National College of Ireland

GroomPersona: Salon Finder

IEEE Website Requirements Specification Document

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Declaration Cover Sheet for BSHTM4 Project Submission

SECTION 1 Student to complete

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1. Requirements Elicitation & Analysis Planning

1.1 Introduction

GroomPersona is a commercial app that allows users to search, book, and track salon appointments from a variety of salons located in Ireland. This project requires data collection, data analysis, and documentation of functional and non-functional requirements necessary to develop the app. The rationale behind developing this app accounts for the lack of an integrated platform where salons can offer and promote their services, and customers can find the right services in a given budget based on their unique preferences. The current apps available for users have limited salon service provided and are not operating in Ireland. The demographic for this app is the residents of Ireland, aged between 18 to 50 years.

This project is also selected because individuals requiring specific salon services tend to lack information about the availability of salons in a given area, due to which they spend excessive time finding the right salons, contacting salons regarding the type of services, and getting pricing details. It is observed that individuals tend to have a limited budget for salon services, due to which they spend excessive time finding affordable services in a given location. Similarly, waiting time at the salon is also considered an inhibiting factor in customer experience, due to which GroomPersona provides real-time tracking of salon appointments, enhancing efficiency in the overall experience of customers. The customers seeking salon services remain unaware of their appointment delays, which increases waiting time at the salon and inhibits their customer experience while causing rush hour at the salon. Moreover, the customers are often unaware of the unprecedented delays, which increases miscommunication and leads to customer dissatisfaction. This project will be targeted toward enhancing efficiency in searching for and selecting the right salon services while ensuring efficiency in the customer experience, leading to enhanced levels of customer satisfaction.

The currently available apps on AppStore and Google Play Store, mainly StyleSeat and Booksy for Customers, are not provided an integrated platform for salons and customers. StyleSeat is not operating in Ireland and does not offer real-time tracking of appointments, salon consultations, and promotions to customers, whereas the functionality of StyleSeat is limited to showing nearby salons in a given area rather than enhancing the customer experience of users seeking salon services. In recent years, the utilization of e-commerce platforms in searching for products and services has increased, making this app feasible to pursue in this project. This project will require extensive input from stakeholders, due to which different elicitation techniques, mainly brainstorming, interviews, and surveys, will be used to collect information from stakeholders. In this instance, the project will initiate gathering the requirements based on extensive input from stakeholders.

Brainstorming sessions will be conducted in the early stage to determine potential ideas that can add value to this project. The brainstorming session will incorporate the document analysis procedure, leading to analysing and producing findings. Moreover, interviews with four main stakeholders will also be conducted to gain their insights into the major requirements that are considered essential for the app. Similarly, surveys will also be conducted for requirements elicitation, and the surveys will be conducted on a large scale in comparison with interviews, as surveys provide the capability to collect, assess, and examine insights from a large number of respondents in an efficient manner. The information

regarding the identification of desired features for the app will be determined using surveys based on the priority ranking received from the stakeholders.

The business need and elicitation techniques can be changed or enhanced due to changes in the app features as the agile approach is used instead of the traditional waterfall approach. Elicitation techniques will help determine the app features, leading to identifying how the required features can be developed through prototyping. The features for GroomPersona will be prioritized using the MoSCoW analysis, as it is believed that this project will significantly benefit from the utilisation, understanding, and development of non-functional requirement analysis. A prototype will also be developed using wireframes and requirements workshop, which will help demonstrate the utility of functional and non-functional requirements in the app.

1.2 The Business Need

In Ireland, there is no functional app that provides an integrated platform for users to find the right salon services based on their unique preferences. StyleSeat, being the only app for locating salons, is limited to showing nearby salons on the map, making GroomPersona feasible based on its utility for customers and salon service providers. In the recent era, consumers tend to search online for products and services as a means to gather information about quality, pricing, and commute/delivery. Similarly, individuals seeking grooming services also opt for online searches to find salons that match their service preferences, pricing, and location. Although this information can be achieved through Google search, followed by a traditional phone call to discuss the required services, pricing, and scheduling, there is no integrated app currently functional in Ireland that provides holistic customer service to users. The holistic customer service accounts for providing information about the availability of nearby salons based on the type of services and pricing, followed by appointment and consultation and real-time appointment tracking to reduce waiting time for customers. The utility of GroomPersona also extends to providing local businesses, i.e., salons, to reach the right target customers in an effective and efficient manner.

Currently, the information regarding the location of salons, types of services, and pricing is scattered throughout the internet, due to which customers need to engage in a thorough search before selecting salons. The process of selecting salon services also involves making calls to salons, followed by a discussion of services and scheduling. GroomPersona provides holistic customer service to users by enabling them to find the salons in their preferred area, including the type of services, pricing, and scheduling. It also provides the customers with the option to screen salons based on their price, distance, and reviews, ensuring that the customers have adequate information to select the best services.

Moreover, GroomPersona also enables salons to create their profile and list their services, pricing, and availability hours to reach customers in an efficient manner. Salons can also offer promotions using the app, which can contribute to increasing their sales. Customers seeking salon services can access the service portfolio of salons and can engage in a positive buying decision by seeking to either consult or set an appointment. The option for consult enables the users to call the salon and discuss their services, whereas setting the appointment will schedule the selected services at the preferred time of users. This app also enables users to track their appointments in real-time to ensure effective time management, which can reduce the waiting time at the salon. It can help increase efficiency for customers while ensuring that salons also optimize their operating efficiency. The users reserving their appointments via

GroomPersona can also check in for their services at the salon using this app, which can enhance their overall customer experience and reduce service time. It is common knowledge that every individual requires salon services at specific periods, due to which this app can also be used for scheduling appointments ahead of their time, inhibiting the hassle of seeking recurring appointments and remembering appointment schedules. Customers with upcoming appointments will receive notifications on their phones to schedule their day accordingly, leading to increasing the business prospects for salons while providing a holistic customer experience to its users.

Therefore, the requirements specification document based on IEEE standards will be completed after collecting data in this project to design the app with desirable features.

Approach:

This project follows an agile approach, as the GroomPersona app project is subject to change based on insights gained from stakeholders during the data-gathering process. The agile approach provides flexibility in terms of adding new requirements to the project and incorporating change to increase the utility and efficiency of the project. In contrast, the waterfall approach limits the developers by setting out the requirements in the initial stages of the project, reducing the cost-effectiveness and duration required to complete the project.

1.3 The Business Case

This app is developed for non-profit reasons as a means to gain academic and professional experience in the context of elicitation, data gathering, data analysis, and prototyping. There are no similar apps in Ireland, whereas apps in other countries provide some level of integrated support but do not provide a holistic customer experience to users in finding the right salon services. The reason for developing this app accounts to assist users with searching, screening, and scheduling their salon appointments and enable salons to reach their target customers in an efficient manner while reducing the time required for arranging appointments, salon check-in, and waiting for services. It is understood that the app features cannot be decided due to changes in user preferences, and thus, various stakeholders will be approached to provide their insights to ensure an efficient user interface of the app.

The app will be designed with the optimization of navigation, communication between salons and customers, and other features that can make the appointment and real-time tracking process easier to manage and more efficient. Incorporating the viewpoint of different stakeholders will help include as many of the features suggested by the stakeholders in order to benefit customers in finding the right salon services while providing salons with a platform to promote their services. Upon completing this project, it is expected that GroomPersona will provide assistance to users in terms of searching, screening, and scheduling salon services while providing an efficient and holistic customer experience.

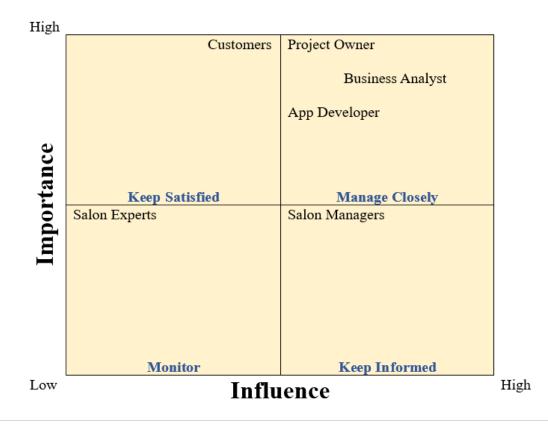
There are certain risks in the elicitation and development phases of this project, due to which it is essential that stakeholders' needs are identified in an effective manner to guide the business analyst and developer accordingly. It eventually requires that app requirements must be clear, consistent, comprehensive, and correct to reduce ambiguity among the stakeholders. The development phase will also require extensive efforts to ensure the onboarding of a competitive programmer who can add value to this project. It is also essential that the requirements specification document should be comprehensive in terms of functional and non-functional requirements to ensure that the development process does not result in inhibiting the value of the project. It should be noted that collaborating with the wrong developer and providing inadequate requirements specification documents can lead to reducing the utility and value of the project, resulting in the development of an app that has limited or no useability. Hence, it is essential that the developer is formally interviewed and assessed for practical competency, and the requirement specification document is developed based on thorough insights received from stakeholders to ensure its efficacy in practice and develop an app that provides value to its users.

It is also significant that the app is easy to navigate, as complex navigation can lead to inadequate use of the app, which discourages users from its usage. After releasing the app, it would be ideal to develop a tutorial and ensuring its availability on AppStore, Google Play Store, and YouTube to ensure that users can learn its navigation and extract maximum utility from its features. It can help ensure the flow of information among users while ensuring that users remain aware of its features and can utilize its features to receive an efficient and effective salon experience. Hence, it is essential that following the completion of the requirements specification document, a tutorial is developed to educate users about the utility and features of this app to reduce the risks regarding user retention.

1.4 Stakeholders List & Importance/Influence Matrix:

This project comprises the following stakeholders:

- a. Project Owner
- b. Business Analyst
- c. App Developer
- d. Salon Managers
- e. Salon Experts
- f. Customers



Importance/Influence Matrix for GroomPersona

The Importance/Influence matrix indicates the ranking of stakeholders in this project. The project owner, business analyst, and developer are considered the most important stakeholders in this project due to their significant and distinctive roles in the project completion. The project owner has the utmost authority over the decision-making and requirements list necessary to develop the prototype for the app. The business analyst is also placed in the high power and influence quadrant because input from the business analyst will set the business model of the app as a means to generate value for users by providing a holistic customer experience. Similarly, the developer is also placed in this quadrant because the developer will be responsible for comprehending the requirements document and developing the app, ensuring that it provides the expected levels of value and functionality to users. The bottom right quadrant depicting high importance and low influence encompasses salon managers, as they will provide business insights that can change the features of the app and can somewhat enhance or change the app functions. The top left quadrant represents customers, as they have high importance in this app because this app is focused on providing customers with an efficient and effective salon experience. However, customers do not have a significant role in influencing this project, due to which they have a low level of influence. The lower left quadrant represents high importance and low influence, and this quadrant encompasses salon experts, and this quadrant will not influence the app, but this quadrant is important because it will contribute to offering an integrated customer experience.

1.5 Requirements Elicitation Techniques

1.5.1 Survey

Survey Participants:

The survey participants are as follows:

- a. College students
- b. Local salon visitors
- c. Local mall visitors

Distribution:

The survey was conducted using different methods to access the participants, and these methods are listed below:

- a. The survey was distributed throughout the campus for the students to fill out, as salon services are required by every individual depending on their interest in aesthetics. The survey was printed, and then students in the canteen were approached to fill out the survey.
- b. The local salons operating in Dublin, Ireland, were contacted via phone to request their participation. After receiving permission from the respective salons, these salons were visited, and customers in the waiting area were approached to fill out the survey.
- c. The survey was also conducted at the local mall, where the shoppers were approached to fill out the survey.
- d. The survey was also shared using Google Forms, and its link was shared on social media platforms, mainly Instagram, Facebook, and Twitter.

Objectives:

The survey was aimed to gain insights regarding the perception of participation towards the using GroomPersona. The survey was also aimed at gathering requirements for the GroomPersona app, and the survey questions were incorporated to evaluate the demand for app features. This survey ensured that viewpoints from different demographics were collected, as salon services are required by every individual based on their unique preferences, lifestyle, and aesthetic interests. This survey will help the business analyst to gain insights into the buying behaviour and preferred user experience for the business analyst. This survey will also help promote an effective relationship between the stakeholders, enabling them to understand the expected value and leading to developing the app that can provide value and functionality to the target audience in an effective manner.

Questions:

- 1. Select your age.
 - a. Less than 20 years
 - b. 20-25 years
 - c. 25-30 years
 - d. 31-35 years
 - e. 35-40 years
 - f. 40-45 years
 - g. 45-50 years
 - h. Above 50
- 2. How often do you visit a salon?
 - a. Once a week
 - b. Every fortnight
 - c. Once a month
 - d. Twice a month
 - e. Thrice a month
- 3. How long does it take you to select and find exclusive services from the salon?
 - a. Less than 30 minutes
 - b. More than 30 minutes
 - c. More than 1 hour
 - d. More than 2 hours
- 4. How do you find the right salon for the required services?
 - a. Social media
 - b. Google Search
 - c. Ask someone for suggestions
 - d. Call a few salons
 - e. Visit before scheduling the required services

- 5. How long do you have to wait in salons for your turn?
 - a. Less than 10 minutes
 - b. Less than 30 minutes
 - c. Less than 1 hour
 - d. More than 1 hour
- 6. How often do your salon appointments get delayed or cancelled?
 - a. Very often
 - b. Often
 - c. Sometimes
 - d. Never
- 7. Are you aware of the recent salon promotions offered by the salons in your nearby areas?

Yes

No

- 8. How do you contact salons once you realize that you need a salon appointment?
 - a. Call
 - b. Email
 - c. Message
 - d. Visit
- 9. How long does it take to set up an appointment at your preferred salon?
 - a. Less than 10 minutes
 - b. Less than 30 minutes
 - c. 1 hour
 - d. More than 1 hour
- 10. Would you be interested in using GroomPersona, an app for finding and scheduling salon services?
 - a. Absolutely
 - b. Yes
 - c. Maybe
 - d. No
- 11. Do you forget your recurring salon appointments or schedules?
 - a. Yes
 - b. No
- 12. Would you prefer to receive notifications about customized salon services?
 - a. Yes
 - b. No

- 13. On a scale of 1-5, how would you rate the usefulness of GroomPersona?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5

14. If available, would you use GroomPersona to find and book your salon appointments?

- a. Absolutely
- b. Yes
- c. Maybe
- d. No
- 15. How interested would you be in the Promotions section providing the latest salon offers in GroomPersona?
 - a. Very interested
 - b. Somewhat interested
 - c. Not interested
- 16. How important do you feel that the feature for customer support is essential for the app to help through the process?
 - a. Very important
 - b. Important
 - c. Somewhat important
 - d. Not important at all
- 17. Would you prefer if GroomPersona offered discounts and vouchers?
 - a. Yes
 - b. No
- 18. Do you think that an option to schedule an appointment and consult with an expert would be a viable option for GroomPersona?
 - a. Yes
 - b. No
- 19. Do you think that consultation with an expert via GroomPersona will increase communication and increase the quality of services?
 - a. Yes
 - b. No
- 20. Would you be interested in an integrated system between GroomPersona and other social media platforms to share updates?
 - a. Yes
 - b. No

1.5.2 Interviews1.5.2.1 Interview One: Business Analyst

Participant:

A senior business analyst working at a renowned business development company was interviewed to provide insights regarding the value GroomPersona can provide to salons and customers. The identity of the business analyst is kept confidential as per their personal request.

Interview location:

This interview took place at a local coffee shop in Dublin, Ireland.

Date of interview:

The interview took place on Saturday, 10/12/2022.

Time of Interview:

The interview was conducted at 5:00 pm, and it lasted for 45 minutes and 10 seconds.

Objective of Interview:

Understanding the business context of value that an app should be able to provide is essential to ensure that it incorporates the right features. This app is focused on enabling salons to promote their services while providing customers with an integrated platform to find the right services specific to their unique preferences. This interview will help enlighten how this app can offer value to salons and customers at the same time while ensuring efficiency in the overall customer experience. Although e-commerce has enabled users to use online solutions in securing their appointments for different types of services, providing an integrated platform where customers can find stylists and salons in their locality and can track their appointments with real-time tracking requires insights from the business analyst to enhance the operational flow of the services. Hence, the business analyst will provide insights regarding how GroomPersona can be used to provide value to salon service providers and customers in such a manner that it reduces the turn-around time of salon services while enabling the customers to find the right services in an efficient manner.

Interview Questions:

GroomPersona is an app that will be developed for the residents of Dublin, Ireland. The purpose of this interview is to get insights from the Business Analyst about providing value to salon service providers and customers. The GroomPersona app will require communication between salons and customers, promotion offers, consultation, and booking. This interview will help gather information about the app features that can add value to its business model.

- 1. Would an app where customers can find salon services be beneficial for customers and salons? Why?
- 2. Would this app be successful in reducing the time a customer spends finding salons, asking for prices, and setting up appointments?

- 3. Do you think adding promotions and discount vouchers would be a viable option to increase app usage and engagement? (90% of customers said that they prefer promotions and discount offers)
- 4. Do you believe customers prefer to track the status of their salon appointment to reduce wait time? (85% of customers said that they would want to receive updates about their appointment status)
- 5. There are search engines, like Google, that provide information about nearby salons. How do you think this app can be made more distinctive for customers?
- 6. How to ensure that salons maintain the quality of their services and reduce wait times once they start using this app to provide salon services to customers?

1.5.2.2 Interview Two: Salon Manager

Participant:

This interview was conducted with the Salon Manager at a local salon located in Dublin, Ireland. The identity of the interviewee is kept confidential as per their company policy.

Interview location:

This interview was conducted at the salon.

Date of interview:

This interview took place on Thursday, 08/12/2022.

Time of Interview:

The time of the interview was 11:00 am, and the interview lasted for the duration for 13 minutes and 47 seconds.

Objective of this interview:

The objective of this interview resided in determining the hindrances salon managers experience in targeting and retaining customers. This interview also aimed to determine the hindering factors in the customer experience and insights regarding the initiatives that salons can take to reduce waiting time for customers. The areas of interest addressed in this interview accounted for the frequency of phone calls salon managers receive from customers regarding pricing, scheduling, rescheduling, and cancellation of appointments. The interview also covered the effect of waiting times on customer services and whether it can be improved by using GroomPersona. The manager was selected for the interview because of their experience and knowledge about business operations, marketing, and customer service, due to which it is believed that they would be able to provide adequate information during the interview. Moreover, the salon manager is also the owner of this salon, which also meets the stakeholder criteria, and thus, it is believed that the salon manager will be able to provide insights regarding the effect of GroomPersona on increasing business opportunities for the salon by targeting the right customers while ensuring the efficiency in their salon services.

Interview Questions:

- 1. How often do you receive phone calls and customer visits when they require information about services, and how do you retain these customers?
- 2. Do you face appointment cancellations due to excessive waiting times?
- 3. Are you inclined toward using GroomPersona? (93% of customers are willing to use GroomPersona to find, select, schedule, and track their salon appointments)
- 4. How do you think increasing efficiency in salon services can contribute to business profits?
- 5. Do you think offering promotions and vouchers would be a viable option to intrigue customers to receive salon services, specifically from your salon?
- 6. How can you ensure efficiency in work processes after using this app?
- 7. Do you believe customers would like to be notified about their salon service schedules?

1.5.2.3 Interview three: Salon Expert

Participant:

This interview was conducted with a Salon Expert working at a renowned salon in Dublin, Ireland. Due to the company's policy, the identity of the interviewee is kept confidential. The interviewee is a hairstylist with foreign affiliations and has a professional experience of 12 years.

Interview location:

The interview was conducted at the salon in Ireland.

Date of interview:

The interview took place on Monday, 19/12/2022.

Time of Interview

The interview was conducted at 10:30 am, and it lasted for the duration of 12 minutes and 18 seconds.

Objective of this interview:

The objective of this interview resided in determining requirements for the GroomPersona app using questions directed toward the salon expert. The rationale behind interviewing a salon expert resided in the notion that salon experts deal with customers and provide user-specific salon services. The waiting time in salons is high because salon experts are busy with prior appointments, which inhibits the operational efficiency and customer experience in salons. Hence, interviewing a salon expert can help identify app features that can help enhance efficiency while reducing the waiting time for customers. It can

eventually help provide insights regarding the efficacy of certain app features that can optimize value for customers and salon experts.

Interview Questions:

- 1. Do you think tracking salon appointments can reduce waiting time for customers? Why?
- 2. Do you think miscommunication about the type of services increases service time for customers, increasing waiting time for next appointments?
- 3. Do you think that a notification system that reminds customers about their appointments can reduce waiting time?
- 4. Do you think that using check-in via the Groom Persona app can increase operational efficiency in the salon?
- 5. Do you believe that making a salon profile on GroomPersona can increase the number of customers? Why?
- 6. Are there any other features that have not been mentioned above that could be suggested?

1.5.2.4 Interview Four: Developer

Participants:

The interview was conducted with a developer who will be working on this project after wireframing to develop GroomPersona.

Interview location:

The interview was conducted at the canteen of the National College of Ireland Campus

Date of interview:

The interview took place on Tuesday, 20/12/2022.

Time of Interview:

The interview took place at 2:00 pm and it lasted for 15 minutes and 27 seconds.

Objective of this interview:

This interview aimed to ensure that the developer understands the value that should be offered to customers and salons via GroomPersona, and can provide insights from a functional point of view. The interviewee will provide details regarding functional and security features necessary to be incorporated into the GroomPersona app. This interview will enable me to prioritize requirements based on their efficacy and complexity, and the results will be used to conduct MoSCoW analysis.

Interview Questions:

1. Is it possible to link the GroomPersona App with the search engine results, as this would involve a feed of data regarding salon location and contact details? How?

Sub question: Would salons be able to upload their information directly from the app, or would they be restricted to search engine results?

2. Is it important to add a notification system in the GroomPersona App, and how would this notification system work? The notification system would include promotions, discount offers, and real-time appointment tracking. How would this be accomplished?

Sub question: Would it be possible to enable the users to customize the notification system based on their preferences?

- 3. Would it be possible to develop a link between social media platforms, such as Facebook, Instagram, and Twitter, with GroomPersona App? This would include sharing content from the Groom Persona with social media accounts.
- 4. If required, would it be possible to display YouTube videos on the GroomPersona App in order to allow users to understand the app's functions? How?
- 5. Would it be possible to book appointments via the GroomPersona app?
- 6. What sort of safety percussions can be implemented in GroomPersona to ensure that user details are safe?
- 7. Would an administrator role be possible on the GroomPersona app?

1.5.3 Brainstorming

Why brainstorming?

Brainstorming helps gather information from individuals with different viewpoints, leading to determining a comprehensive list of ideas. The brainstorming session allows different stakeholders to participate in discussions and share their insights and opinions regarding certain app features.

Objective:

The objective of the brainstorming session for the GroomPersona app was to get salon managers from different salons located in different cities together to discuss the idea regarding the efficacy and utility of the GroomPersona app. The rationale behind selecting different salons located in different cities was to ensure that the final product could deliver value to salons and their customers across Ireland. The major objective of the brainstorming session was to understand the viewpoint of salon managers to determine the features that would be useful in increasing operational efficiency and customer experience, necessary to ensure that GroomPersona optimizes value for its users.

Participants:

Three salon managers and two salon experts from three different salons located in Ireland participated in the brainstorming activity. The managers represented the following salons:

- Riverside Beauty, Clare, Ireland
- Rochas Beauty Concept, Dublin, Ireland
- Allure Hair, Donegal, Ireland

Location of Brainstorm:

Zoom meeting was used to conduct the brainstorming session, as the participants were located in different cities.

Date of Brainstorming:

The brainstorming session took place on Thursday, 05/01/2023.

Time of brainstorming:

The brainstorming session was conducted at 11:00 am, and it lasted for 27 minutes and 33 seconds.

Brainstorm guidelines:

- a. Participants must switch off or silence their mobile phones.
- b. Participants are not allowed to discuss their viewpoints with each other prior to the brainstorming activity.
- c. Participants are not allowed to judge the opinions of other participants.
- d. Participants must show interrupt and allow for one conversation at a time.
- e. Participants must understand that no one is wrong and should accept every idea.
- f. Participants must not consider each other as business competitors.
- g. Participants are required to arrive 10 minutes early to ensure that the brainstorming activity can be conducted on time.

1.5.4 Prototype

Objective prototype:

The objective of developing a non-functional prototype using wireframes resides in providing a visual representation of the GroomPersona app to the stakeholders to ensure that they understand how the final product would look like. Developing the first draft of the prototype using the requirement workshop can help identify the requirements that are not adequate enough for the GroomPersona app and can also help determine inhibitions in the potential layout. The first set of wireframes is developed using digital sketches, whereas the second set of wireframes is developed using Balsamiq that will incorporate the potential changes based on insights gained from the stakeholders to enhance the app features.

Participants:

The following participants will provide insights for the prototype:

- a. Business analyst
- b. Salon managers
- c. Salon experts

d. Customers

1.5.5 Requirements Workshop

Objective:

The requirements workshop was aimed at discussing the layout and design elements of GroomPersona. This workshop is intended to enable stakeholders to understand the utility of the app and develop a general understanding of its features. It also incorporates improvements in the prototype by means of comparing similar apps. It is expected that following this workshop, the stakeholders will understand the app features and determine gaps in the layout and design that might have been missed during the elicitation process. This information will be provided to the developer to enhance the final prototype.

Participants:

The requirements workshop will include the following participants:

- a. Business analyst
- b. Salon managers
- c. Salon experts
- d. Customers

Workshop location:

Zoom meeting was used to conduct the requirements workshop, as the participants were located in different cities.

Date of workshop:

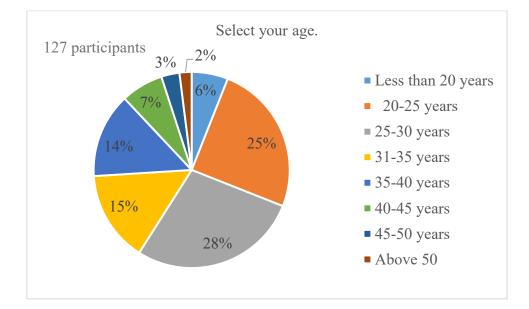
The requirements workshop took place on Monday, 13/03/2023.

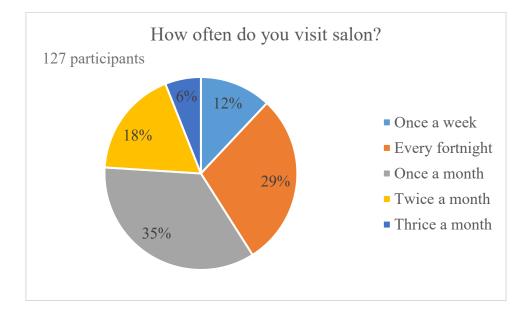
Time of workshop:

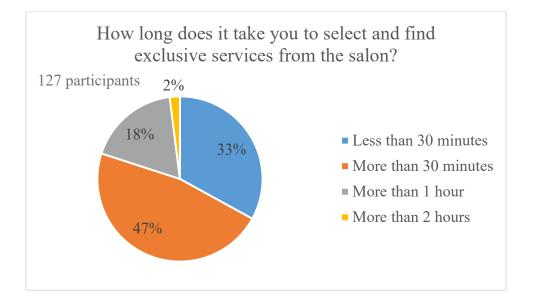
The requirements workshop was conducted at 11:00 am, and it lasted for 54 minutes and 27 seconds.

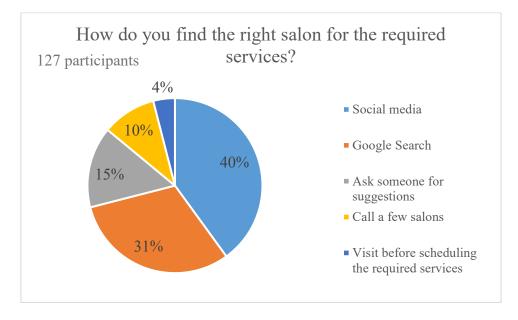
Requirements Elicitation Results and Conclusions: Survey Results and Conclusion

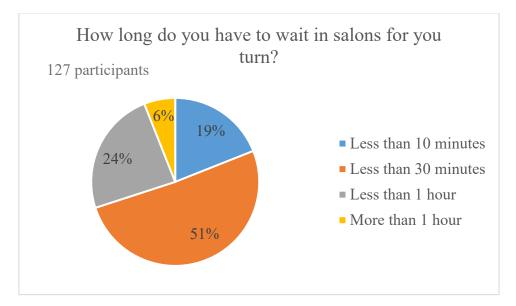
2.1.1 Survey Results

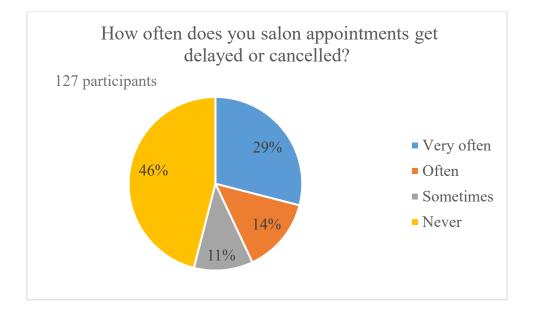


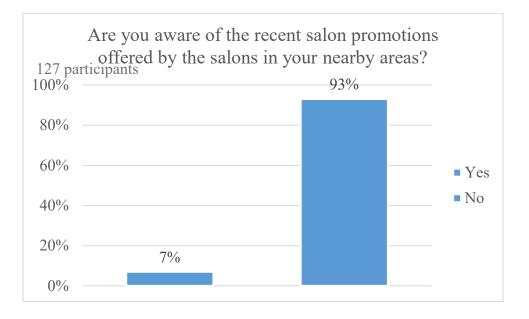


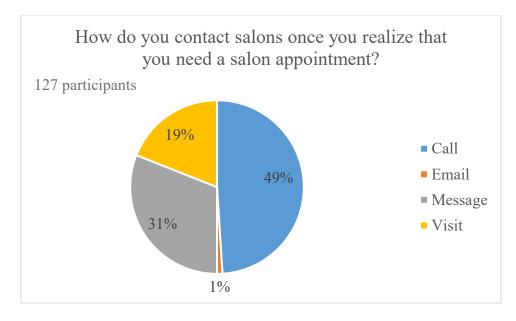


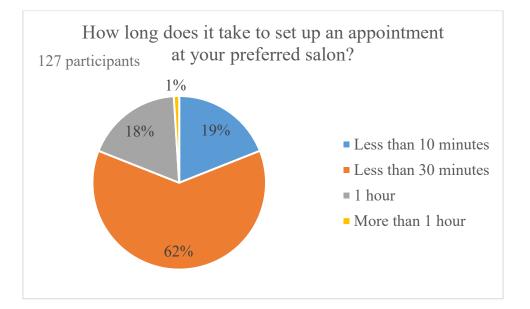


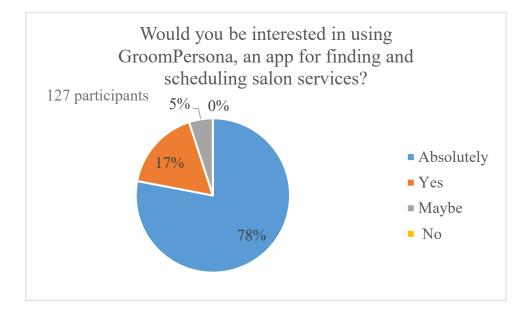


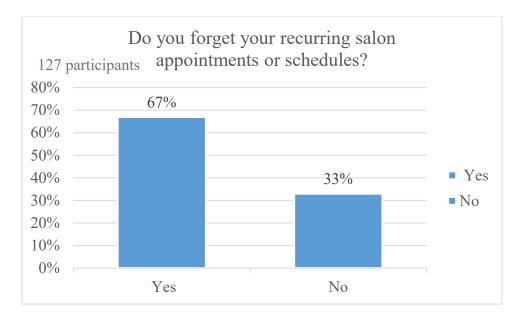


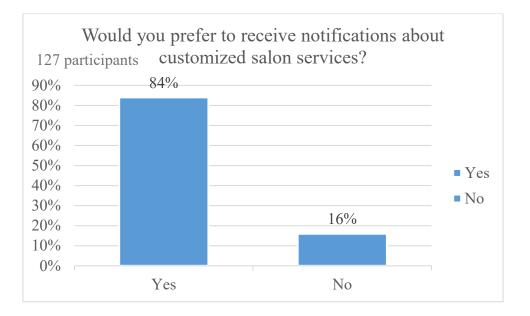


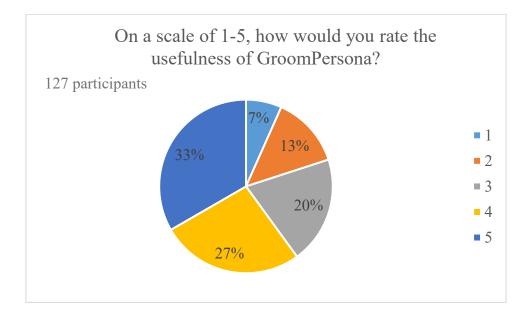


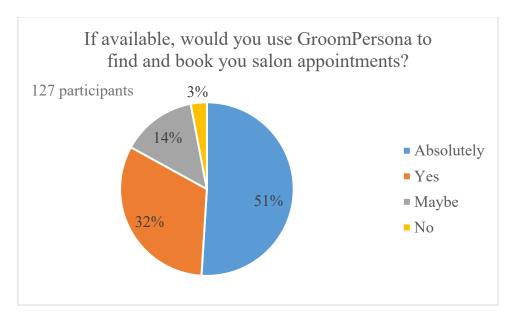


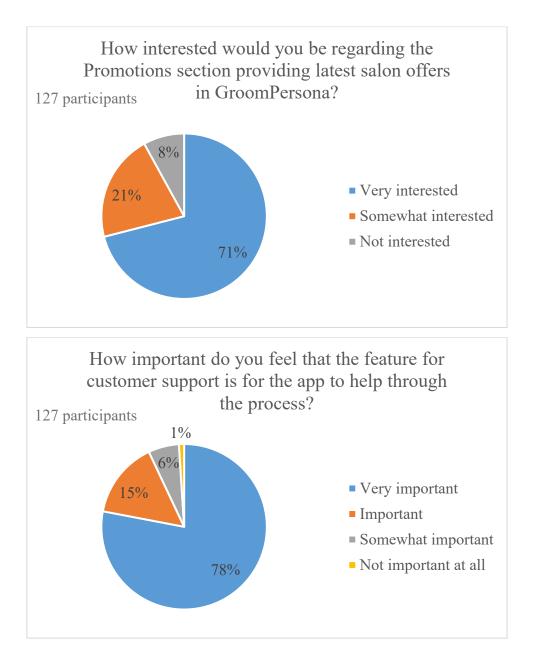


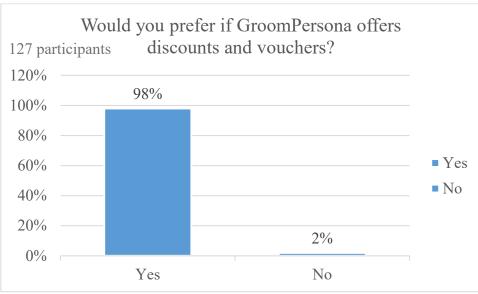


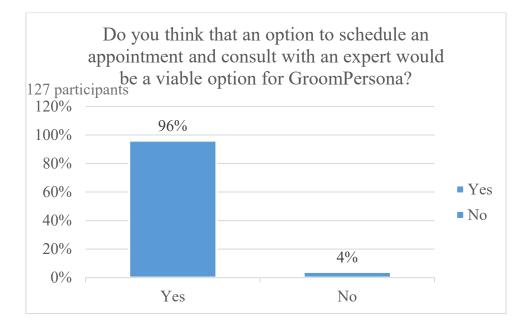


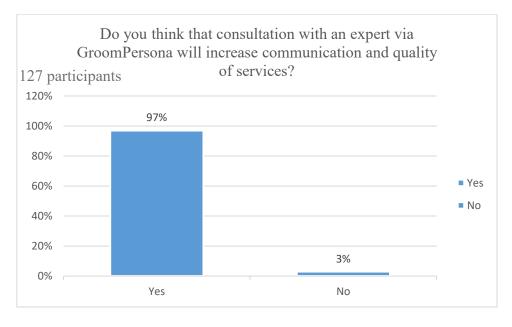


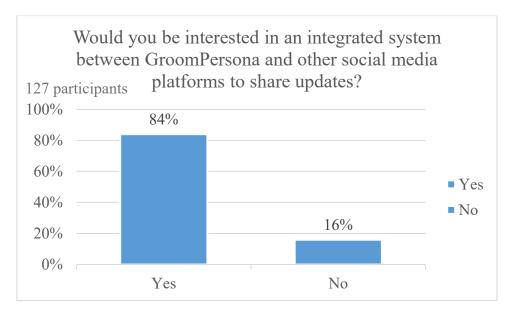












2.1.2 Survey Conclusion

The survey was conducted among salon customers, who were reached via NCI canteen, local mall, local salons, and an online survey. This is because every individual requires salon services at specific intervals, due to which customers were reached using a number of sites and techniques. The survey comprised 127 participants, and the findings indicated that 6% of the participants were less than 20 years old, 25% participants were aged between 20 to 25 years, 28% participants were aged between 25 to 30 years, 15% participants were 31 to 35 years, 14% participants were 35 to 40 years old, 7% participants were 41 to 45 years old, 3% participants were 45 to 50 years old, whereas 2% participants were above 50 years old. These findings suggest that the survey represents a large demographic, inhibiting the risk of limiting the findings to one age group.

The major objective of the survey resided in achieving opinions from an extensive populace to ensure that the app can be optimized based on their unique viewpoints. The results obtained from online and manual surveys were combined in MS Excel, and the findings are graphically represented. The results indicate that 12% of the participants visit the salon once a week, whereas 29% visit every fortnight, 35% visit once a month, whereas 6% of participants visit the salon thrice a month. The results also show that 33% of participants claimed that it takes 30 minutes to select and find exclusive salon services, whereas 47% indicated more than 30 minutes, 18% suggested more than 1 hour, whereas 2% suggested more than 2 hours, which indicates that participants spend extensive time in finding salon services.

The results also indicated that 40% of participants use social media to find salon services, whereas 31% engage in Google Search, 15% ask someone for suggestions, 10% call salons, and 4% visit salons to book appointments. The results further indicate that 19% of participants waited less than 10 minutes for their turn in salons, whereas 51% indicated less than 30 minutes, 24% indicated less than 1 hour, and 6% indicated more than 1 hour. It eventually implies that the overall waiting time is high in salons. The results highlight that 29% of participants have had their appointments delayed or cancelled very often, whereas 15% have often had their appointments delayed or cancelled, which suggests a lack of communication about the booking updates.

Moreover, only 7% of participants are aware of the recent salon promotions in their area, indicating that salons are not reaching their target audience in an effective manner. The findings also indicate that only 19% of participants are able to set up an appointment at their preferred salons within 10 minutes, whereas 62% require less than 30 minutes and 18% require approximately 1 hour. The participants were found to be interested in using GroomPersona, as 78% responded Absolutely, and 17% responded Yes.

There are 67% of participants accepted that they forgot their recurring salon appointments, and 84% showed a preference for receiving notifications about customized salon services. The results also showed that 78% of participants considered customer support feature to be very important, and 98% of participants preferred to receive discounts and vouchers from GroomPersona for salon services. Similarly, 96% of participants claimed that they would like to schedule an appointment using GroomPersona, and 97% claimed that they would like to consult with an expert using GroomPersona to communicate their service requirements. The results also show that 84% of participants would be interested in an

integrated system between GroomPersona and other social media platforms, suggesting their login preferences.

2.1.3 Requirement Outcomes from the Survey

After analysing the survey results, the following requirements are identified:

- Promotions about nearby salons should be available on the app.
- Discount vouchers should be offered to customers.
- A link between social media profiles and the GroomPersona app.
- A notification system for promotions and upcoming salon schedules.
- Ability to schedule and reschedule salon appointments.
- Ability to track appointments to reduce waiting time at salons.
- A customer support system.
- A search engine for finding the right salon services.
- Option to either consult with an expert or book an appointment.

2.2 Interviews Results and Conclusions

2.2.1 Interview One Results and Conclusion

Interview Questions for Business Analyst

This interview aims to shed light on how GroomPersona can provide value to both salons and customers while ensuring an efficient customer experience. It is crucial to understand the business context in order to ensure that the app incorporates the necessary features. The app focuses on helping salons promote their services and enabling customers to easily find services that match their preferences. While e-commerce has allowed users to book appointments online, an integrated platform that allows customers to discover local stylists and salons and track their appointments in real time requires insights from a business analyst to improve service operations. Therefore, the business analyst will provide insights into how GroomPersona can bring value to salon service providers and customers by reducing turnaround time and facilitating efficient salon services.

Q1: Would an app where customers can find salon services be beneficial for customers and salons? Why?

- Yes, of course. I will allow customers to discover salon services and will bring
 numerous benefits to both customers and salons. It will be convenient for users as
 a user-friendly platform can help them browse and book salon services quickly. It
 will eliminate the need for traditional methods of searching and contacting salons,
 and I truly believe that it will help customers save time and effort. This app will
 also increase the visibility of salons to customers and will help them to reach
 potential customers, which will increase their profits.
- The app will provide personalized recommendations based on customer preferences, location, and past experiences, which will contribute to its value for users.
- The app incorporates features like real-time availability and appointment tracking, benefiting both customers and salons. Customers can stay updated on their appointments, receive timely reminders, and even make changes if necessary. Simultaneously, salons can efficiently manage their schedules, minimize noshows, and optimize resource utilization, resulting in improved operational efficiency.

• A review and rating system will allow customers to provide feedback on their salon experiences. This feature will empower customers to make informed decisions when selecting a salon, which will also incentivise salons to maintain high-quality services to attract positive reviews.

Q2: Would this app be successful in reducing the time a customer spends finding salons, asking for prices, and setting up appointments?

- The app would be successful in reducing the time customers spend on finding salons, inquiring about prices, and setting up appointments. It will also centralize the salon search and booking process because it offers a highly efficient solution that significantly streamlines these tasks.
- Furthermore, the app can use features like advanced filters, sorting options, and customer reviews. They will enable customers to refine their search based on preferences, and I believe that this app will empower customers to find the right salons with its tailored search results.
- The app will streamline the process by providing real-time scheduling and booking information. Customers will be able to go through available time slots and choose appointments that meet their personal schedules with a few taps. This will eradicate the time-consuming communication between customers and salons, which will make the appointment booking and scheduling process efficient for its users.
- This app will provide an amazing user experience because it will reduce the time customers spend on finding salons, inquiring about prices, and setting up appointments.

Q3: Do you think adding promotions and discount vouchers would be a viable option to increase app usage and engagement? (98% of customers said that they prefer promotions and discount offers)

- Using promotions and discount vouchers in the app is a highly viable option to increase app usage and engagement. It will help provide its users with an incentive that will promote its effective use and engagement. Exclusive deals and discounts will provide value for customers, motivating them to explore the app and use these offers.
- Promotions and discount vouchers help attract new users to the app. When customers hear about such offers, then they are more likely to download the app and check out its features. By using promotions as a marketing strategy, the app can increase its usage and engagement.
- Promotions and discount vouchers can help generate positive word-of-mouth marketing because satisfied customers tend to share their experiences with their peers, which can increase user engagement and loyalty.
- Promotions and discount vouchers will give a competitive edge to the app, making it a preferred option for searching and finding exclusive and discounted salon services. It will ensure that the app can differentiate itself and capture a larger market share.

Q4: Do you believe customers prefer to track the status of their salon appointment to reduce wait time? (85% of customers said that they would want to receive updates about their appointment status)

- The ability to track the status of their salon appointment is highly preferred because it will help reduce wait time while providing customers with a way to manage their time in an efficient manner. They will be able to plan their schedule accordingly by having knowledge of the estimated wait time.
- I believe that tracking appointments can reduce anxiety and uncertainty. Waiting for an appointment can be stressful, especially when the wait time is unclear. By offering real-time updates or a visible queue, customers will have a sense of certainty.
- Also, offering a tracking feature enhances the overall customer experience. It demonstrates that the salon values its time and aims to provide efficient services.
- Using a tracking system demonstrates efficiency and professionalism, and salons that will be using this feature are considered highly organized and customerfocused.

Q5: There are search engines, like Google, that provide information about nearby salons. How do you think this app can be made more distinctive for customers?

- The app will have to be positioned as a specialized platform focused on salon services. By offering personalized recommendations and comprehensive information about salons, stylists, and services, it will provide a customized experience based on customers' unique preferences. This will set this app distinctive from its competitors.
- Also, an integrated booking and appointment management system, which offers features like real-time tracking, instant booking, reminders, and easy rescheduling within the app, will ensure an efficient booking experience. This distinguishes the app from other search engines that require extensive navigation for search and booking.
- Also, user reviews and ratings can make the app distinctive. Reliable feedback helps users make informed decisions, setting it apart from search engines that may provide limited or generalized reviews.
- Making partnerships with salons to offer exclusive deals, discounts, and loyalty
 programs will also increase value for customers. Incentives and rewards can
 increase app usage, which will increase salon visits, which will make this app a
 preferred option for salon services compared to other search engines.

Q6: How to ensure that salons maintain the quality of their services and reduce wait times once they start using this app to provide salon services to customers?

- Providing clear service guidelines to salons by highlighting service and quality expectations can help ensure efficiency and high service standards.
- Regular monitoring and feedback be used to evaluate the salon's performance.
- Performance metrics and analytics within the app can track key indicators based on customer reviews and ratings.

Interview One Conclusions:

The interview with the business analyst was very informative and provided extensive insights about the business model of GroomPersona. It helped me understand how this app can generate value for customers and salons by making the salon services highly efficient and reducing the time required for searching and booking the right salon services. This interview was aimed at understanding the perspective of a business analyst toward the utility of this app and how they rank certain app features that can bring value to its users. By conducting this interview, the value offered by GroomPersona can be enhanced by identifying and addressing the issues that can inhibit its effectiveness for its users, leading to developing requirements for GroomPersona.

Q1: validated that GroomPersona would be beneficial for salons and customers alike. It was highlighted that this app has the potential to make the booking process convenient by means of streamlining salon browsing and bookings. It will eventually boost salon visibility, enabling them to reach new customers. Also, personalized recommendations will help cater to individual preferences, increasing customer satisfaction. It is also observed that real-time availability and appointment tracking benefit both customers and salons, optimizing efficiency, and the review system will empower customers and encourage high-quality services.

Q2: validated that GroomPersona efficiently reduces time spent on salon search, inquiries, and appointment setup. It centralizes the process, eliminating manual searches and offering comprehensive details with filtered search results. Also, real-time appointment and scheduling simplify appointment tracking and make the process efficient. Overall, the app streamlines the salon experience, saving time and enhancing customer satisfaction.

Q3: validated the point that promotions and discount vouchers in the app are a highly effective approach to boost usage and engagement. It provides strong incentives for customers to actively engage with the app, attracting new users and fostering loyalty. Promotions generate positive word-of-mouth and set the app apart from competitors, making it a go-to platform for discounted salon services, which can also increase app usage.

Q4: validated that customers prefer the option to track their salon appointment status as it reduces wait time and offers convenience. It provides better control over their schedule, reduces anxiety, and enables effective time management. The tracking feature enhances the overall customer experience and creates a perception of efficiency and professionalism. Implementing this feature meets customer expectations, improves satisfaction, and sets salons apart in the competitive market.

Q5: highlights that GroomPersona can differentiate itself from general search engines by can focus exclusively on salon services, offering curated content and personalized recommendations. It can also provide an efficient booking system with real-time availability features while empowering users with reviews and ratings, which can increase the reliability of services. Partnering with salons for exclusive deals and loyalty programs enhances customer value.

Q6: highlights strategies to enhance salon performance to meet the quality standard of GroomPersona. In this instance, providing service guidelines to salons in order to maintain quality reduces wait times. Also, regular monitoring and app analytics can track key indicators from customer reviews and ratings, which can increase the quality of services.

Requirements Outcomes of Interview One:

- A promotions page for salon services offering vouchers and discounts.
- A search option with service and pricing filters.
- A booking management system that allows setting real-time appointments, cancelation, and rescheduling.
- A customer rating system to ensure quality and efficiency in salon services.
- A customer loyalty program to achieve user engagement.

2.2.2 Interview Two Results and Conclusion

Interview questions for Salon Manager:

The objective of this interview was to identify challenges faced by salon managers in attracting and retaining customers, improving the customer experience, and reducing wait times. Areas covered included customer inquiries, appointment management, and the impact of wait times. The selected manager, experienced in business operations, marketing, and customer service, was expected to provide valuable insights. As the salon owner, the manager's input was crucial for assessing the impact of GroomPersona on business opportunities and service efficiency.

Q1: How often do you receive phone calls and customer visits when they require information about services, and how do you retain these customers?

- Typically, the day starts with customers calling about specific services, availability hours, pricing, and the experience of stylists. For exclusive or personalized services, customers tend to negotiate, and most of the time, they call to know about the price, and then without making reservations, they hang up. It takes a lot of time for the front desk employee to explain the services, types of products used in services, and credentials and expertise of salon professionals while failing to persuade customers to get an appointment.
- Although customers believe that they will be calling back after thinking about the services, they rarely call back. Customers want value-based pricing, and they will not pay unless they have called a few salons to ask about the services and pricing.
- It is difficult to retain customers as we do not know what prices other salons are offering. This is because prices are market competitive, and each salon can reduce prices to achieve its sales target. Hence, unpredicted pricing in the market makes it difficult to retain customers.

Q2: Do you face appointment cancellations due to excessive waiting times?

 Walk-in customers have a longer waiting time compared to customers with appointments. If the waiting time for walk-in customers is high, then they are most likely to refuse salon services and find alternative salons. Sometimes, if a salon expert is not available, then we have to make appointments. Although we compensate or offer a complementary service to customers to retain them, it is difficult to retain customers who have jobs or have strict schedules, due to which they cannot reschedule.

Q3: Are you inclined toward using GroomPersona? (78% of customers are willing to use GroomPersona to find, select, schedule, and track their salon appointments)

- I believe that using GroomPersona to target and reach customers is a very good option. It will reduce staff's time in explaining services, prices, and negotiating with the customers.
- Using GroomPersona will also help customers screen services based on pricing, which will also reduce the time spent on negotiation. It will also help us understand the competitive market price of salons, enabling us to offer discounts and promotions necessary to attract and retain customers.
- It will also help customers track their appointments, which can certainly enhance efficiency because, most of the time, salon experts are waiting for their customers who have made reservations while making the walk-in customers wait for their turns. Hence, keeping track of appointments will enable the customers to reach salons on time, which can certainly increase efficiency.

Q4: How do you think increasing efficiency in salon services can contribute to business profits?

- I have observed that when salon experts are free, customers with scheduled appointments are often on the way or either checking in. It wastes the salon experts' as most of them work on commission. In the meantime, walk-in customers tend to wait for salon experts to get free, which makes salons seem crowded and lower levels of efficiency.
- I believe that if efficiency is increased by enabling the customers to track and manage their appointments, it will reduce downtime for salon experts. Hence, salon experts and professionals will be able to provide services to customers without spending time waiting for them, which will improve the number of customers served in a day. It will eventually increase profits and enable salon experts to remain highly motivated, knowing that their appointment slots are full and managed in an effective manner.

Q5: Do you think offering promotions and vouchers would be a viable option to intrigue customers to receive salon services, specifically from your salon?

- Yes, because, as I said before that, customers often make calls or visit to ask for pricing and try to negotiate fixed prices in hopes of receiving discounts. I believe that seasonal promotions and vouchers can intrigue customers to make appointments.
- However, I am concerned that if a customer has scheduled an appointment one week before and then they find a discounted offer or promotion by some other salon, then they might switch to the other offer. I hope that your app will ensure that promotional offers and discounts do not affect the businesses offering regular prices for certain services.

Q6: How can you ensure efficiency in work processes after using this app?

- First of all, if this app proves to be lucrative for my business, then I can accommodate this app as a benchmark for incentive. Once customers receive a certain service and leave positive feedback, it will account for an intrinsic reward for the employee who has provided services to the customer. I believe it will keep the employees motivated to enhance their job performance and meet the expected levels of efficiency.
- Also, I have a front-desk employee who also manages appointments and walk-in customers. Since this app will enable us to determine whether the customer is running late or will check in on time, we can manage walk-in customers adequately without making the salon experts wait for appointments. It will help enhance the overall efficiency of the salon services.

Q7: Do you believe customers would like to be notified about their salon service schedules?

- Yes, there are so many customers who want to be regular in receiving salon services but often forget their appointments or forget to make appointments. I believe since everyone requires salon services once in a while, pre-booking can allow customers to get their monthly salon services.
- I believe that notifying customers about their upcoming salon service schedules will help them manage their salon appointments in an effective manner. It will enable customers to take adequate time off their busy schedules and confirm if they can meet their appointment schedule. In this way, customers can also reschedule on time without canceling or forgetting their appointments.

Interview Two Conclusions:

The salon manager identified challenges in customer acquisition and retention, including phone inquiries, pricing competitiveness, long wait times, and appointment rescheduling difficulties. They expressed optimism about using GroomPersona to address these issues, improving efficiency, and motivating employees through customer feedback. However, concern was raised about customers switching to discounted offers and the need for fairness among salons. The manager expressed readiness to integrate the app as a performance benchmark and utilize its features to enhance efficiency. Additionally, the manager emphasized the importance of notifying customers about their upcoming appointments to facilitate effective appointment management and reduce cancellations. This proactive approach allows customers to allocate time in their schedules and make necessary rescheduling adjustments.

Q1: validated the time-consuming nature of phone inquiries, customers' desire for valuebased pricing, and the difficulty of retaining customers in a competitive market with fluctuating prices. This information provides a valuable understanding of the need for efficient communication, competitive pricing strategies, and customer retention tactics to improve the salon's overall performance and success.

Q2: validated the impact of long wait times on customer satisfaction and retention. The insights gained highlight the potential loss of customers who prefer immediate service and the challenges faced in retaining customers who cannot reschedule appointments.

Q3: validated that GroomPersona can save staff time, streamline pricing and negotiation processes, improve appointment management, and enhance overall efficiency for both customers and salon experts.

Q4: provides insights into the relationship between efficiency and financial success. The responses indicate that improving efficiency through appointment management and reducing waiting times can lead to increased customer satisfaction and higher profits for the business.

Q5: validated that promotions and vouchers can indeed intrigue customers and encourage them to make appointments. However, there is also a concern about customers switching to other offers if they find better discounts elsewhere. The salon manager expects that the app will ensure fairness by not affecting businesses offering regular prices for certain services. This insight helps me understand the potential benefits and challenges of implementing promotional strategies in the salon industry.

Q6: helped enlighten that the app can serve as a benchmark for incentivizing employees based on positive customer feedback, thus motivating them to enhance their job performance and maintain efficiency. Additionally, the app's features can aid in managing walk-in customers effectively, reducing waiting times for both customers and salon experts. This insight highlights the potential of the app to improve overall efficiency in salon services and optimize work processes.

Q7: revealed that customers often forget or fail to make appointments but intend to receive regular salon services. Notifying customers about their upcoming appointments can help them manage their schedules effectively, allowing them to allocate time and make necessary adjustments. This insight suggests that proactive notifications can contribute to reducing appointment cancellations and forgetfulness, enhancing the overall customer experience, and improving appointment management for the salon.

Requirements Outcomes of Interview Two:

- A salon's standalone page.
- Promotion notices for salons on their profile.
- A map locating the salon for customers.
- Calendar for upcoming schedules.
- Vouchers/discount page.
- Link between vouchers and notification system.
- A consultation option.
- A rating system for customers to rate salon services.

2.2.3 Interview Three Results and Conclusion

Interview questions for Salon Expert:

The purpose of the interview was to gather requirements for the GroomPersona app from a salon expert. The salon expert's insights were valuable due to their direct interaction with customers and provision of personalized salon services. The focus was on addressing the issue of high waiting times in salons, which negatively impacts operational efficiency and customer satisfaction. By interviewing the salon expert, app features could be identified to improve efficiency and reduce waiting times. This interview aimed to gain insights into the effectiveness of specific app features in delivering value to both customers and salon experts.

Q1: Do you think tracking salon appointments can reduce waiting time for customers? Why?

- Yes, of course. Because customers are often running late and we spend time waiting for our scheduled appointments, which can be discouraging as well. It also inhibits the tendency to assist walk-in customers as we are unsure if the scheduled customers will be checking in soon.
- Tracking salon appointments can also develop a sense of urgency among customers, enabling them to be punctual in reaching the salons on time.
- I think tracking salon appointments can reduce waiting time for customers because if one customer is late for the appointment, then they mess with our schedule as well, due to which the next customers end up waiting for their services. So, yes, tracking appointments can increase significantly reduce waiting times. Also, if a customer is running late, then we can provide services to customers who are already at the salon, irrespective of their appointment status, which can help manage workload effectively.

Q2: Do you think miscommunication about the type of services increases service time for customers, increasing waiting time for next appointments?

- Yes, certainly. This is because every salon has different criteria for services. For example, one salon includes hair wash with a haircut at a higher price, whereas we offer hair cut at a lower price, but we do not include hair wash in the service. So, customers will have to pay extra for a haircut, and if a customer just made a call asking for a haircut price, then they would find our charges comparatively lower than other salons. In this way, the customer ends up discussing or negotiating the price, which can also result in appointment cancellation, all because of a miscommunication regarding the type of services.
- Similarly, if a customer agrees to pay extra at a regular or discounted price that includes hair wash with the haircut, it increases service time as my next appointment would be scheduled based on prior haircut time only. It eventually makes the next appointments get delayed, which can increase customer dissatisfaction.

Q3: Do you think that a notification system that reminds customers about their appointments can reduce waiting time?

- Yes, if the notification is sent at the right time to enable customers to plan their time accordingly and consider their commute duration, it can help customers reach salons at the right time. But I also believe that being punctual is a personality factor and that some people will always be running late.
- However, I would like to know if they are running late so I can manage my other clients efficiently without making them wait for the customer who has a habit of running late.

Q4: Do you think that using check-in via the Groom Persona app can increase operational efficiency in the salon?

- When you say check-in, do you mean to pay for the services or reach the salon? I
 think if customers pre-pay for their services and reach late at the salon, then it will
 not affect the operational efficiency.
- But if you are suggesting an option that enables customers to check in once they
 reach the salon, then I believe that it can significantly increase operational
 efficiency. This is because customers will not have to discuss their appointment
 details and share service specifications with the assigned or available salon
 experts. This way, salon experts will also know that the client has checked in and
 will keep the services and products ready for the customers.

Q5: Do you believe that making a salon profile on GroomPersona can increase the number of customers? Why?

- Yes indeed. Because the number of customers increases with marketing, and since GroomPersona will be providing customers with discounts and promotion offers, it will actually act as a marketing tool to reach the right customers.
- So, I think when customers see a promotional or discounted service, they are more likely to make a purchase because it meets their budget or delivers a higher value compared to the actual price of services. It will increase the number of customers, which will be good for profit and salon experts as well because we also earn commission based on the number of customers served and customer ratings.

Q6: Are there any other features that have not been mentioned above that could be suggested?

- Yes. I would like to recommend that customers providing ratings should not be able to abuse their empowerment level given by the rating system. I feel like salons should also be able to rate their customers to maintain transparency in the service quality and expected levels of services. I know how some customers could be impossible to please, and a negative or low rating hurts the overall business.
- I believe that this app provides very comprehensive services to accommodate the needs of customers and salons, so I don't think any changes are required in features, but then again, I do not know much about how apps are made.

Interview Three Conclusion:

During the interview, several important insights were shared regarding salon appointments and customer satisfaction. It was acknowledged that tracking appointments can reduce waiting times by encouraging punctuality and optimizing scheduling. Miscommunication about services can lead to increased service time and subsequent customer dissatisfaction. Implementing a notification system can help customers arrive on time and improve overall scheduling efficiency. The concept of a check-in feature was discussed, with potential benefits including streamlined operations and preparedness for services. Creating a salon profile on the app was seen as a marketing opportunity, offering discounts and promotions to attract more customers. However, concerns were raised about potential customer rating abuses, and a suggestion was made to allow salons to rate customers as well. Overall, the app was viewed as comprehensive, but the need to consider the perspectives of salon professionals and potential customer ratings was emphasized.

Q1: highlighted the challenges faced when customers are late for their appointments, causing delays and affecting the efficiency of salons in serving other customers. Tracking appointments can help manage the schedule more effectively, prioritize punctuality, and provide services to customers who are present at the salon.

Q2: validated the potential issues caused by miscommunication, such as customers expecting different services or negotiating prices based on incomplete information. This can lead to longer service times, disrupting the schedule and causing delays for other appointments. Understanding the impact of miscommunication helps in improving communication with customers and ensuring clarity about the services offered, ultimately reducing waiting times and enhancing customer satisfaction.

Q3: reveals that revealed that while notifications can help customers plan their time and reduce waiting time, individual factors such as personality traits and punctuality habits may still influence customer arrival times. However, the insights gained emphasize the importance of being aware of customer delays and managing appointments efficiently to minimize waiting time for other clients.

Q4: highlights that if check-in refers to pre-payment and arrival at the scheduled time, it may not directly impact operational efficiency. However, if it refers to a feature that allows customers to check in upon arrival at the salon, it can enhance efficiency by eliminating the need for extensive discussions and enabling salon experts to prepare services in advance based on the customer's check-in status.

Q5: validated that by offering discounts and promotions through GroomPersona, the salon can reach a wider audience and attract customers who are more likely to make a purchase due to the perceived value or affordability. This can result in an increase in the number of customers, benefiting both the salon's profitability and the salon experts' commissions based on customer ratings and service volume.

Q6: explored additional features that could enhance the functionality and effectiveness of the app. The insight gained from this question is that implementing a customer rating system for salons, where salons can also rate their customers, could help maintain transparency and fairness in the service quality and expectations. It addresses the concern of potential abuse of the rating system by customers and provides a mechanism for salons to provide feedback on customers' behaviour and satisfaction. Additionally, it reveals the belief that the app already offers comprehensive services, indicating satisfaction with the existing features.

Requirements Outcomes of Interview Three

- An appointment tracking system for customers and salons.
- A notification system for salons about customer check-ins.
- A Service specification option for salons.
- A promotional banner for each salon

- A rating system for customers and salons
- Salons should have their own pages to ensure that they appeal to customers using their own brand.
- An RSVP system is in place for customers to respond to booking schedule notifications.

2.2.4 Interview Four Results and Conclusion

Interview questions for Developer:

The purpose of this interview was to gather insights from the interviewee regarding the functional and security features that should be included in the GroomPersona app. The goal was to ensure that the developer understood the value that the app should deliver to both customers and salons. By prioritizing requirements based on their efficacy and complexity, the interview aimed to provide valuable input for conducting a MoSCoW analysis. The interviewee's perspectives from a functional standpoint will help shape the development process and ensure that the app meets the needs of its users effectively.

Q1: Is it possible to link the GroomPersona App with the search engine results, as this would involve a feed of data regarding salon location and contact details? How?

- Yes, it is possible to link the GroomPersona App with search engine results by integrating the app's data with search engine algorithms. This can be achieved by optimizing the app's content with relevant keywords and metadata, ensuring accurate and up-to-date salon location and contact details are included.
- Additionally, leveraging structured data markup can provide search engines with structured information about the salons, such as name, address, phone number, and opening hours, which can enhance the visibility and accessibility of salon information in search engine results pages. This integration would enable users searching for salon services to easily find and access relevant salon information through search engine results.

Sub question: Would salons be able to upload their information directly from the app, or would they be restricted to search engine results?

- Salons should have the capability to directly upload their information to the GroomPersona app. This would enable them to have control over their salon profile, ensuring that accurate and up-to-date information is available to users.
- By allowing direct uploads, salons can provide detailed and specific information about their services, contact details, and location, enhancing their visibility and accessibility within the app.
- This approach ensures that salons are not restricted to search engine results and gives them the autonomy to manage their profiles effectively within the app's ecosystem.

Q2: Is it important to add a notification system in the GroomPersona App, and how would this notification system work? The notification system would include promotions, discount offers, and real-time appointment tracking. How would this be accomplished?

• Yes, adding a notification system to the GroomPersona App is important as it serves multiple purposes for both customers and salons. The notification system

would enhance communication and engagement by providing timely updates, promotions, discount offers, and real-time appointment tracking.

- Additionally, the notification system can be used to send promotional offers and discounts to customers. Salons can create targeted campaigns based on customer preferences, previous service history, or specific time periods to attract more customers and boost sales. These notifications can include special promotions, discounted services, or loyalty rewards to incentivize customers to book appointments and visit the salon.
- Real-time appointment tracking can be implemented through the notification system. Customers can receive updates on the status of their appointment, such as estimated wait times or any delays, allowing them to plan their time accordingly. This feature also helps salons manage their operations more efficiently by providing insights into appointment schedules and potential bottlenecks.
- The notification system in the GroomPersona App serves as a valuable tool for communication, marketing, and improving the customer experience. It ensures that customers are informed and engaged in using the app to visit salons while empowering salons to streamline their operations and offer personalized services.
- The app would need to integrate push notifications, SMS alerts, or email notifications. When a customer books an appointment, they can opt-in to receive notifications regarding their appointment status, reminders, and any changes or updates related to their scheduled service. This helps customers stay informed and organized, reducing the chances of missed appointments and enhancing their overall experience.

Sub question: Would it be possible to enable the users to customize the notification system based on their preferences?

 Yes, it would be possible to enable users to customize the notification system based on their preferences, allowing them to choose the types of notifications they want to receive and how they want to receive them.

Q3: Would it be possible to develop a link between social media platforms, such as Facebook, Instagram, and Twitter, with GroomPersona App? This would include sharing content from the Groom Persona with social media accounts.

- Yes, it would be possible to develop a link between social media platforms like Facebook, Instagram, and Twitter with the GroomPersona app. This integration would allow users to share content from the GroomPersona app, such as promotions, discounts, or their salon experiences, directly to their social media accounts, increasing the app's visibility and potentially attracting more customers.
- Salons can also benefit from the convenience of customers sharing their salonrelated activities and updates with their social media followers, which will also act as a marketing strategy for the app and salons.

Q4: If required, would it be possible to display YouTube videos on the GroomPersona App in order to allow users to understand the app's functions? How?

• Yes, it would be possible to display YouTube videos on the GroomPersona app to help users understand its functions. To display YouTube videos on the app, I can

incorporate a feature that allows users to access and view specific YouTube videos within the app's interface.

- This can be achieved by integrating the YouTube API (Application Programming Interface) into the app, which enables fetching and playing YouTube videos. The app can include a designated section or page where users can browse and select relevant videos that provide tutorials, demonstrations, or explanations of the app's features and functionalities.
- When a user selects a video, the app can use the YouTube API to load and display the video within the app, providing a seamless and integrated viewing experience for the users.

Q5: Would it be possible to book appointments via the GroomPersona app?

- Yes, it would be possible to integrate a booking system into the GroomPersona app, allowing users to book appointments directly through the app.
- The app can provide a user-friendly interface where customers can select their preferred salon, choose a specific service, select a date and time slot, and confirm an appointment.
- The booking system can be designed to sync with the salon's schedule and availability, ensuring accurate and real-time appointment booking for customers through the app.

Q6: What sort of safety percussions can be implemented in GroomPersona to ensure that user details are safe?

- One important measure is the use of secure data encryption, such as SSL/TLS protocols, to safeguard user data during transmission and storage.
- Additionally, implementing a robust authentication system with features like strong passwords, multi-factor authentication, or biometric authentication can enhance security.
- Data privacy policies should be clearly defined and followed, ensuring compliance with regulations like GDPR.
- Regular security audits and vulnerability assessments should be conducted to identify and address potential weaknesses in the system.
- Secure server infrastructure with proper access controls, firewalls, and intrusion detection systems is crucial to prevent unauthorized access and data breaches.
- Obtaining user consent for data collection and providing transparency in data usage, along with giving users control over their data through privacy settings and opt-out options, contributes to data safety. By implementing these safety measures, GroomPersona can prioritize user data protection and build trust with its users.

Q7: Would an administrator role be possible on the GroomPersona app?

- Yes, it is possible to incorporate an administrator role in the GroomPersona app for both users and salons.
- The administrator role would have elevated privileges and access to manage and oversee various aspects of the app, such as user accounts, salon profiles, service listings, promotions, and resolving any issues or disputes that may arise.

• The administrator role of users ensures the efficient administration and smooth operation of the app while maintaining control and security.

Interview Three Conclusion:

The objective of this interview was to determine the requirements for the GroomPersona app by gathering insights from a salon expert. The interview covered various aspects, including linking the app with search engine results to improve salon visibility and accessibility. It was established that salons should have the ability to directly upload their information to the app for better control over their profiles. The importance of incorporating a notification system in the app was discussed, which would include promotions, discount offers, and real-time appointment tracking. It was suggested that the notification system could be customized based on user preferences. Integrating social media platforms like Facebook, Instagram, and Twitter with the app was deemed possible to allow users to share content. The feasibility of displaying YouTube videos on the app to help users understand its functions was confirmed. The interview also touched upon the possibility of enabling users to book appointments directly through the app. Safety precautions to protect user details, such as data encryption and authentication systems, were discussed. It was also realized that incorporating an administrator role for both users and salons was deemed possible for efficient management and oversight.

Q1: highlighted that by integrating the app's data with search engine algorithms and leveraging structured data markup, the app can enhance the visibility and accessibility of salon information, making it easier for users to find relevant salon details through search engine results.

Q2: revealed that the notification system would enhance communication and provide timely updates, promotions, discount offers, and real-time appointment tracking. This would be accomplished by integrating push notifications, SMS alerts, or email notifications into the app.

Q3: helped gain insight into the possibility of linking social media platforms with the GroomPersona App, as this integration would allow users to share content from the app, such as promotions and salon experiences, directly to their social media accounts, increasing visibility and attracting more customers. It also benefits salons by leveraging customers' social media activities as a marketing strategy.

Q4: highlighted the possibility and importance of displaying YouTube videos on the GroomPersona App to help users understand its functions. By integrating the YouTube API, the app can provide a designated section where users can browse and view relevant tutorial videos, enhancing their app experience.

Q5: revealed that by integrating such a system, users can conveniently book appointments by selecting salons, services, and preferred dates and times, improving the overall user experience.

Q6: provided insight into the safety precautions that can be implemented in GroomPersona to protect user details. By incorporating measures such as data encryption, robust authentication systems, privacy policies, security audits, and secure server infrastructure, the app can ensure the security of user data and maintain compliance with regulations.

Q7: revealed that having an administrator role allows for efficient management of user accounts, salon profiles, and app operations, ensuring smooth functioning and maintaining control and security.

Requirements Outcomes of Interview Three

- A user-specific notification system that involves alerts for promotions, schedules, appointments, rescheduling, and cancelations.
- The GroomPersona app should be broken up into customer and salon groups.
- A scheduling calendar personalized for each user based on their scheduled bookings.
- User support page where users can contact support to get assistance.
- The integration of the social media app with the GroomPersona App.
- An FAQ page with possible user queries specific to customers and salons.
- YouTube API to assist users with app features.
- The use of single sign-in for the app.
- Users can change their profile information on the App (phone numbers, location, etc.).
- Promotions and discounts page to promote recent offers by salons.
- Notifications for upcoming appointments.
- Share content on social media via the GroomPersona App.
- Facility to contact salons for consultation.
- Incorporate data encryption, security audits, and privacy policy.
- Allow administrator role for customers and salons

2.3 Brainstorm

The brainstorming activity was conducted to determine the requirements of the salon managers and experts that will be the potential users of the GroomPersona App. The activity was conducted to determine the features that could be successful or unsuccessful based on their utility for users. This activity enabled the participants to identify and contribute to determining the key features of this project. The brainstorming activity was in two phases, in which the first phase focused on determining which features of the app would be successful, whereas the second phase focused on identifying the features that would be unsuccessful or inefficacious for the users. The information gathered from both phases is represented as a pros and cons list in the further sections of this project.

2.3.1 Participants from Riverside Beauty, Clare, Ireland:

The participants from the Riverside Beauty Salon, located in Clare, Ireland, attended the brainstorming session. The participants included a salon manager and a salon expert, and their insights highlighted a variety of features in similar apps, like StyleSeat, Booksy, and Google Search, that either add or inhibit value for their users.

Pros	Cons
1. Shows nearby salons based on the distance to the customer location.	 Does not show availability or schedule for certain salon services.
2. Provides accurate data about salons with an online presence.	2. Prices and promotions are often outdated.
3. Enables customers to call salons to get additional information.	3. Customers do not know which salon to select due to the availability of a number of salons without further information about their services.
4. Redirects customers to official web pages of salons for further correspondence.	4. Often redirects to Facebook and Instagram pages that do not result in instant communication or consultation with experts.

2.3.2 Participants from Rochas Beauty Concept, Dublin, Ireland

The participants from the Rochas Beauty Concept, located in Dublin, Ireland, attended the brainstorming session. The participants included a salon manager and a salon expert, and their insights highlighted a variety of features in similar apps, like StyleSeat, Booksy, and Google Search, that either add or inhibit value for their users.

Pros	Cons
1. Extensive search results provide contact information and the location of salons.	 Lack of content on redirected pages.
2. Ability to search for a location using location services in certain apps.	2. Outdated salon brochures.
3. Certain salons have price lists that enable customers to get	3. Unattractive or unorganized information on webpages
information about services.	 Limited search options based on pricing and quality

2.3.3 Participants from Allure Hair, Donegal, Ireland

The participant from Allure Hair, located in Donegal, Ireland, attended the brainstorming session. The participants included a salon manager, who is also the salon owner, and their insights highlighted a variety of features in similar apps, like StyleSeat, Booksy, and Google Search, that either add or inhibit value for their users.

Pros	Cons
 Phone numbers are available for every salon that promote correspondence. 	 Lack of online booking management system.
2. Increases customer impression on social media pages for salons with social media accounts.	 Lack of support function for users.
3. Customers can access the latest promotions only if salons have listed this information on social media.	3. Unintentional access to apps and pages.
 Promotes customers to correspond with salons to require additional information about services. 	4. Customers call just to ask for the price without making reservations.

2.3.4 Results from Brainstorm

The completion of brainstorming sessions resulted in identifying different features that can add value to GroomPersona. The brainstorming map shows the requirements that are gathered during the brainstorming phases, and these requirements are listed below:

- A standalone page for salons showing pricelist and promotions.
- A promotions page for available promotions.
- A booking management system to allow customers to schedule appointments.
- A booking management system that helps manage multiple bookings, real-time appointments, and cancelations.
- A rating system for customers and salons.
- A loyalty program to promote user engagement.

- Location-based search results and guidance using the map.
- An option for consultation before and after setting appointments.
- A notification system for salons about customer check-ins.
- A notification system for customers to remind upcoming appointments.
- User support page to get assistance in case the app is down or other queries.
- Integration of social media with the GroomPersona App.
- An FAQs page for salons and customers to seek assistance.
- Ability to change/edit profile information.
- Data privacy

2.3.5 Brainstorm Map

2.4 MoSCoW Analysis:

Must	
FR1	The link between Google Search and the GroomPersona App
FR2	A user support feature
FR3	A notification system for GroomPersona
FR4	A calendar feature for managing appointments for users
FR5	GroomPersona should be broken up based on customer and salon account
FR6	FAQ section for customers and salons
FR7	Access to user email
FR8	Access to booking tracking
FR9	Users can view and change personal information on the app
FR10	Each salon should have their own page
FR11	Salons individual page admin
FR12	Promotions page administrator
NF1	Login is restricted to registered users
NF2	Administrator access
NF3	Buffer overloads
NF4	Encryption of valuable data
NF5	Salon service appointments
NF6	Efficiency in login credentials
NF7	Easy to navigate
NF8	Updating profile with administrator login
NF9	Posting promotions
NF10	Return to the homepage/return to the previous page
NF11	Log out
NF12	Efficiency in page loading
NF13	24/7 app availability
NF14	24/7 admin log in
NF15	24/7 user support

Should	
FR13	A salon page independent from the customer profile page.
FR14	An independent customer page customer page
FR17	Ability to signup for salons on the app
FR21	Integrated messages with email
FR22	YouTube channels/videos for users
FR23	Call available on the app

FR24	Contact details and addresses for salons
FR15	Ability to schedule appointments
FR26	Find the salon service and sort the results with the price

Could	
FR18	A customer profile feature available for salons
FR19	An RSVP system for upcoming discounts and promotions
FR20	A customer loyalty point system
FR27	To see previous appointments
FR28	Can check available slots in salons
FR29	Ability to make calls with salons for online consultation
FR30	Ability to track customer check-n status

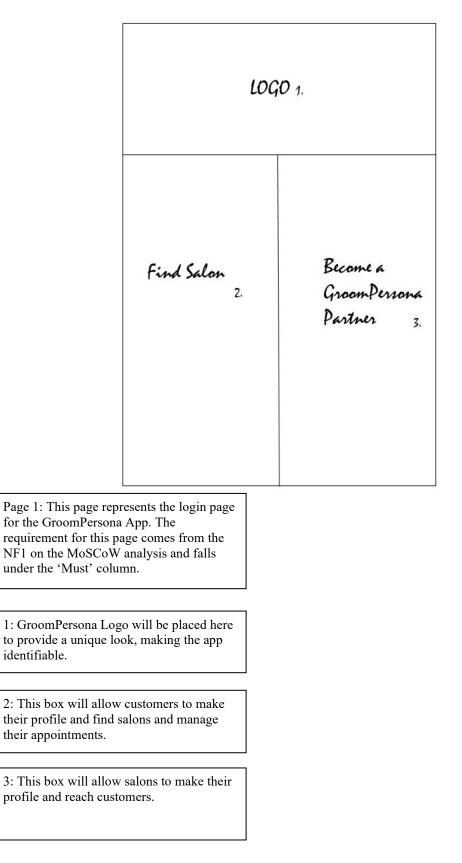
Won't	
FR31	A blog for salons and customers
FR32	Integration between the customer page and social media page (privacy issues)
FR33	The ability to share links with salons and vice versa
FR34	The ability to share content from GroomPersona and social media
FR35	The ability to make payments via GroomPersona
FR36	The ability to top-up GroomPersona for reservations
FR37	The ability to book more than two promotions per account

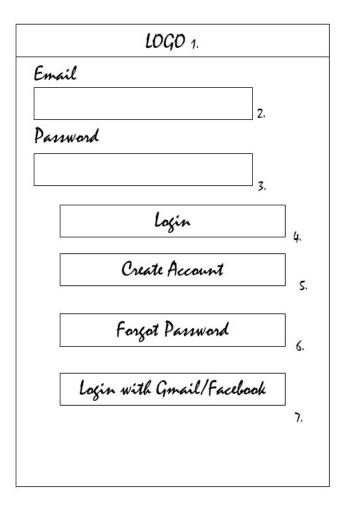
The MoSCoW analysis was conducted to prioritize the app requirements based on the elicitation process in this project. The elicitation process incorporated data from the following stakeholders:

- A survey was conducted among salon users that were approached at the NCI campus, local salons, and local malls.
- Interview one was conducted with a business analyst.
- Interview two was conducted with a salon manager.
- Interview three was conducted with a salon expert.
- Interview four was conducted with a developer.
- A brainstorming session was conducted with five participants.

The MoSCoW analysis helps develop a clear understanding of requirements based on their ranking so that they can effectively be comprehended by the stakeholders. The requirements prioritized in respective tables will be included in the wireframes and will help understand where these requirements are generated from. The requirements in MoSCoW analysis represent the importance identified by stakeholders, and the required number does not represent their importance as each requirement in the Must section has equal weightage.

2.5 Wireframes Set 1





Page 2: This page will occur after logging in. This page shows different pages that offer different features that were identified during the elicitation process.

1: GroomPersona Logo will be placed here to provide a unique look, making the app identifiable.

2: Users will be required to input their ID to initiate the login process.

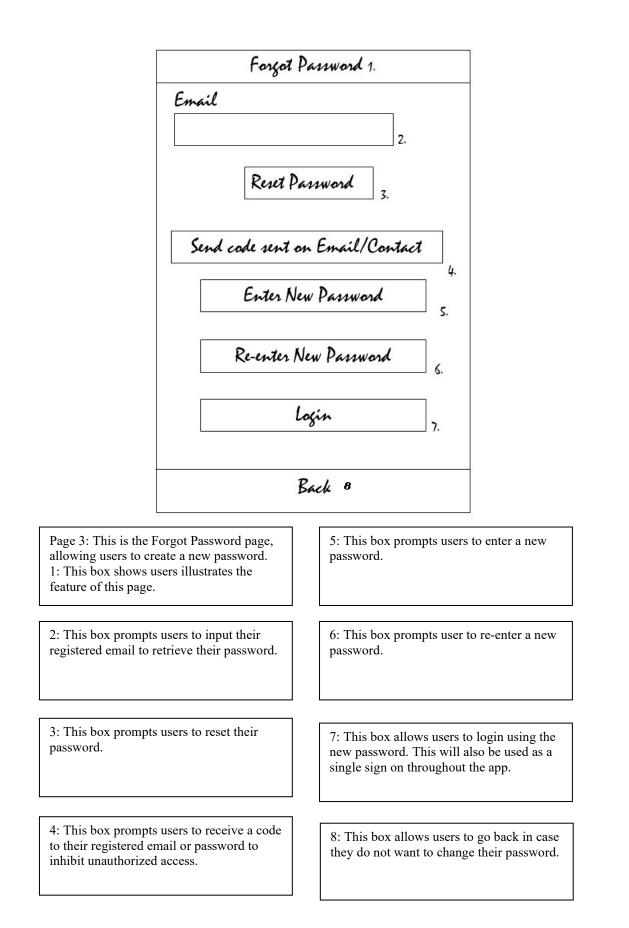
4: This box will prompt users to log in

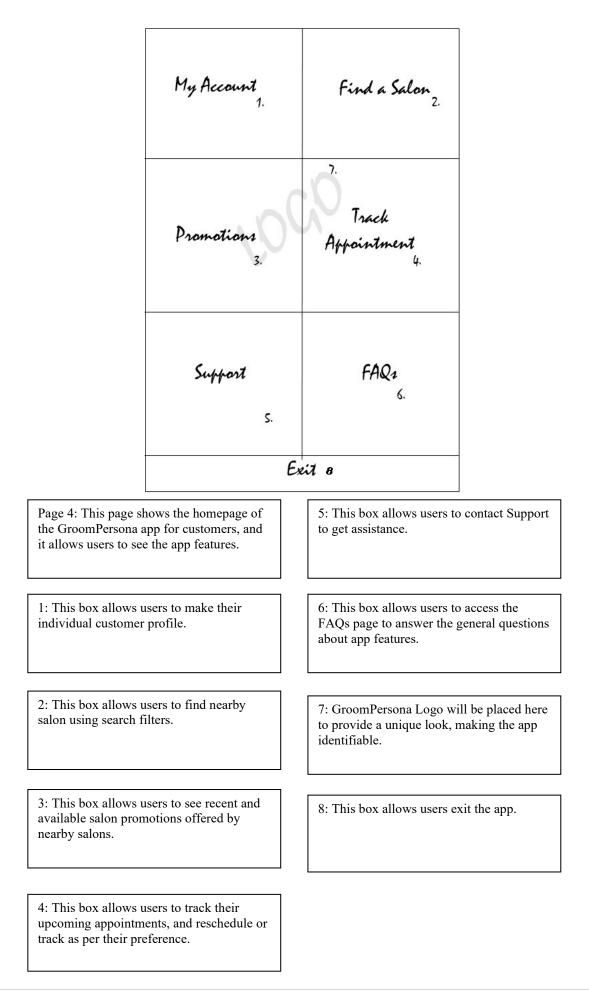
5: This box will prompt users to create a new account.

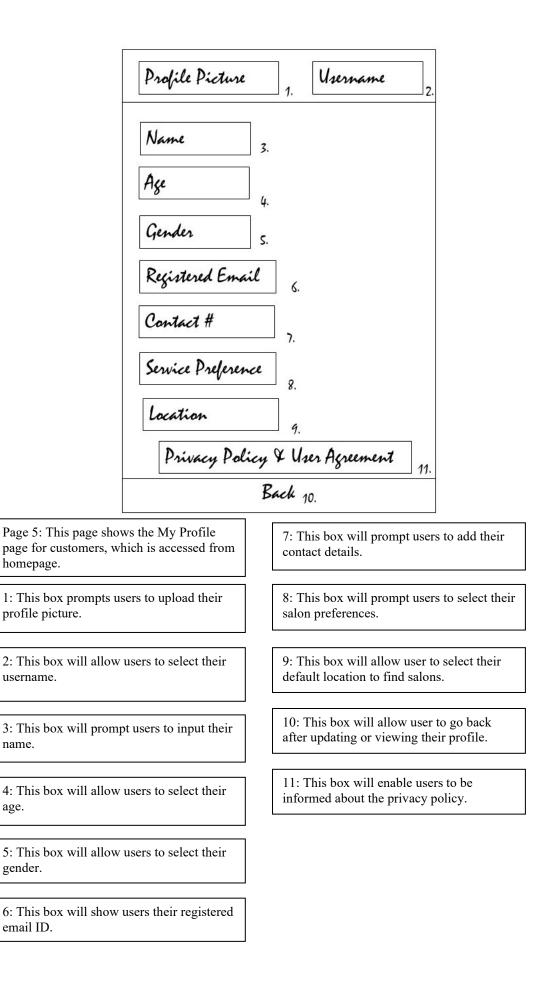
6: This box will allow users to recreate a new password in case they forget their password.

3: This box will prompt users to input their password.

7: This box will prompt users to log in using their Gmail or Facebook accounts.







MAI)
1 17 IF	2.
Date 3.	
Time 4.	
Type of Service 5.	
Gender 6.	
Price limit 7.	
Search	1

Page 6: This page shows the Find a Salon page for the app. The requirement for this page can be tracked to the MoSCoW analysis.

1: This box informs the user about the app feature they are using.

2: This box shows the map from where the users can drop pin to find nearby salons.

5: This box allows the users to select their preferred services.

6: This box prompts users to specify their gender to find the adequate salons.

7: This box prompts users to set a price limit for their search results.

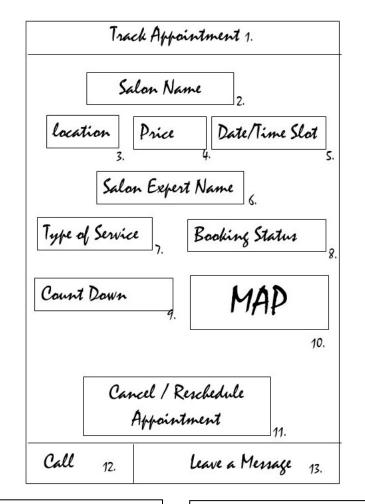
3: This box prompts the users to select the dates for which they are finding the salon appointments.

4: This box prompts the users to select their preferred time slots for salon appointments. 8: This box prompts users to search results based on their input.

9: This box will take users back to homepage in case they do not want to use this feature.

	F:	ind a Salon 1.
		Result # 01 _{2.} Rating Price Date/Time Slot
	4.	5. 6.
	Search	Result # 02
	location	Price Date/Time Slot
	Г	0
	Perk	Consult 7. Book an Appointment 8.
	Back g.	Book an Appointment
		8.
rom Find a Salon	shows search results page for customers, ssed via homepage.	5: The is where the price of salon service based of search query will appear.
rom Find a Salon which can be acces . This will inform	page for customers, ssed via homepage.	5: The is where the price of salon service
rom Find a Salon which can be acces . This will inform	page for customers, ssed via homepage.	 5: The is where the price of salon service based of search query will appear. 6: This is where the available date and time
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rom Find a Salon which can be acces : This will inform eature they are usi	page for customers, ssed via homepage.	 5: The is where the price of salon service based of search query will appear. 6: This is where the available date and time
rom Find a Salon which can be acces : This will inform eature they are usi ?: This is where the	page for customers, ssed via homepage. the users about the ing. e results will appear.	5: The is where the price of salon service based of search query will appear. 6: This is where the available date and time slots will appear based on search query. 7: This is where the users can choose to consult with the salon experts from the search results.
rom Find a Salon which can be acces : This will inform eature they are usi ?: This is where the	page for customers, ssed via homepage. the users about the ing. e results will appear. ting of salon from sear	5: The is where the price of salon service based of search query will appear. 6: This is where the available date and time slots will appear based on search query. 7: This is where the users can choose to consult with the salon experts from the search results.

Pr	omotion 1.
	esult # 01 2. ice Date/Time Slot 4. 5.
Search #	Result # 02 vice Date/Time Slot
Page 8: This page shows Promotions page for customers, which can be accessed via homepage. This page is based on the requirements identified in the MoSCoW	Book an Appointment 7. 5: This is where the available date and time slots will appear for salons offering promotion.
1: This will inform the users about the feature they are using.	6: This is where the users can choose to consult with the salon experts from the search results.
2: This is where the results will appear.	7: This is where the user can book an appointment.
3: This is where location of salon offering the promotion will appear.	
4: This where the price of offering the promotion will appear.	



Page 9: This is a Track Appointment page for customers, which is accessible via homepage. This page is based on the requirements from the MoSCoW analysis.

1: This will inform the users about the feature they are using.

2: This will show the salon name from where the appointment is scheduled.

3: This will show the location of salon from where the appointment is scheduled.

4: This will show the price of services for the appointment.

5: This box will show date and time slot for scheduled appointment.

6: This box will show the salon expert assigned from the salon for the scheduled appointment. 7: This box will show the type of service scheduled in the appointment.

8: This box will show the booking status, i.e., confirmed or pending for the appointment.

9: This box will show the real-time count down for the scheduled appointment.

10: This box will show the real-time location of the salon for the scheduled appointment.

11: This box will allow users to cancel or reschedule their appointment.

12: This box will allow users to call the salon for further correspondence.

13: This box will allow users to message the salon for further correspondence.

Arr	ointment Status 1.	
location 3.	4. n Expert Name 6.	207 5.
Back 9.	Rate 1-5	10.

Page 10: This page shows the Appointment Status page, which will appear once the customer has availed the services from salon.

1: This will inform the users about the feature they are using.

2: This will show the salon name from where the appointment was scheduled.

3: This will show the location of salon from where the appointment is scheduled.

4: This will show the price of services for the appointment.

5: This box will show date and time slot for scheduled appointment.

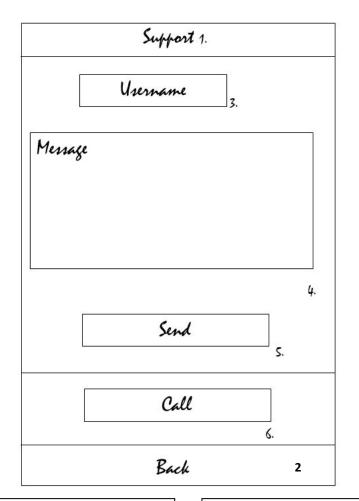
6: This box will show the salon expert assigned from the salon for the scheduled appointment.

7: This box will show the type of service scheduled in the appointment.

8: This box will show the 'done' status of the appointment, showing that the appointment has been concluded.

9: This box will take the user to the home page.

10: This box will prompt the user to rate the salon services on a scale of 1 to 5.



Page 11: This is the Support page, which can be accessed via homepage. This page is developed from requirements provided in MoSCoW analysis.

1: This will inform the users about the feature they are using.

3: This box will show the registered username of users, so that their query can be tracked back to them. 5: This box will prompt the users to send their query to the Support.

6: This box will allow users to call the Support in case they do not want a written correspondence.

2: This box will take the user to the home page.

4: This is where the users will be able to write their queries.

FAQS 1.		
Question		
		2.
Answer		
		3.
Contact Support		
	4.	
Back		S .

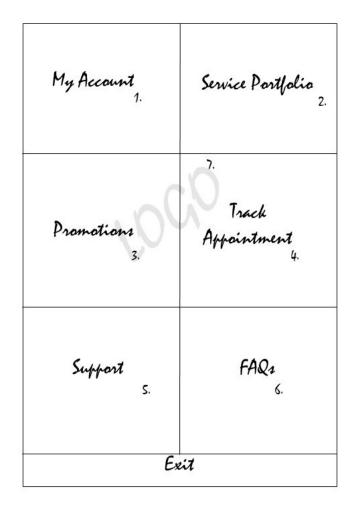
Page 12: This is the FAQs page, which can be accessed via homepage. This page is developed from requirements provided in MoSCoW analysis. 4: This box will prompt users to contact Support in case they do not receive help from FAQs. This box will redirect users to Page 11.

1: This will inform the users about the feature they are using.

2: This box will take the user to the home page.

2: This is where the frequently asked question will appear.

3: This is where the answers for frequently asked question will appear.



Page 4: This page shows the homepage of the GroomPersona app for salons, and it allows users to see the app features.

1: This box allows users to make their salon profile.

2: This box allows users to develop their service portfolio.

5: This box allows users to contact Support to get assistance.

6: This box allows users to access the FAQs page to answer the general questions about app features.

7: GroomPersona Logo will be placed here to provide a unique look, making the app identifiable.

3: This box allows users to see their promotions offered to customers.

8: This box allows users exit the app.

4: This box allows users to track their upcoming appointments and reschedule as per their preference.

Salon Lozo 1. Username	2
Salon Name 3.	
Gender 4.	
location s.	
Registered Email 6.	
Contact # 7.	
Salon Description	8
Review Rating	
Privacy Policy & User Agreement	10.
Back 11	

Page 5: This page shows the My Salon Profile page for salons, which is accessed from homepage.

1: This box prompts users to upload their salon logo.

2: This box will allow users to select their username.

3: This box will prompt users to input their salon name.

4: This box will allow users to select genders whom they offer salon services.

5: This box will show users their registered email ID.

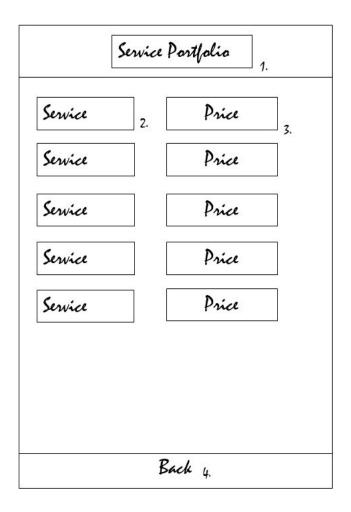
6: This box will prompt users to add their contact details.

8: This box will prompt users to write their salon description and specialty.

9: This box will allow user to check their review rating.

11: This box will enable users to be informed about the privacy policy.

11: This box will allow user to go back after updating or viewing their profile.



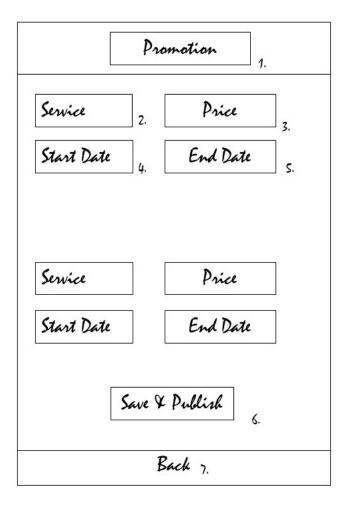
Page 5: This page shows the My Portfolio page for salons, which is accessed from homepage.

3: This box will allow customers to list the price for services they are offering.

1: This will inform the users about the feature they are using.

4: This box will allow user to go back to homepage after updating or viewing their portfolio.

2: This page will allow salons to list their available services.



Page 6: This page shows Promotions page for salons, which is accessed from homepage.

1: This will inform the users about the feature they are using.

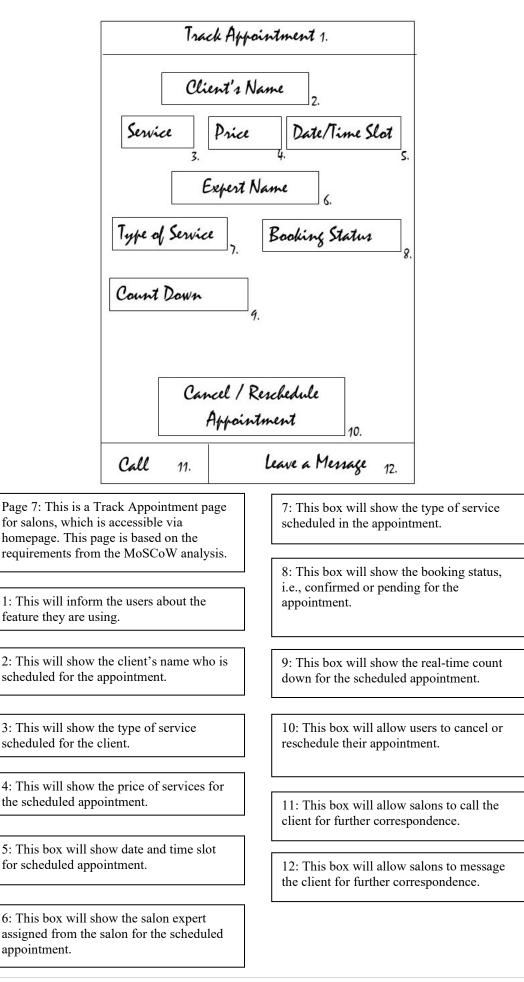
2: This will prompt the salons to provide the service detail they want to provide promotions for.

3: This will prompt the salons to provide the price for service offered in promotion.

4: This will allow the salons to set the date from when they want to provide promotions. 5: This will allow the salons to set the date for when they want to stop offering this promotion.

6; This will allow salons to sasve and publish their promotion to reach the customers.

4: This box will allow the salon user to go back to homepage after updating or viewing their promotions.



FAQS 1.	
Question	
	2.
Answer	
	3.
Contact Support	
	4.
Back	5.

Page 12: This is the FAQs page, which can be accessed via homepage. This page is developed from requirements provided in MoSCoW analysis.

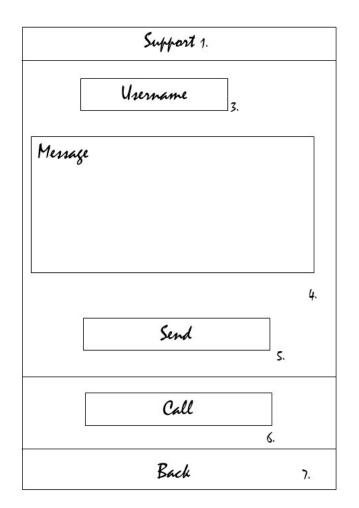
1: This will inform the users about the feature they are using.

2: This is where the frequently asked question will appear.

3: This is where the answers for frequently asked question will appear.

4: This box will prompt users to contact Support in case they do not receive help from FAQs. This box will redirect users to Page 11.

2: This box will take the user to the home page.



Page 9: This is the Support page, which can be accessed via homepage. This page is developed from requirements provided in MoSCoW analysis.

1: This will inform the salons about the feature they are using.

3: This box will show the registered username of users, so that their query can be tracked back to them.

4: This is where the users will be able to write their queries.

5: This box will prompt the users to send their query to the Support.

6: This box will allow users to call the Support in case they do not want a written correspondence.

2: This box will take the user to the home page.

2.6 Requirements Workshop: Post Wireframes Set 1

The requirement workshop was conducted after the completion of the first set of wireframes. The requirements workshop was aimed at receiving feedback regarding the layout of the GroomPersona App. The wireframes were developed based on the requirements identified with the elicitation techniques and their respective priority level determined with the MoSCoW analysis. The wireframes indicated the main pages of the app based on the 'Must' and 'Should' categories. The wireframes also highlight the process of signing up, log-in, searching, scheduling, and support functions. The participants in the requirements workshop comprised two salon managers and three salon experts. The stakeholders were found to be satisfied with the app layout and appreciated that app can be used by customers and salons. The log-in page was considered very effective in restricting unauthorized access to the app functions, and the stakeholders also appreciated the promotions option in the app to reach customers.

The option for salons to indicate their services and prices were also appreciated, and the ability to schedule and track appointments was also applauded by the stakeholders. The profile page received a positive response because it allowed customers to develop their profiles that can be used for targeted discounts and promotions. Similarly, the customer support function and salon rating function was also considered effective in enhancing the user experience while enhancing the efficiency of the salon services.

However, there were certain criticisms regarding the first wireframe set, which will be incorporated into the digital set of wireframes. These criticisms are as follows:

- 1. The sign-up page does not accommodate sign-in using Gmail or Facebook option, which can reduce utility for users.
- 2. The search results do not have a 'sort' option to allow customers to find services that are recent or affordable based on their preferences.
- 3. The Support function does not provide the option for making a direct call to the salon, which can be an inhibiting factor for customers regarding developing positive buying behaviour.
- 4. The option for forgetting my password was not in the wireframes, and it was suggested that this option should be included to facilitate the users.
- 5. The scheduling feature did not show a calendar to help users find upcoming appointments.
- 6. There should be a separate page for the service portfolio of salons so that customers can find additional salon services that meet their preferences and get information about pricing.
- 7. The page for review rating for customers should also be added so that customers can go through the reviews and ratings each salon have received to assist their purchase decision.

2.7 Wireframes Set 2: Digital



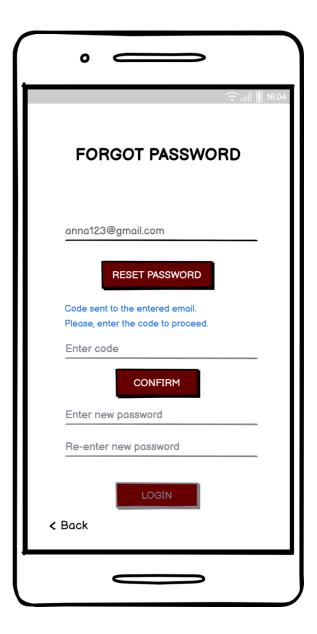
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,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
GROOMPERSONA
Logging in as Customer
anna123@gmail.com

Forgot Password?
LOGIN
OR Login with
G f ©
Don't have an account?
CREATE ACCOUNT

• —
्रि _{नम} 🗍 16:04
GROOMPERSONA
Enter your email
Enter your password
Confirm password
Select User Role Salon Customer
SIGN UP OR
Signup with
Gf 💿
Already have an account?

•
م ااال 16:04
GROOMPERSONA
Logging in as Salon
bsugar@gamil.com

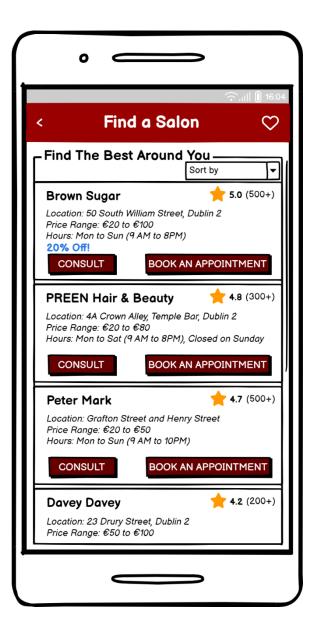
Forgot Password?
LOGIN
OR Login with
Gf©
Don't have an account?
CREATE ACCOUNT

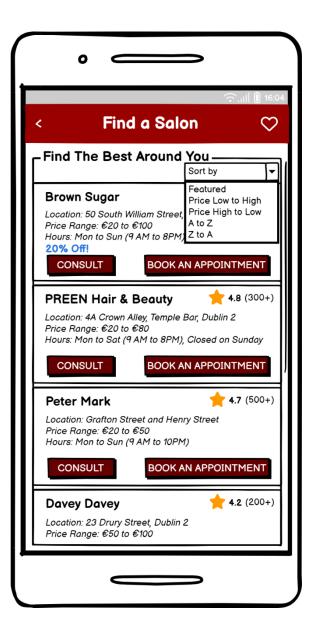


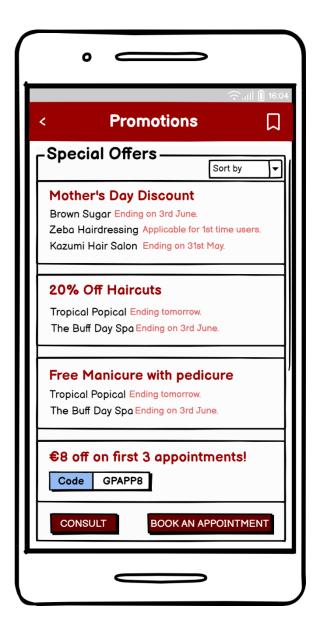


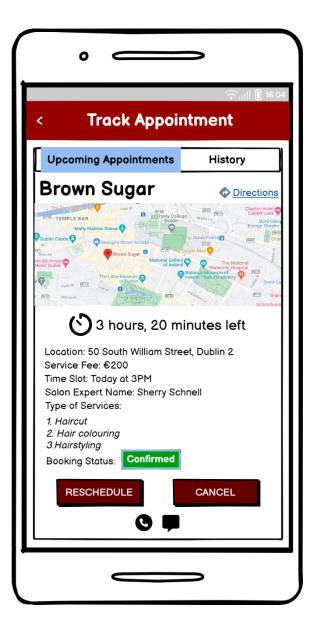


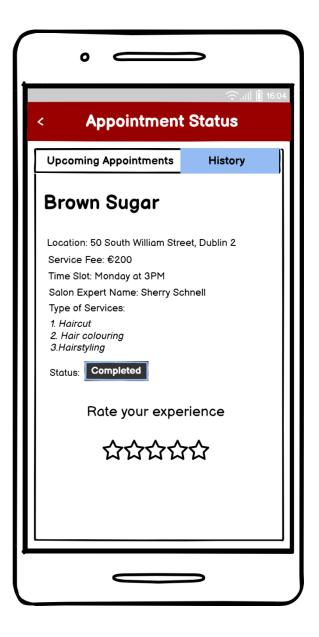
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< Find a Salon
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Time HH:MM:SS
Type of Service Select
Gender Select 🗸
Price Limit
SEARCH



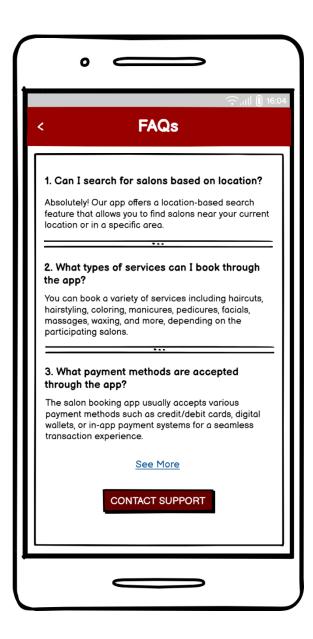


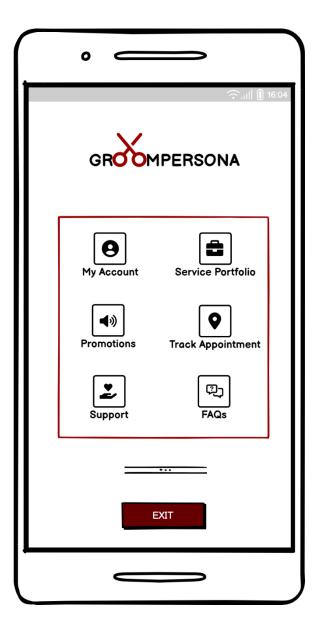






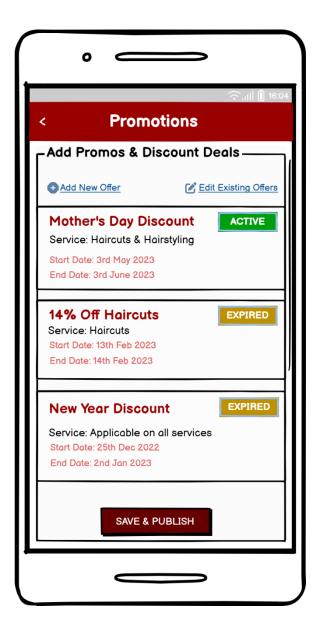
•	
ি < Support	ıı
Hi, Anna Avetisyan Need assisstance?	
Enter your message	
SEND	
Talk to our support team	

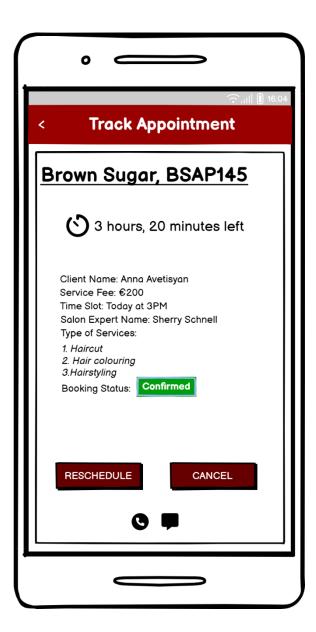




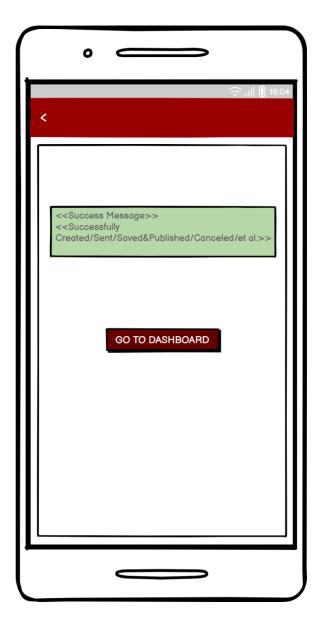


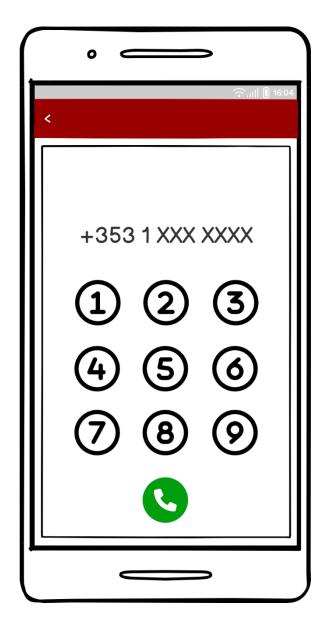
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< Servic	e Portfo	iio 🔒 🔝
South Willio	am Street F	Prices 🗸
SERVICE	SENIOR STYLIST	COLOUR SPECIALIST
Balyage half head	€154	€163
Balyage full head	€176	€193
Half head meche short	€94 €94	€120 €120
	€94 €94	€120 €120
	€94	€120 €120
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Blackro	ck Price Li	st 🗸
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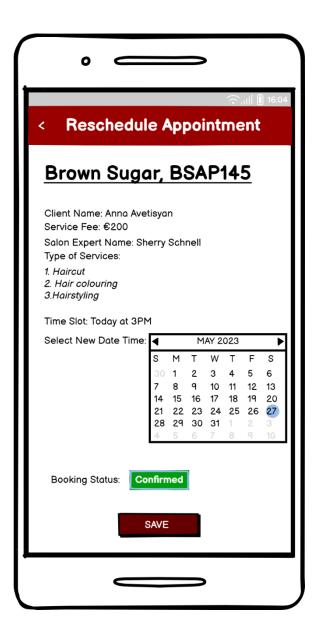


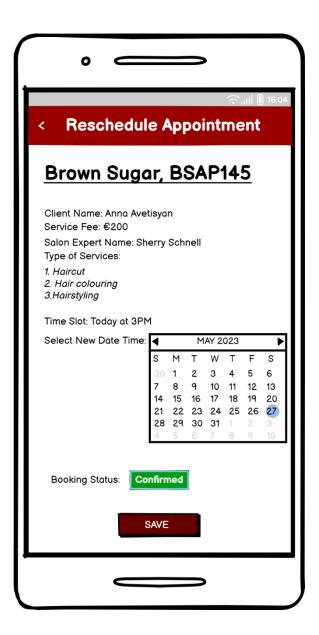


•	
< ٤	िताती 🛙 16:04 Support
Hi, Brown Sugar Need assisstan	
Enter your messag	e
1	SEND
Talk to	our support team
	C



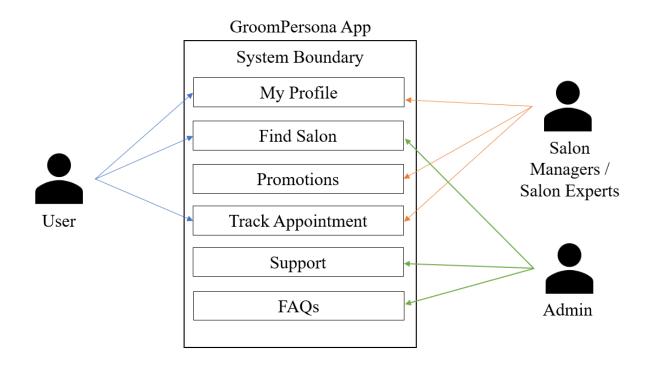








2.8 UML Use Case Diagram



The use case diagram provides the visual representation of stakeholders and the GroomPersona App. The stakeholders are placed outside the GroomPersona system boundary. The different pages existing in the GroomPersona App are illustrated inside the boundary. The coloured lines indicate whether the stakeholder has administrative permission for the specific page. The users, mainly customers, have administrative permission to manage their profile and manage or track their appointments, whereas salon managers have administrative permission to manage their salon profile, offer promotions, and manage or track their upcoming appointments. The app administrator reserves administrative permission to manage services regarding support, location, and FAQs.

3. IEEE Requirement Specification

3.1 Introduction

3.1.1 Purpose

The purpose of the IEEE requirement specification document resides in identifying and enlisting key functional and non-functional requirements for GroomPersona App to ensure its effective development, leading to optimizing its value for its users. It also aims to ensure that the app features meet the needs and expectations of stakeholders, as the IEEE requirement specification document will be examined by the stakeholders to ensure that this project delivers value and utility for its users.

3.1.2 Scope

In Ireland, there is currently no comprehensive app that allows users to find the right salon services based on their preferences. While StyleSeat provides a map of nearby salons, it lacks the functionality to cater to specific user needs. This is where GroomPersona comes in, offering a solution for both customers and salon service providers. In today's digital age, consumers increasingly rely on online searches to gather information about products and services, including grooming services. While Google searches and phone calls are commonly used to find salons, there is no integrated app in Ireland that offers a holistic customer service experience.

GroomPersona fills this gap by providing users with a platform to search for salons based on their service preferences, pricing, and location. Users can screen salons based on reviews, prices, and distance, ensuring they have all the necessary information to make an informed decision. The app also enables users to schedule appointments and track them in real time, reducing waiting times and improving time management. For salon owners, GroomPersona allows them to create profiles and list their services, pricing, and availability. They can also offer promotions through the app, increasing their visibility and potentially boosting sales. Customers can consult with salons or directly book appointments, providing flexibility and convenience.

The app also offers features that enhance the overall customer experience. Users can check in for their services and receive notifications about upcoming appointments. This streamlines the process, eliminates the need for recurring appointments, and helps users better manage their schedules. By providing a centralized platform for salon services, GroomPersona benefits both customers and salons. It simplifies the search process for users and helps salons reach their target customers more efficiently. With its focus on convenience, personalized service, and real-time tracking, GroomPersona aims to revolutionize the salon industry in Ireland.

3.2 Functional Requirements

3.2.1 Class One: User

Functional Requirement 1	
Identification Code:	FR1
Title:	The link between Google Search and GroomPersona App.
Description:	GroomPersona App should draw information from Google Search to gain information regarding the salon's location to help customers find salons in specific locations
Location:	This is located on the Find a Salon page and Track Appointment page.
Priority:	Must Have

Functional Requirement 2	
Identification Code:	FR2
Title:	A user support feature
Description:	User support provides users with access to multiple support services offered by GroomPersona. This feature allows users to either submit queries or call support agents.
Location:	The Support page is located on the home page of the GroomPersona.
Priority:	Must Have

Functional Requirement 3	
Identification Code:	FR3
Title:	A notification system form GroomPersona
Description:	The notification system will be used for multiple areas, including notification for upcoming salon appointments, vouchers, salon promotions, rescheduling updates, ratings and reviews, and appointment cancellations.
Location:	Throughout the GroomPersona App.
Priority:	Must Have

Functional Requirement 4	
Identification Code:	FR4
Title:	A calendar feature for managing appointments for users
Description:	The calendar feature is specific to the Find a Salon and Track
	Appointment pages and will contain different information. The
	calendar on the Find a Salon page will allow users to find salon
	services based on their availability, whereas the calendar feature on
	the Track Appointment page will allow users to keep track of their
	upcoming appointments.
Location:	The calendars are located on the Find a Salon and Track
	Appointment pages.
Priority:	Must Have

Functional Requirement 5	
Identification Code:	FR5
Title:	GroomPersona should be broken up by profiles.
Description:	When a user logs in, they will only be able to view their own profiles and appointments.
Location:	Home Page
Priority:	Must Have

Functional Requirement 6	
Identification Code:	FR6
Title:	FAQ section for customers and salons
Description:	The FAQ sections aim to solve user queries regarding the app's
	functions and features. These sections will comprise common
	questions that are typically asked by users and will provide
	adequate answers to users.
Location:	The FAQ section is located on the homepage.
Priority:	Must Have

Functional Requirement 7	
Identification Code:	FR7
Title:	Access to user email
Description:	GroomPersona will have access to the user's email from their personal profile.
Location:	This feature is located on the My Profile page that can be accessed from the homepage.
Priority:	Must Have

Functional Requirement 8	
Identification Code:	FR8
Title:	Access to booking tracking
Description:	GroomPersona will provide access to track their booking. This will be done through integration with Google Search link to show booking location.
Location:	This feature is located on the Track Appointment page given on the homepage.
Priority:	Must Have

Functional Requirement 9	
Identification Code:	FR9
Title:	Users can view and change personal information on the app
Description:	The users can view and edit their personal information on GroomPersona. The information will include a profile picture, name, age, gender, email address, contact number, service
	preference, and location.
Location:	This feature can be accessed through the My Profile page.
Priority:	Must Have

Functional Requirement 10	
Identification Code:	FR10
Title:	Each salon should have their own page
Description:	When the customers access the Find a Salon page, they will be able to select an individual salon from the search results. This will contain their service hours, service list, and price list.
Location:	This can be found under the Find a Salon page.
Priority:	Must have

Functional Requirement 13	
Identification Code:	FR13
Title:	A salon page independent of the customer profile page
Description:	The salon page will allow salons to manage information regarding their services. Customers will be able to access this page to gain information about services and appointment slots.
Location:	This page will be located as the My Profile page for users registered as salons
Priority:	Should Have

Functional Requirement 14	
Identification Code:	FR14
Title:	An independent customer page
Description:	This page will allow customers to browse all available salons in the GroomPersona. It will also provide features regarding managing appointments, finding salons, and consulting with experts.
Location:	This feature is located on the home page.
Priority:	Should Have

Functional Requirement 15	
Identification Code:	FR15
Title:	Ability to schedule appointments
Description:	The search results from the Find A Salon and Promotions page will

	allow customers to schedule appointments.
Location:	This feature will be located on the Find a Salon page search results
	and Promotions page.
Priority:	Should Have

Functional Requirement 17	
Identification Code:	FR17
Title:	Ability to signup for salons on the app
Description:	This feature will allow users to select an individual salon and signup to receive notifications specific to those salons.
Location:	This will be found on Salon pages accessed via search results from the Find A Salon page.
Priority:	Should have

Functional Requirement 18	
Identification Code:	FR18
Title:	A customer profile feature available for salons
Description:	This feature will allow salons to see customer profiles of users with whom they have scheduled appointments. It will allow salons to make their services customized to user preferences once the customers reach the salon for their services.
Location:	This feature will be located on the Track Appointment page.
Priority:	Could Have

Functional Requirement 20	
Identification Code:	FR20
Title:	A customer loyalty point system
Description:	This feature will grant customers who have used GroomPersona certain points that will make them eligible for future discounts and promotions.
Location:	This feature will be available on the Promotions page.
Priority:	Could Have

Functional Requirement 21	
Identification Code:	FR21
Title:	Integrated messages with email
Description:	This feature will allow users to show messages from within their app in their email.
Location:	This feature will be located on the My Profile page.
Priority:	Should Have

Functional Requirement 22	
Identification Code:	FR22
Title:	YouTube channels/ videos for users
Description:	This feature will allow users to see tutorials specific to GroomPersona features to help users understand its functions.
Location:	This will be located in the FAQs section to guide users with navigation.
Priority:	Should Have

Functional Requirement 23	
Identification Code:	FR23
Title:	Call via app
Description:	Users requiring information or consultation from salons will be able to call on their contact numbers
Location:	This will be located in the search results on the Find A Salon page.This feature will also be accessed in ongoing appointments from theTrack Appointment page.
Priority:	Should have

Functional Requirement 24	
Identification Code:	FR24
Title:	Contact details and addresses for salons
Description:	The customers should be able to find contact details and addresses for salons for correspondence.
Location:	This information will be located in search results on the Find aSalon page, and customers will be able to see the contact details and

	addresses for salons for their upcoming appointments on the Track
	Appointment page.
Priority:	Should Have

Functional Requirement 25	
Identification Code:	FR29
Title:	Ability to make calls with salons for online consultation
Description:	This feature will allow customers to call salons for online consultation at predetermined service charges.
Location:	This feature can be accessed from search results provided on theFind A Salon page.
Priority:	Should have

Functional Requirement 26	
Identification Code:	FR26
Title:	Find the salon services and sort the results with the price
Description:	This feature will allow customers to find nearby salons and sort results in ascending or descending order based on their prices. It will enhance the search feature, providing the right type of service to customers based on their budget preferences.
Location:	This feature will be located at the top of search results on the Find ASalon Page and Promotions page.
Priority:	Should Have

Functional Requirement 27	
Identification Code:	FR27
Title:	To see previous appointments
Description:	This feature will allow the customers to see their previous appointments.
Location:	This feature will be located on the Track Appointment page, where the previous appointments can be accessed.
Priority:	Could Have

Functional Requirement 28	
Identification Code:	FR28
Title:	Check available slots in salons
Description:	This feature will show what times are available for salon services in a specific salon.
Location:	This feature will be accessed when customers select a salon from search results to book an appointment.
Priority:	Could Have

Functional Requirement 30	
Identification Code:	FR30
Title:	Ability to track customer check-in status
Description:	This feature will allow salons to know that their customers have reached the salon.
Location:	The salons will receive a push notification integrated with the Track Appointment page.
Priority:	Could Have

Functional Requirement 36	
Identification Code:	FR19
Title:	An RSVP system for upcoming discounts and promotions
Description:	This system will be integrated with the notification system, allowing customers to be informed about recent and upcoming discounts and promotions.
Location:	This feature will be accessed via the notifications centre in My Profile.
Priority:	Could Have

3.2.2 Class Two: Admin

Functional Requirement 11	
Identification Code:	FR11
Title:	Salons individual page admin
Page permissions:	Restricted to individual salons
Description:	This role will change the information regarding salon services,
	pricing, working hours, and booking times for users to access.
Outcome:	This will allow the salon admin to change content and reach the
	customers using updated information about their salon services.

Functional Requirement 12	
Identification Code:	FR12
Title:	Promotions page administrator
Page permissions:	Restricted to individual salons
Description:	There will be many salons operating via GroomPersona, and it is crucial that each salon page has an administrator. They will be responsible for developing content specific to promotions and salon services.
Outcome:	It will ensure that each salon is managed adequately and provides information from a single source without causing ambiguity for customers.

3.3 Non-Functional Requirements:

3.3.1 User Class One: Security Requirements

Non-Functional Requirement 1	
Identification Code:	NF1
Title:	Login restricted to registered users
Description:	Only GroomPersona registered users can access the app, as the app
	provides e-commerce services. It will help inhibit the risk of
	unauthorized access to data. In this instance, using Captcha can help
	ensure that automated programs are restricted from using different

combinations to get access to GroomPersona. It will also allow
users to stay logged in without needing to log in again.

Non-Functional Requirement 2	
Identification Code:	NF2
Title:	Administrator access
Description:	The administrator access will be associated with user IDs, enabling
	the users to have administrator permission to create, modify, and
	manage their profile and access GroomPersona features.

Non-Functional Requirement 3	
Identification Code:	NF3
Title:	Buffer overloads
Description:	Buffer overload attacks occur when there is no limit on input field length, enabling the attacker to send large amounts of data to make the application submissive. Hence, the user input field is limited to support nine characters for a user ID to reduce the risk of unauthorized access to data.

Non-Functional Requirement 4	
Identification Code:	NF4
Title:	Encryption of valuable data
Description:	Valuable data, mainly comprising personal information and booking details of users, will be encrypted to ensure the implementation of
	safe data handling and management practices.

3.3.2 User Class Two: Performance Requirements

Non-Functional Requirement 5	
Identification Code:	NF5
Title:	Salon service appointments
Description:	When the users select their appointment for salon services, booking confirmation should appear within 30 seconds. The appointment schedule will be accessible from the Track Appointment page.

Non-Functional Requirement 6	
Identification Code:	NF6
Title:	Efficiency in login credentials
Description:	 The potential users attempting to log in must be notified within 10 seconds whether their login attempt was successful or unsuccessful. This process will have two outcomes: a. The user will log in successfully and will be directed to the home page. b. The user will be unsuccessful in the login attempt and will
	have to try again in case the user ID and passwords do not match.

Non-Functional Requirement 7	
Identification Code:	NF7
Title:	Easy to navigate
Description:	GroomPersona must be easy to navigate for its uses, which accounts for the easiness of navigating pages and reading buttons. The wireframes of GroomPersona illustrate that this app is easy to
	navigate and does not incorporate excessive scrolling of extensive menus.

Non-Functional Requirement 8	
Identification Code:	NF8
Title:	Updating profile with administrator login
Description:	Users will have an administrator login for their profiles and will be
	able to update their profiles. Once the user has updated their profile,
	the changes should be applied within 30 seconds.

Non-Functional Requirement 9	
Identification Code:	NF9
Title:	Posting promotions
Description:	Once a user submits their promotions offers, their promotion should be available to be viewed by all other users within 30 seconds. The

users will be able to update their promotions offers from the My
Profile section.

Non-Functional Requirement 10	
Identification Code:	NF10
Title:	Return to the homepage/ return to the previous page
Description:	When the user selects the option to return to the homepage or return
	to the previous page, then they should be redirected within 10
	seconds after clicking the button.
	When the user selects the return to home/ previous page button,
	they should be redirected within 10 seconds of clicking the button.

Non-Functional Requirement 11	
Identification Code:	NF11
Title:	Log out
Description:	When a user logs out from the GroomPersona, then the app must
	close within 10 seconds after clicking the button.

Non-Functional Requirement 12	
Identification Code:	NF12
Title:	Efficiency in page loading
Description:	Every page on GroomPersona must load between 10 to 20 seconds once the user has selected the page.

3.3.3 User Class Three: Availability Requirements

Non-Functional Requirement 13						
Identification Code: NF13						
Title:	24/7 app availability					
Description:	cription:The GroomPersona app must be available 24/7 for its users.					

Non-Functional Requirement 14					
Identification Code:	NF14				
Title:	24/7 admin log in				
Description:	The administrator login must be available at all times to ensure that users can make updates to their profiles.				

Non-Functional Requirement 15					
Identification Code:	NF15				
Title:	24/7 user support				
Description:	User support features must be available 24/7 to ensure that users can contact support regarding their concerns, which will contribute to enhancing the trustworthiness and effectiveness of the app among its users.				

4. References

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5. Appendices

5.1 Project Proposal

5.1.1 Project Objectives

The objectives for the requirement document for the GroomPersona app are as follows:

- To analyze other apps providing appointment and consultation services for grooming in Ireland.
- To gather information from stakeholders, mainly salon visitors, salon managers, hairstylists, and grooming experts, via surveys and interviews in order to determine service gaps and brainstorm app features.
- To identify preferred app features among the stakeholders to optimize navigation and utility of the proposed app.
- To provide residents of Ireland with an efficient and convenient means to select, discuss, and reserve salon appointments specific to their unique preferences.
- To develop a prototype using wireframes to demonstrate how the app will look.
- To develop the final product comprising detailed requirement specification document used to develop the GroomPersona app.
- To utilize effective time management skills necessary to ensure the timely completion of this project.

5.1.2 Background

The app will target the residents of Dublin, Ireland. The current apps lack the integrated version of services, due to which the grooming services they offer are limited to specific salons without offering extensive choices for customers regarding their location and service preferences. The idea for this project came when my sister and I were looking for grooming services on a limited budget, and we had to google search different salons to get their prices and available hours. This process was very time-consuming, due to which I realized that there must be an app specifically designed to help users find, select, and reserve salon appointments that match their schedule, budget, and unique preferences. It intrigued me to check the AppStore and Google Play, and I found two similar apps, but they lacked integration with the regional salons and did not meet the scope for business needs that I realized when I was looking for salons. Hence, when this project was initiated, I made sure to pitch this idea, as I believe that it will increase efficiency in selecting salon services.

This app will also enhance communication between salon managers, hair stylists, and customers by providing them with an integrated platform to consult and discuss their unique preferences while knowing the schedule and service charges. Moreover, I also observed that whenever I reach the salons for my appointment, my hairstylist are always busy, and when my turn comes, they spend more time discussing what type of service and hairstyle I would prefer. It further inhibits their time management, as I see that other customers are waiting for their services in the meantime. I believe that utilizing this help will enhance the flow of information between the customers and hairstylists, as hairstylists will be able to see the customer preferences based on their appointment, and the customers will not have to spend excessive time waiting for their services and describing their preferences once their turn comes up. The app will also provide real-time scheduling updates so that the customers will know if there are delays in their services, which will reduce their waiting time. This app will also enhance the check-in process with the salons, as the customers would have paid for their services online, which will make the overall service and experience more efficient.

Therefore, I intend to meet the objectives set out in the previous section by conducting a survey of stakeholders to understand their preferences for salon services and the hindrances they receive in their salon experience. After brainstorming, I will have the features that would optimize the salon services and experience, leading to developing the prototype of the proposed app.

5.1.3 State of the Art

Currently, there are two apps, i.e., StyleSeat and Booksy for Customers. StyleSeat is not operating in Dublin, Ireland, irrespective of their claim to be working in this region. Similarly, Booksy for Customers introduces its users to new businesses but does not provide information about the services, availability, and pricing. Hence, there is a lack of an integrated app that provides the residents in Dublin with information about nearby salons, services, pricing, and scheduling, enabling the users to interact with salon representatives to discuss their services, check-in, and track their appointment schedules in real time. Therefore, this app stands out in the market due to its holistic experience that initiates from screening and selecting salons, sharing their service preferences, booking appointments, making payments, and check-ins, providing an efficient and integrated salon experience to its users.

5.1.4 Technical Approach

The approach for the requirement documents for GroomPersona App will be based on the results obtained from the information-gathering process. The information will be gathered from different stakeholders, mainly salon customers, salon managers, and salon experts. These stakeholders are identified as the salon service users and salon service providers, as these individuals interact with each other during their salon experience. The research phase will also aim at different grooming and salon appointment apps, as I intend to explore similar apps available in Ireland and the United Kingdom. I believe that researching these apps will provide me with insights into the features and layouts used in the current apps. I will also interview salon customers to understand what features they perceive to be important and useful for the app. I also plan to interview salon managers to obtain their insights about the utility of its features in practice.

Moreover, different sources of literature, mainly BABOK v3, will be used to understand the context of business value in order to achieve better outcomes from this app. I believe that using BABOK as a source of literature will help generate value for stakeholders by understanding their unique needs and preferences. I also intend to use different sources of literature to guide the information-gathering process and understand the context of research and its scope in an effective manner.

The prototype of the app will be demonstrated using a wireframe to represent how the app will use after using coding programs. Wireframe will be developed by using Balsamiq and will be used to demonstrate product features and navigation. I will keep track of project progress using the GANT chart, and the project will be organized into tasks and activities that can be completed on a weekly basis. It will ensure that I continue to achieve progress milestones, which will ensure the timely completion of this project.

5.1.5 Technical Detail

In this project, Balsamiq will be used to develop wireframes. Balsamiq is a flexible tool that allows its users with an effective user interface design to create complex wireframes. It will also enable me to customize features, resulting in developing comprehensive wireframes that deliver the mock-up design for the app. I will be managing the timeline of this project using MS Excel, and I will use MS Word to create and edit the requirement document for this app.

5.1.6 Project Plan

The project plan is developed by listing tasks that contribute to achieving project activities. The project plan is provided below:

Task	Duration	Start Date	End Date			
Project plan	20 days	Thursday, September 1, 2022	Tuesday, September 20, 2022			
Project brief	1 day	Wednesday, September 21, 2022	Wednesday, September 21, 2022			
Brainstorm project ideas	12 days	Thursday, September 22, 2022	Friday, September 30, 2022			
Project proposal	5 days	Saturday, October 1, 2022	Wednesday, October 5, 2022			
Conduct research (surveys)	10 days	Thursday, October 6, 2022	Saturday, October 15, 2022	Presentation		
Analyze and conclude surveys	10 days	Sunday, October 16, 2022	Wednesday, October 26, 2022	Write and compile project report	t en en e	
Finalize project concept	5 days	Thursday, October 27, 2022	Monday, October 31, 2022	Develop prototype wireframes		
Deliverable 1	10 days	Tuesday, November 1, 2022	Thursday, November 10, 2022			
Protoype development	10 days	Friday, November 11, 2022	Sunday, November 20, 2022	Conduct research (interviews)		
Work review with supervisor	5 days	Monday, November 21, 2022	Friday, November 25, 2022	Upload mid point documentation		Start Date
Upload mid point documentation	1 day	Saturday, November 26, 2022	Saturday, November 26, 2022	Protoype development	nt e la companya de la companya de	End Date
Monthly releftive journals	10 days	Sunday, November 27, 2022	Tuesday, December 6, 2022	Finalize project concept	ot	
Conduct research (interviews)	20 days	Wednesday, December 7, 2022	Tuesday, December 27, 2022	Conduct research (surveys		
Analyze and conclude surveys	15 days	Wednesday, December 28, 2022	Wednesday, January 11, 2023			
Develop prototype wireframes	10 days	Thursday, January 12, 2023	Sunday, January 22, 2023	Brainstorm project ideas	S	
Assess prototype efficacy using surveys	20 days	Monday, January 23, 2023	Sunday, February 12, 2023	Project plan	n f i i i i i i i i i i	
Write and compile project report	25 days	Monday, February 13, 2023	Friday, March 10, 2023	00	00-01-000-00-	1
Submission	1 day	Saturday, March 11, 2023	Saturday, March 11, 2023			
Presentation	1 day	Tuesday, May 30, 2023	Tuesday, May 30, 2023			

5.1.7 Validation/Verification

The validation and verification of user requirements will take place by collecting data from stakeholders. The data will be collected by conducting surveys and interviews. Surveys will help quantify the agreeability levels of stakeholders, whereas interviews will help provide insights regarding the inclination of stakeholders toward the utility of proposed app features. It will also help identify gaps in their experiences, which will help improve app features and navigation. Hence, these techniques will help verify the user requirements while providing insights for optimizing app features.

Moreover, the wireframe will comprise features that will be based on findings from the information gathered from the stakeholders. After completing the wireframe, I will demonstrate the wireframe to the stakeholders to get their input about the utility and layout of the app. It will help develop feedback specific to the app layout, leading to improving the app features, which will be enhanced before project submission. Hence, user requirements will be verified and validated based on insights gathered from stakeholders throughout the project.

5.2 **Reflective Diary**

Student name:

Programme: BSc in Technology Management

5.2.1 September

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I have shared the proposal for my final year project with my supervisor. My topic was about developing a mobile application that users can use to receive salon services at their homes. This idea was rejected because this idea lacked scope. The supervisor and lecturers argued that salon experts would charge high prices for at-home salon services, and salon experts might lack the means to travel with salon products and equipment to reach their customers. It will increase the waiting times for customers who want to receive salon services at salons. So, I focused on enhancing this idea, and after considering the constructs of efficiency, cost-effectiveness, and high-quality services, I decided that I should make a mobile application that enables its users to find and offer salon services in nearby locations and helps manage their appointments.

Reflection: I feel that I should have considered the constructs of efficiency, cost-effectiveness, and high-quality services for users. It would have ensured that my idea got accepted in the first meeting, saving me time to achieve further project milestones.

Intended Changes: I will share my improved idea with the supervisor and lecturers. I am highly motivated and open to incorporating their suggestions to make this project more practical for users.

5.2.2 October

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: My new idea got accepted, and this idea focuses on developing an app that will enable salons to share their portfolio and promotions to reach nearby customers, and it will enable customers to find nearby salons and schedule their appointments. After discussing this idea with my supervisor, I further enhanced this idea by integrating real-time appointment tracking for salons and customers to manage their schedules and reduce waiting times for customers. I submitted my project proposal, and I am working on my first deliverable.

Reflection: I am satisfied with the idea that my project has received approval. It means I can start working on deliverables and achieve project milestones.

Intended changes: I hope to remain productive throughout the semester and should be able to collect the data necessary to support my project.

5.2.3 November

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: This month has been very overwhelming as I had to meet academic obligations for other courses. Although I intended to be more productive this month, it was difficult to manage time, considering the other assignments that I had to submit. So far, I have identified the stakeholders and have uploaded the second draft. I have started working on designing a

questionnaire survey, and based on advice from my supervisor, I used Likert Scale for questions that required ratings for preference. I am looking forward to further project milestones as I am motivated and excited to see this project through to completion.

Reflection: I have made progress in this project, and my midpoint presentation is also complete. I am working on improving my presentation content as I am nervous due to my experience in pitching my idea for the first time. I hope that I satisfy the supervisor and lecturers and show promising progress on my project.

Intended changes: I should be working on organizing data and preparing for data analysis. I will be prioritizing this task in the coming weeks.

5.2.4 December

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I completed my presentation, and data collection and analyses are complete. I will write results from data during Christmas vacations.

Reflection: The presentation went better, and my idea for applauded for its efficiency. I have made adjustments in the power influence matrix as I have come to realize the actual influence of each stakeholder than assumptions.

Intended changes: I should maintain a balance between preparing for exams and achieving project milestones. I plan to continue with the project after the exams.

5.2.5 January

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: My exams were complete, and I met with participants to conduct interviews.

Reflection: I have completed my semester exams, but did not have the time to work on this project. I did conduct interviews with participants, and I have recorded them, which I will transcribe and analyse in February.

Intended changes: I should complete my final draft for the survey in February.

5.2.6 February

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I am done with the survey results and brainstorming sessions. I have started writing the report, and I am pleased with the information I received from the participants. During surveys, it was challenging to get the questionnaires filled, but after getting a few responses and sharing the survey with students to check for complexity, the turnout for the survey was good.

Reflection: I must share the results with the supervisor to ask for improvements in findings in case I missed something.

Intended changes: I have to finalize my report and organize results in a logical manner.

5.2.7 March

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I have been busy writing report and making sure that I continue to identify patterns and suggestions for improvements that can enhance user experience and app features. It is tiresome to go through such extensive data, and it is taking more time than I expected. I have completed the MoSCoW analysis, and wireframes are also complete. I have organized the requirements workshop to identify changes based on stakeholders' points of view. I have noted the required changes and will accommodate them in the digital wireframes after my exams.

Reflection: I am happy with my overall progress, and my report is complete, and I am taking a break from this project for exams.

Intended changes: I should recheck the elicitation techniques to make sure that I have not missed anything.

5.2.8 April

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I was busy with exams, but I managed to complete the digital wireframes. I have incorporated this information in my report.

Reflection: So far, this month has been very productive and challenging. I am looking forward to having the final draft ready in the next month.

Intended changes: I should have included the digital wireframes in the report, but I will be working on them in the next month.

5.2.9 May

I will be writing this journal on a monthly basis about progress and challenges in my final year project.

Achievements: I was focused on creating a use case diagram and preparing my project report.

Reflection: This month was productive, as I included wireframes in my report and organized and proofread the overall content for consistency. I am working on the poster for the showcase, and I have shared the draft for the final document with my supervisor for feedback.

Intended changes: I have to get the word documented, printed, and ready for submissions.

5.3 Gant Chart

1	Task	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
2	Project plan									
3	Brainstorm project ideas									
4	Project proposal									
5	Conduct research (surveys and interviews)									
6	Analyze and conclude surveys									
7	Finalize project concept									
8	Deliverable 1									
9	Protoype development									
10	Develop prototype wireframes									
11	Assess prototype efficacy using surveys									
12	Write and compile project report									
13	Submission									
14	Presentation									
15										