

National College of Ireland

Business Information Systems

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AFROTUNE

Technical Report

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Executive Summary

This report is intended to highlight the work done on my final year project which I have started in October 2021 called AFROTUNE. I have undergone requirement specification and have used use cases to depict these requirements. I have shown how my web app should look and operate using wireframes & ERD Diagrams. I have also shown snippets and explained key algorithms embedded in my project. Included in this report is also my project proposals and reflective journals. I have documented & highlighted testing results as well as show GUI of my finalised project.

1.0 Introduction

1.1. Background

I did this project because I wanted to build an application that promotes hair confidence for people of African descent. I also want to promote how necessary it is to care for one's hair. This project helps tackle a lot as you have an information giving system, a tracker, and a reminder all under the one belt.

1.2. Aims

As touched on before, this project is aimed to increase confidence, other aims include;

- Promote the importance on hair care
- Make hair styling fun for individuals
- Information sharing
- Track Hair Care Journey
- Remind users of notes they may have made about their hair

1.3. Technology

HTML & CSS - Main languages that will be used to build and customise the body of the application.

JQuery – Framework to help with quiz question buttons etc.

Javascript - This will be used to create pop ups, also to build the quiz and anything.

Bootstrap – Framework to help with css & javascript related like buttons etc.

PHP - Will be used to connect the web app to the database were information inputted by the user will be stored.

mySQL - Will be used to code the database were information inputted by the users will be stored.

Xampp – Will be used for interpretation of the php code for the database.

Github – Will be used to deploy the web app.

Visual Studio Code - Will be the platform used to code up this project.

Canva – Source of all images and will be used to edit images for the web application.

2.0 System

2.1. Requirements

2.1.1. Functional Requirements

2.1.1.1. Requirement 1: User Registration or Login

2.1.1.2. Description & Priority

This use case describes the login or registration of an account in order for the user to be able to gain access to functionalities within the application. The login must be successful and will be based on a username and a password created by the end user. It is needed to access the system in general.

2.1.1.3. Use Case

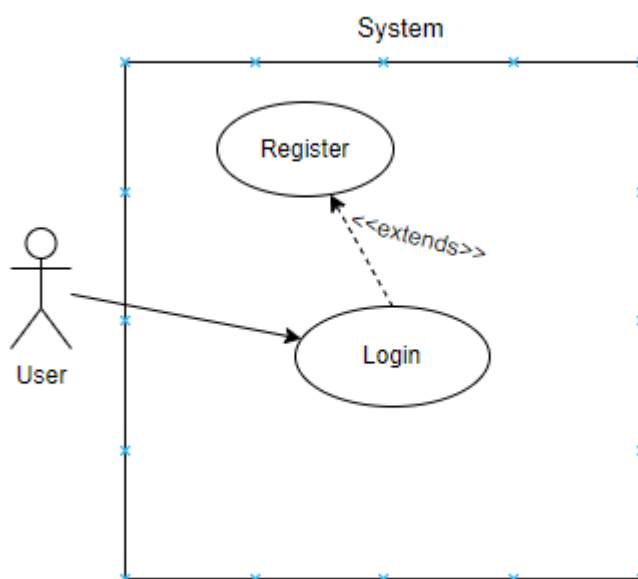
Scope

The scope of this use case is for the user to be able to register an account or login into their account that's already registered

Description

This use case describes the login or registration of an account in order for the user to be able to gain access to functionalities within the application. The login must be successful and will be based on a username and a password created by the end user.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode when the user accesses the start-up page.

Activation

This use case starts when a user starts filing in their details in order to log in/register

Main flow

1. The system identifies the start up page
2. The User inputs the username and password and clicks the log in button
3. The system verifies details given

Alternate flow

A1 : Registration

1. The system identifies start up page
2. The user creates account
3. The system stores details
4. The use case continues at position 2 of the main flow

Termination

The system presents the next page which is the navigation home page

Post condition

The system goes into a wait state

Requirement 2: Hair Care Questionnaire & Recommender

Description & Priority

This use case describes the ability of the system to ask the user questions surrounding their hair. The user must be able to answer questions asked and following these questions the system must be able to present the user with hair care tips & products that suit the specific end user.

It's priority is pretty high because the answers are needed to personalise the application which is one of the top goals.

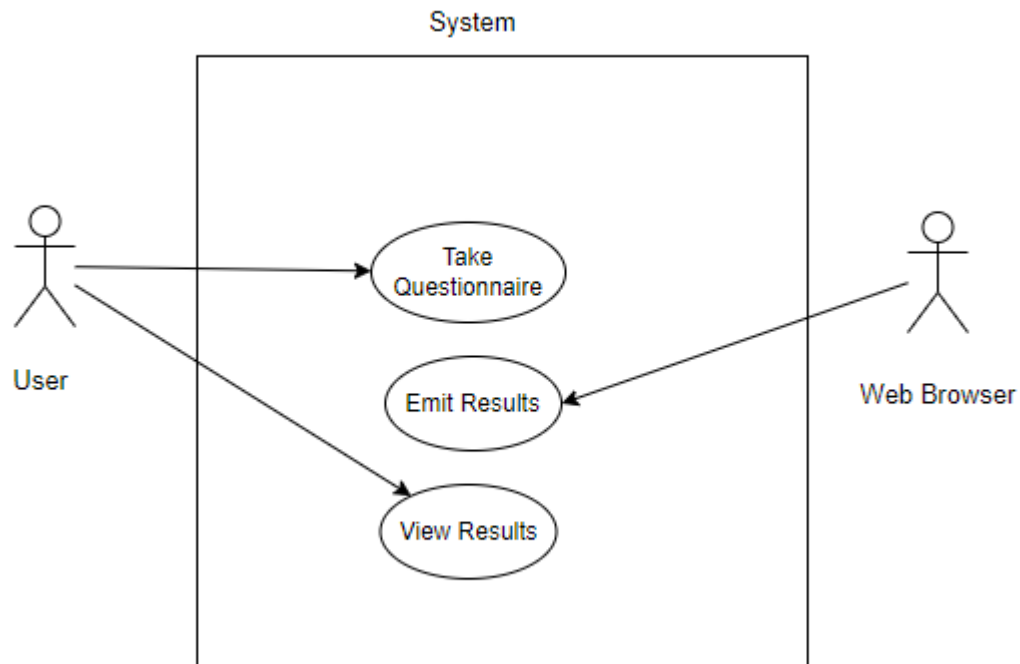
Scope

The scope of this use case is for the system to be able to ask users questions about their hair and for the system to output the results.

Description

This use case describes the ability of the system to ask the user questions surrounding their hair. The user must be able to answer questions asked and following these questions the system must be able to present the user with hair care tips & products that suit the specific end user.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode and user has logged into / registered their account

Activation

This use case starts when a user clicks the hair care questionnaire button

Main flow

1. The system identifies the user has clicked the hair care questionnaire button
2. The user fills in the questionnaire
3. The system processes data collected from the questionnaire and stores
4. The web browser shows the results of the questionnaire (hair tips & products)
5. The user views the results of the questionnaire

Termination

The system presents navigation page

Post condition

The system goes into a wait state

Requirement 3: Hair Style Recommender

Priority & Description

Based on questions, the system will be able to recommend specific hair styles that may suit the users' needs or desired look. This is what this specific use case describes.

It's priority is high as its needed to boost the confidence of the end user and that's another main goal.

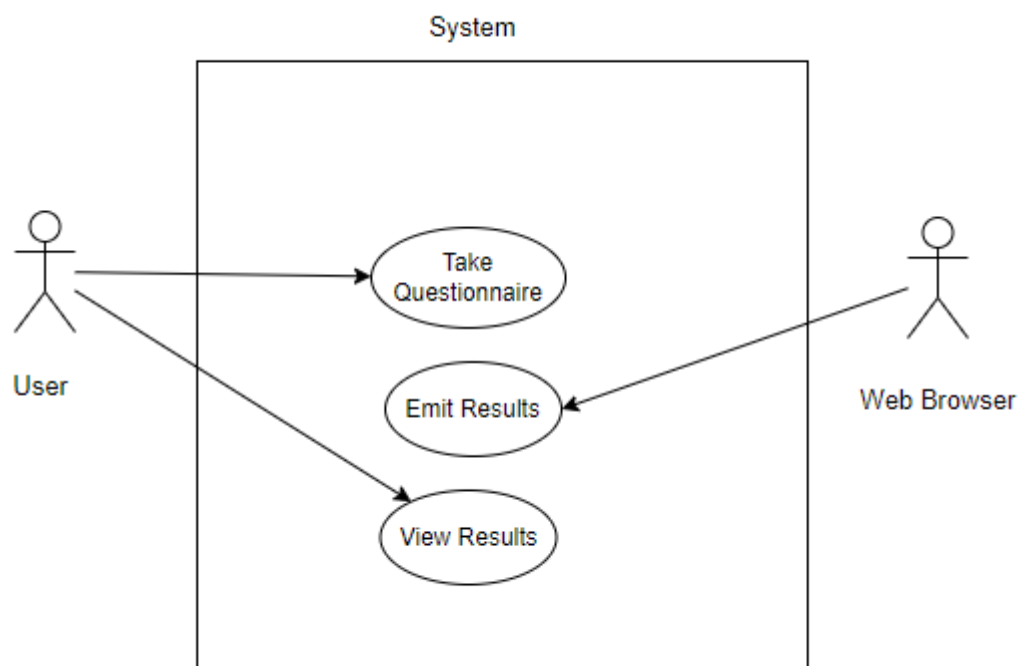
Scope

The scope of this use case is that the system will be able to recommend hair styles for the specific user

Description

Based on questions, the system will be able to recommend specific hair styles that may suit the users' needs or desired look. This is what this specific use case describes.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode and questionnaire has been taken.

Main flow

1. The system identifies the hair style recommender button has been clicked
2. The user takes style questionnaire
3. The system processes the data it has been given
4. The web browser emits the results which is pictures of proposed hairstyles
5. The user views the results

Termination

The system presents the next page and user has finished viewing results

Post condition

The system goes into a wait state

Requirement 4: Schedule Reminders

Priority & Description

This use case describes how the system must allow the user to schedule reminders and how the system must be able to remind the users of specific things they need to do to their hair. The system must also store the data given by the user. The system must also be able to let the user view, edit & delete their reminder.

It's priority is high as one of the goals of this web application is to remind users of their important key reminders surrounding their hair.

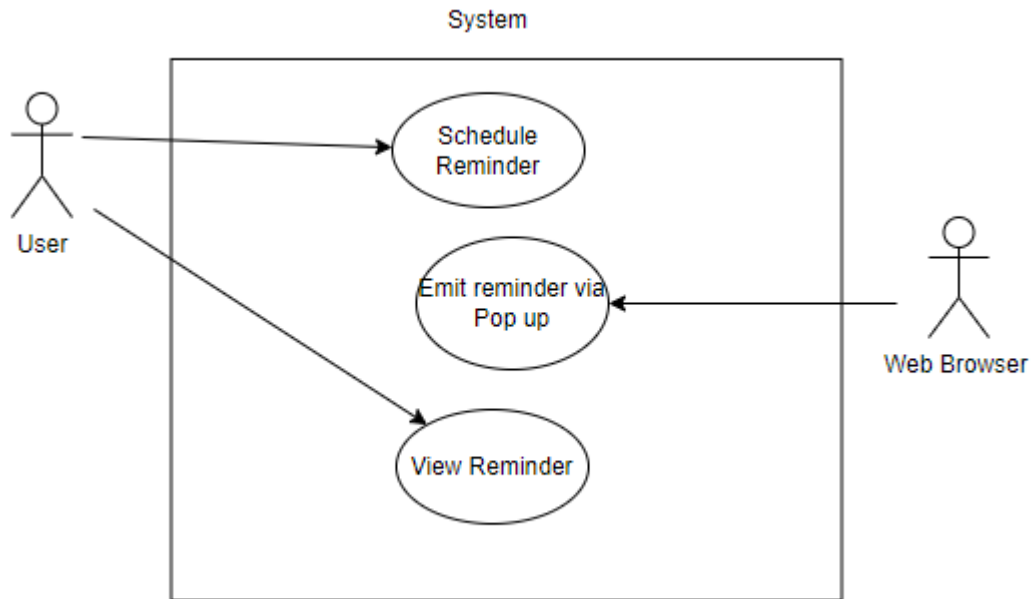
Scope

The scope of this use case is for the system to remind users of key important personal details

Description

This use case describes how the system must allow the user to schedule wash day reminders and how the system must be able to remind the users of their reminders. The system must also store the data given by the user.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode.

Activation

This use case starts when a user selects the notes calendar button on the main page

Main flow

1. The system identifies that the user has selected the notes calendar button
2. The user schedules a reminder
3. The system processes that the date can be reminded and stores the data
4. The user selects reminders button
5. The web browser reminds the user that it's their wash day via pop up

Alternative flow

A1 : Edit Reminder

1. The system identifies that the user has selected the edit notes calendar button
2. The user edits the reminder
3. The use case continues at position 3 of the main flow

A2 : Delete Reminder

1. The system identifies that the user has selected the delete notes calendar button
2. The user deletes the note
3. The system deletes the note from database

Termination

The system presents the next page

Post condition

The system goes into a wait state

Requirement 5: Hair care documentation

Description & Priority

This use case describes the way the system must be able to allow the users to document their hair care journey via a notes feature. The user will select a date to add notes to. Or just freestyle using a separate notes feature. The system must also be able to let the user view, edit & delete their notes.

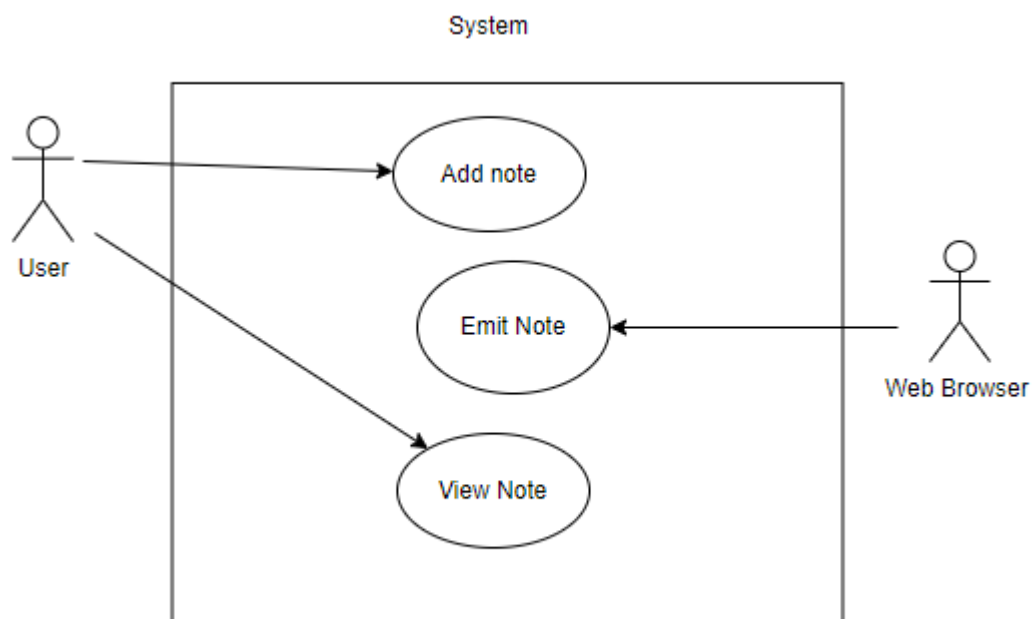
Scope

The scope of this use case is for the user to be able to document their hair care journey

Description

This use case describes the way the system must be able to allow the users to document their hair care journey via a notes feature. The user will select a date to add notes to.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode and user has logged on

Activation

This use case starts when a user clicks the document their hair care journey button

Main flow

1. The system identifies the user has clicked the notes calendar button on the main page.
2. The user types out the note they would like to add
3. The system stores the note

Alternate flow

A1 : Edit Note

4. The system identifies that the user has selected the edit notes calendar button
5. The user edits the note
6. The use case continues at position 3 of the main flow

A2 : Delete Note

4. The system identifies that the user has selected the delete notes calendar button
5. The user deletes the reminder
6. The system deletes the note from database

Termination

The system presents the next page and says "note added"

Post condition

The system goes into a wait state

[Requirement 6: Hair Salon Recommender](#)

[Description & Priority](#)

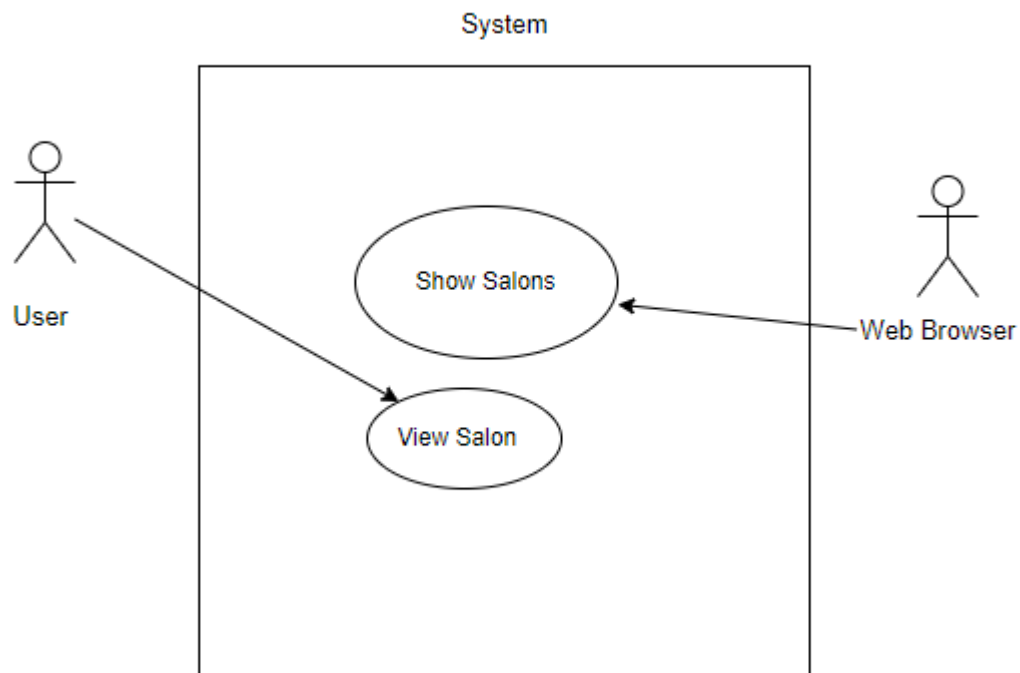
Scope

The scope of this use case is for the application to recommend hair salons in Ireland

Description

This use case describes that the application must be able to produce users with hair salons in Ireland.

Use Case Diagram



Flow Description

Precondition

The system is in initialisation mode and the hair salons near me button is clicked

Activation

This use case starts when a user clicks the hair salon near me button

Main flow

1. The system identifies the user has clicked the salons near me button
 2. The user waits for system to show results
 3. The system shows results of salon

Termination

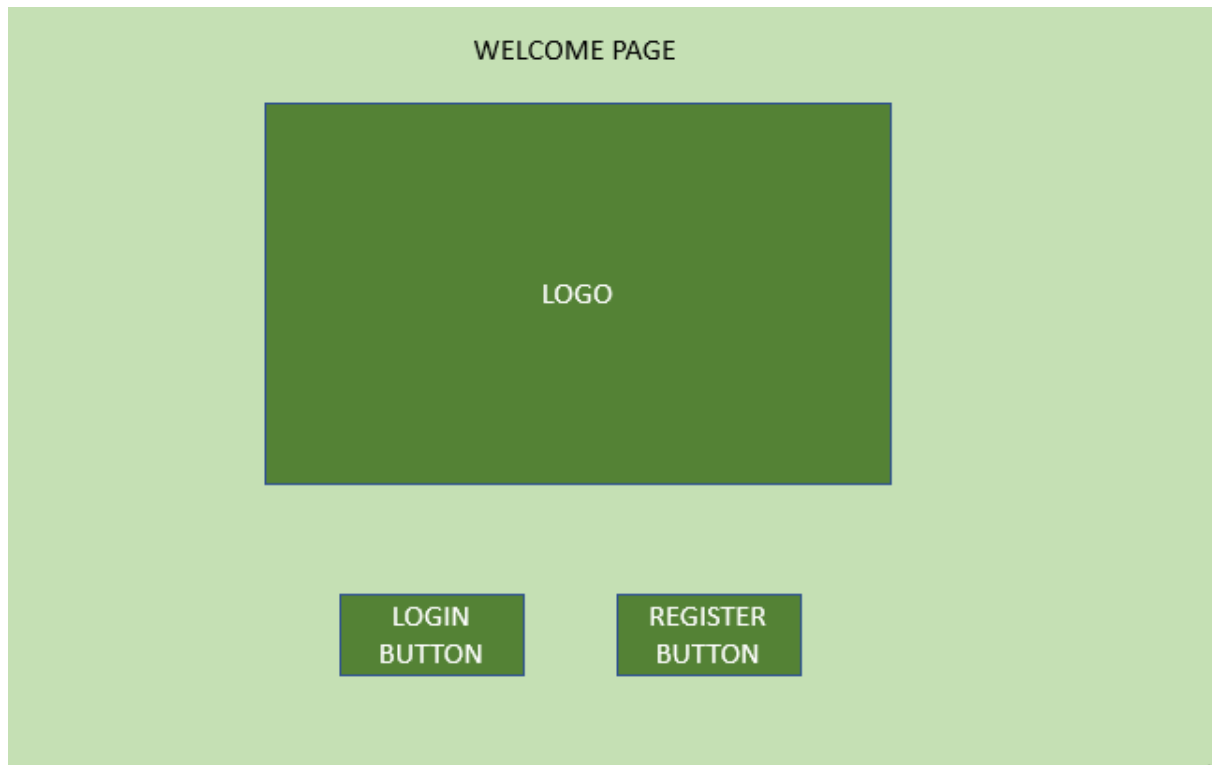
The system presents the next page

Post condition

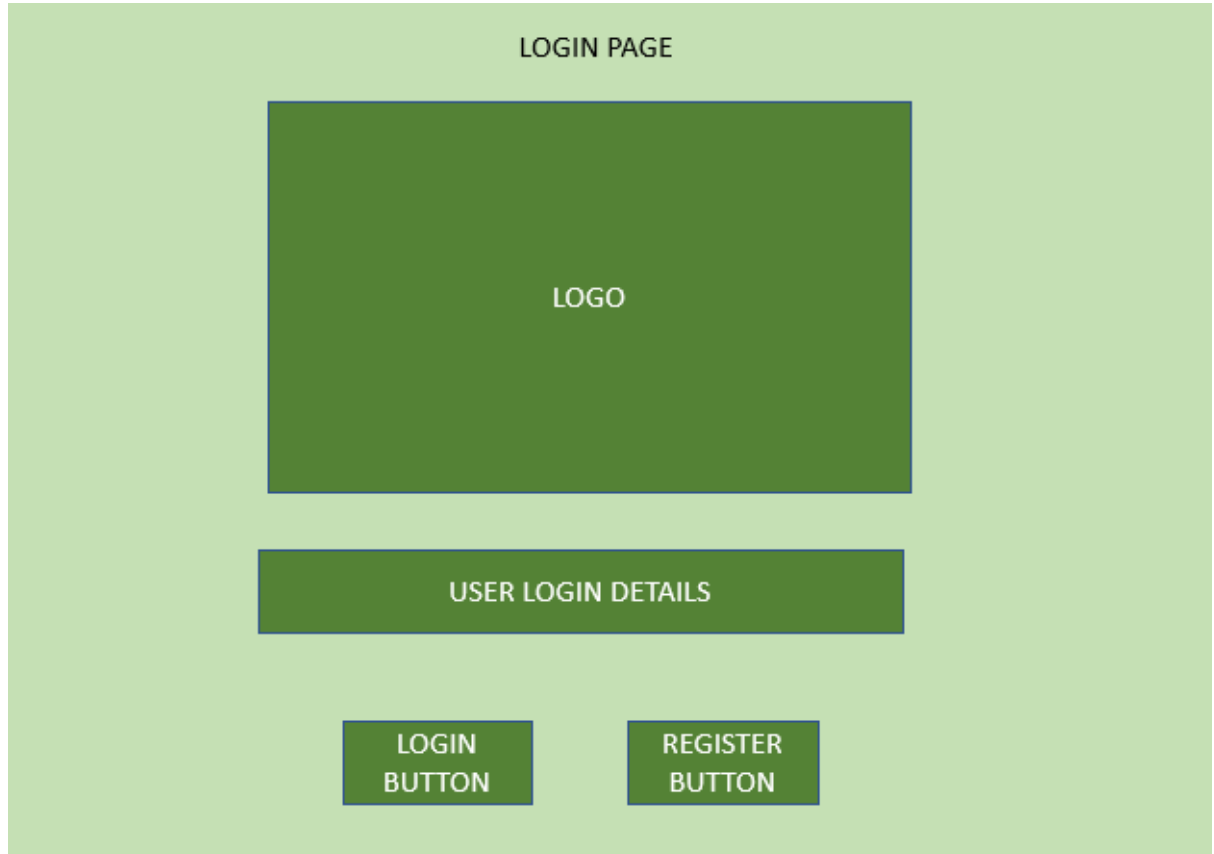
The system goes into a wait state

[1.1. Design & Architecture](#)

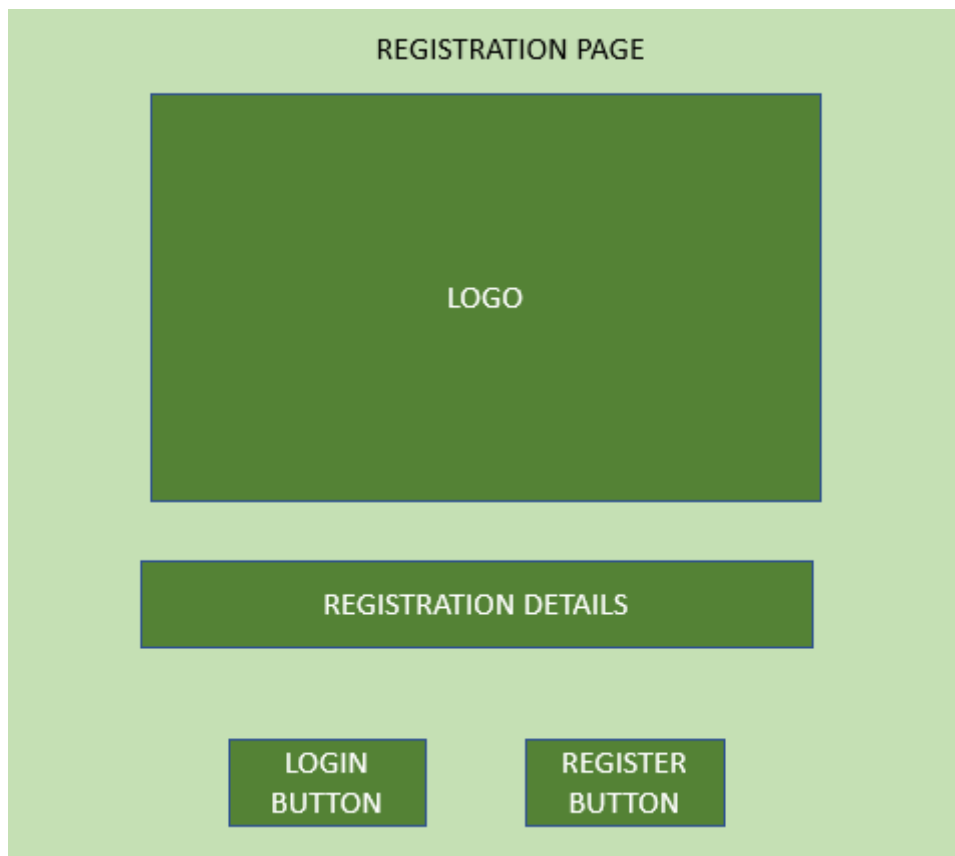
I have created wireframes to highlight the design and architecture of the web application. I have also drawn an ERD diagram to describe the design & architecture of the database.



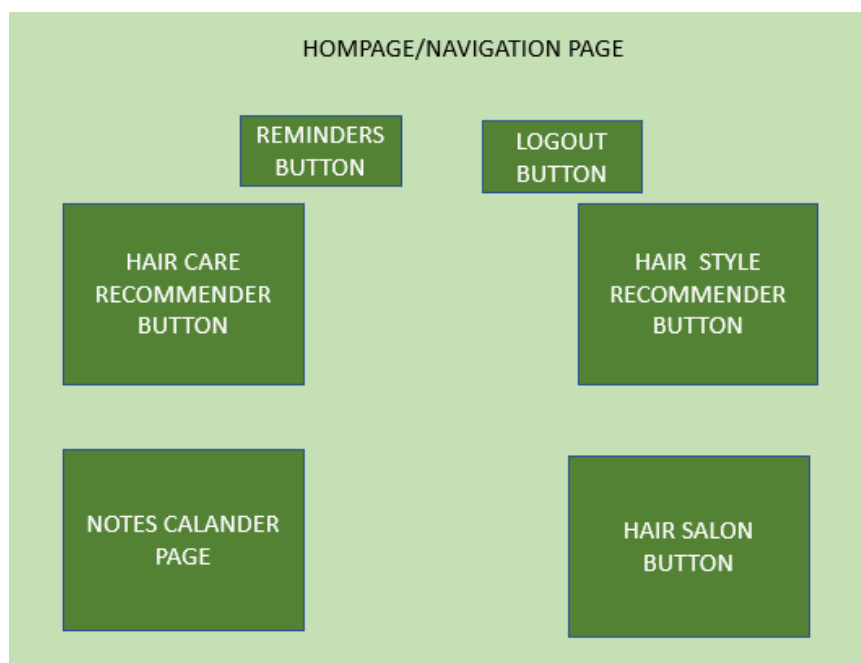
Here we have the welcome page. This is the first page the user will see when they launch the app, the user will then choose between the log in button or the registration button



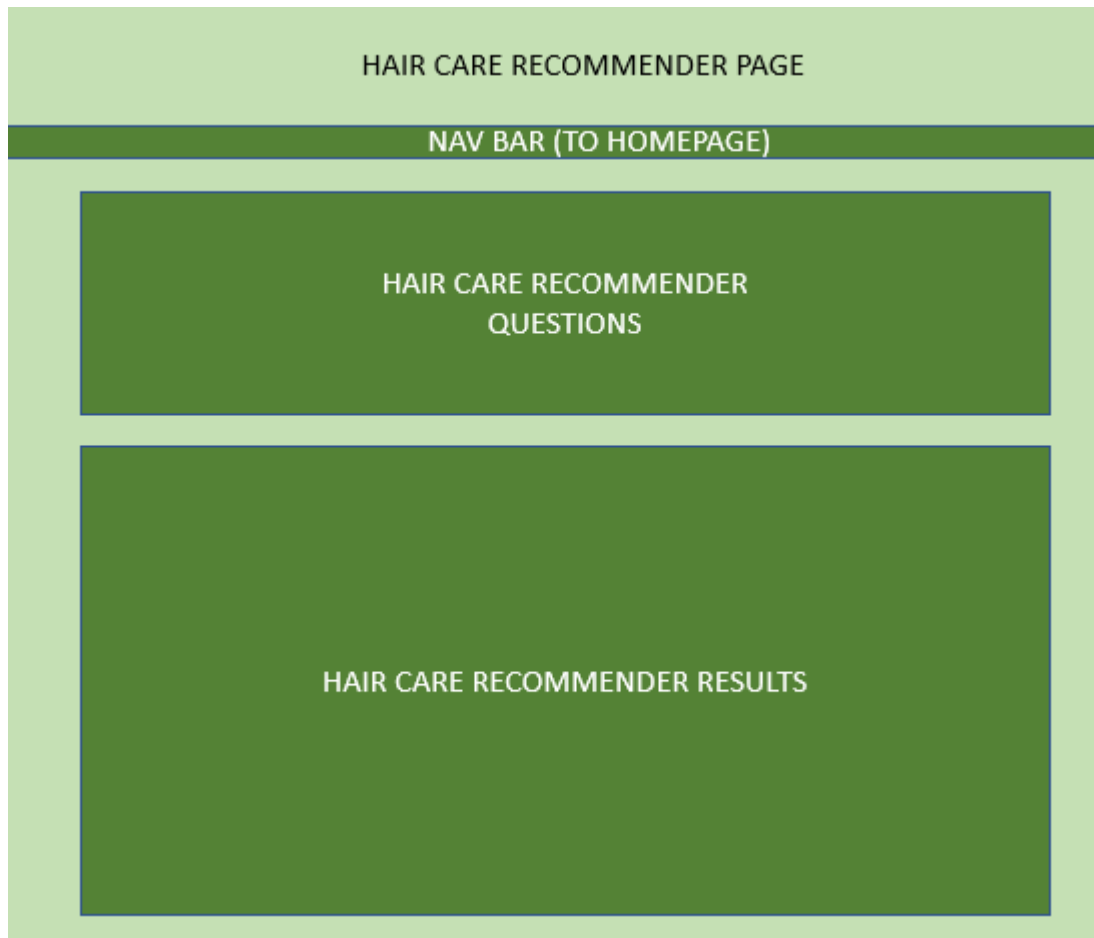
Here we have the login page, where the user will put in their log in details in order to access the application, the user can still choose to go to the registration page via button.



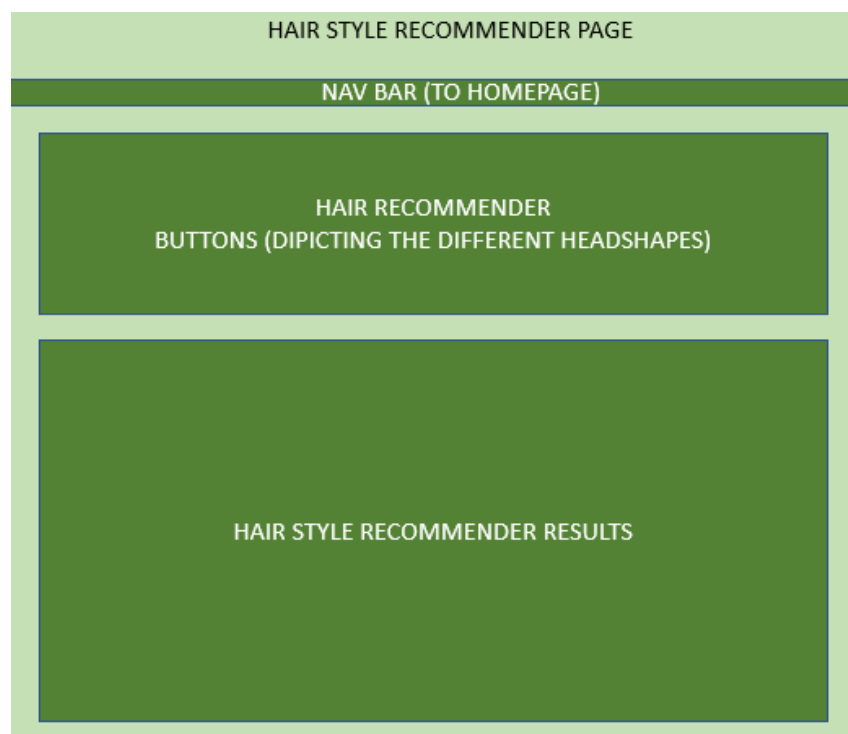
Here we have the registration page where the user inputs the registration details in order to login



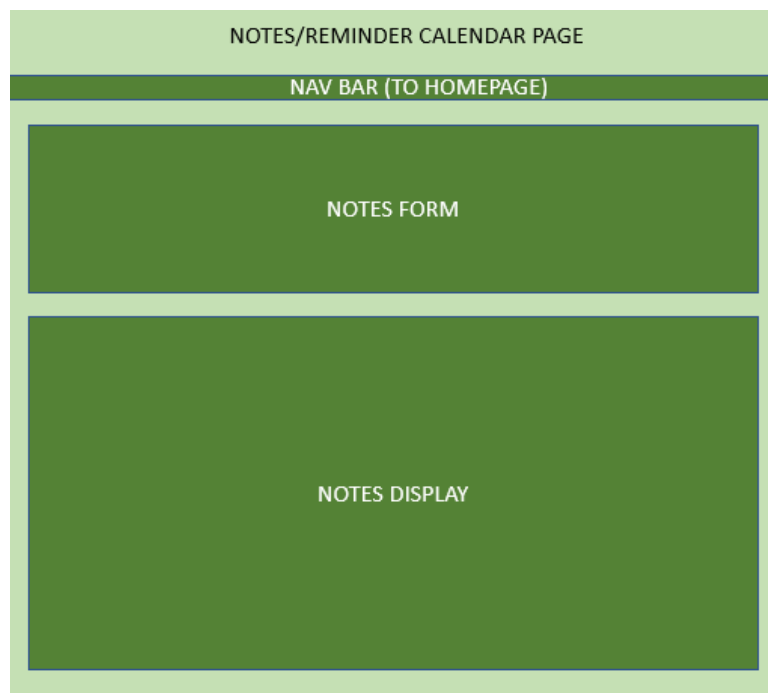
Here we have the homepage where the user can choose what feature they would like to access (we have the reminder button too situated on this page for the pop up)



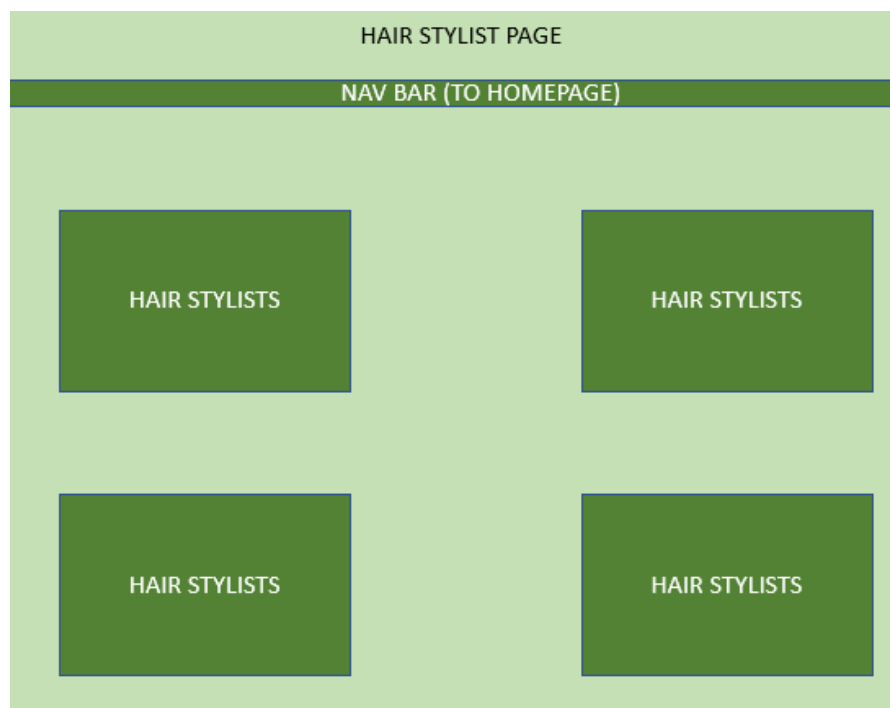
Here we have the hair care recommender page where the user will be asked questions about their hair and from there the results will be emitted on the screen based on their answers



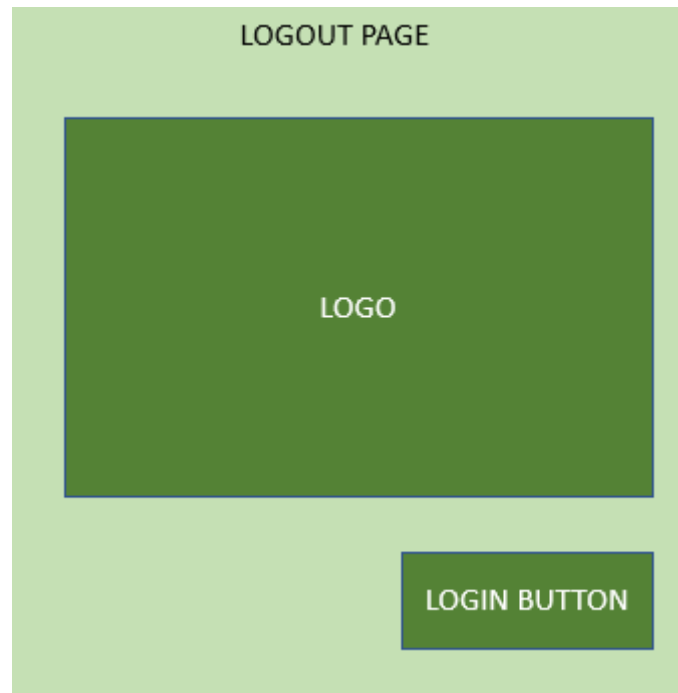
Here we have the hair care recommender page where the user will be asked questions about their hair and from there the results will be emitted on the screen based on their answers



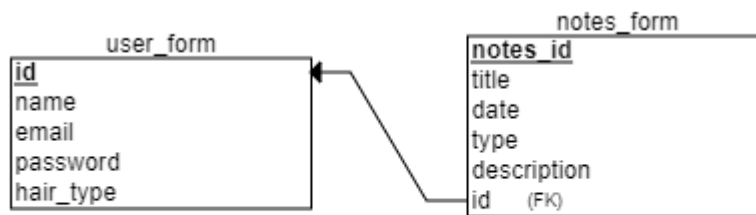
Here we have the notes/reminder calendar page where the notes can be added, edited, deleted and viewed



Here we have the hair stylist page where different hair stylist are shown and links to their Instagram pages are presented.



Here we have the page displayed when the user logs out



Here is the ERD diagram of the database. I chose this relational database structure because of the links it needs to have between the table user and notes.

1.2. Implementation

- **CRUD ALGORITHM**

This create, read, update and delete algorithm was used for the notes calendar feature using buttons.

The system was able to let the user create a note and store it in a database, the note was also displayed on the page and via the reminder pop up. The system allowed the user to update / edit their note and display the edited version within the database. The system allowed the user to delete the note from the database also. Languages mainly used: PHP, HTML, CSS, MYSQL, JAVASCRIPT

```

<?php
if(isset($_POST["submit"])){

    if(!isset($_POST["hidden"])){
        $title1=$_POST["title"];
        $date1=$_POST["date"];
        $type1=$_POST["type"];
        $description1=$_POST["description"];

        $insert = " INSERT INTO notes_form (title, date, type, description) VALUES('$title1','$date1','$type1','$description1')";
        mysqli_query($conn, $insert);
    }
}

```

(inserting values into database)

```

<div class="container-fluid">
    <div class="row justify-content-center">
        <div class="col-lg-10">
            <h1>NOTES & REMINDERS</h1>
            <?php
            $sql="SELECT * FROM notes_form ";
            $res=mysqli_query($conn,$sql);
            $noNotes=true;
            while($fetch=mysqli_fetch_assoc($res)){
                $noNotes=false;
                echo '<div class="card my-3">
                <div class="card-body">
                <h4 class="card-type">'.$fetch["type"].'</h4>
                <h6 class="card-title">'.$fetch["title"].'</h6>
                <p class="card-text">'.$fetch["date"].'</p>
                <p class="card-text">'.$fetch["description"].'</p>
                <button type="button" class="btn btn-primary edit"
                data-bs-toggle="modal" data-bs-target="#exampleModal" id="'.$fetch["notes_id"].'">Edit </button>
                <a href="/delete.php?id='.$fetch["notes_id"].'" class="btn btn-danger">Delete</a>
                </div>
            </div>';
            }
            if($noNotes){
                echo '<div class="card my-3">
                <div class="card-body">
                <h5 class="card-type">ADD A NOTE OR REMINDER TO GET STARTED</h5>
                <p class="card-text">No notes or reminders are available for reading.</p>
                </div>
            </div>';
            }
        </div>
    </div>
</div>
?>

```

(fetching and displaying the value's in database)

- SHOW/HIDE ALGORITHM

This algorithm was used to show and hide divs for the hair care recommender based on checkboxes. If the system asked a user a question on their hair and the user checked yes, the system will proceed to show the products within a div that's applicable to them. If the user unchecked yes and checked no, the system would hide the div. Languages mainly used: HTML, CSS, JQUERY

```

<!-- unlocking & opening divs -->
<script>
  $(function(){
    $(".checkme").click(function(event){
      var a = $(this).is(':checked');
      if (a == true){
        $(this).parents(".checkbox-card").find('.dry').show();
      }
      else{
        $(this).parents(".checkbox-card").find('.dry').hide();
      }
    });
  })

```

- TOGGLE ALGORITHM

This algorithm was used to toggle divs based on a link for the hair style recommender. The links had all the different labels of the head shapes there are, and the user will select the link applicable to them. Based on their selection, the div that held the result would show. If the user clicks on the same link again, it wont show. Languages mainly used: HTML, CSS, JAVASCRIPT

```

<!-- toggling of divs bases on clicking button -->
<script>
  function toggle_faces(div_name)
  {
    if(document.getElementById(div_name).style.display == 'none')
      document.getElementById(div_name).style.display = 'block';

    else
      document.getElementById(div_name).style.display = 'none';
  }
</script>

```

- LOGIN VALIDATION ALGORITHM

This algorithm was used as a security check. It is used to see if the user is the right person logging in. If it the username and password is correct, the user proceeds to the homepage. If it's wrong, it doesn't let them proceeds and alerts the user the information given is incorrect.

```

if(isset($_POST['submit'])){
    $name= mysqli_real_escape_string($conn, $_POST['name']);
    $email= mysqli_real_escape_string($conn, $_POST['email']);
    $pass = md5($_POST['password']);
    $cpass = md5($_POST['cpassword']);
    $hair_type = ($_POST['hair_type']);

    $select = " SELECT * FROM user_form WHERE email = '$email' && password = '$pass'";

    $result = mysqli_query($conn, $select);

    if(mysqli_num_rows($result) > 0){
        header('location:home.php');
    }else{
        $error[] = 'incorect email or password!';
    }
};
?>

```

- REGISTRATION VALIDATION ALGORITHM

This algorithm is used to validate uniqueness of users and also that passwords are not spelt wrong.

```

if(isset($_POST['submit'])){
    $name= mysqli_real_escape_string($conn, $_POST['name']);
    $email= mysqli_real_escape_string($conn, $_POST['email']);
    $pass = md5($_POST['password']);
    $cpass = md5($_POST['cpassword']);
    $hair_type = ($_POST['hair_type']);

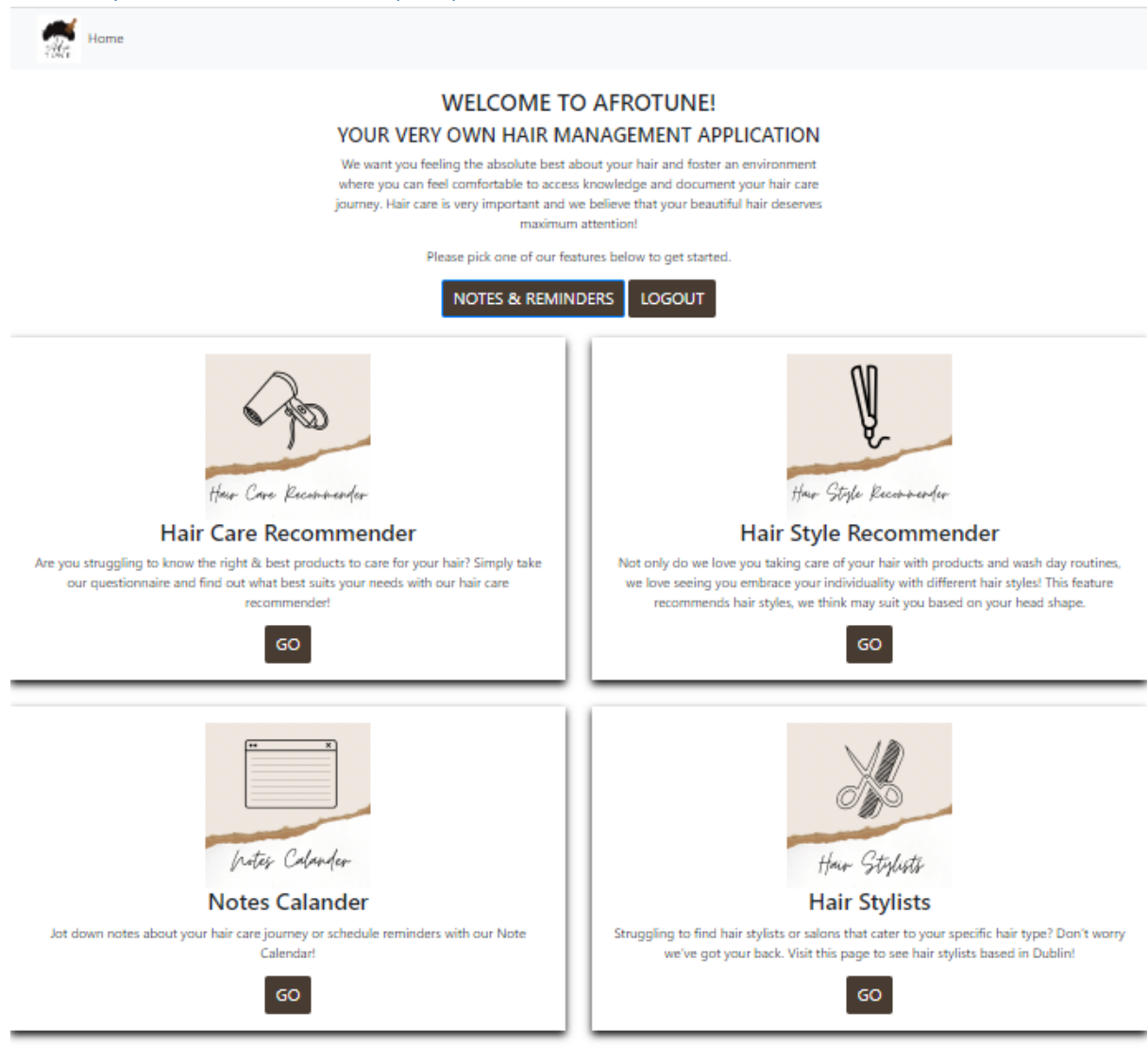
    $select = " SELECT * FROM user_form WHERE email = '$email' && password = '$pass'";

    $result = mysqli_query($conn, $select);

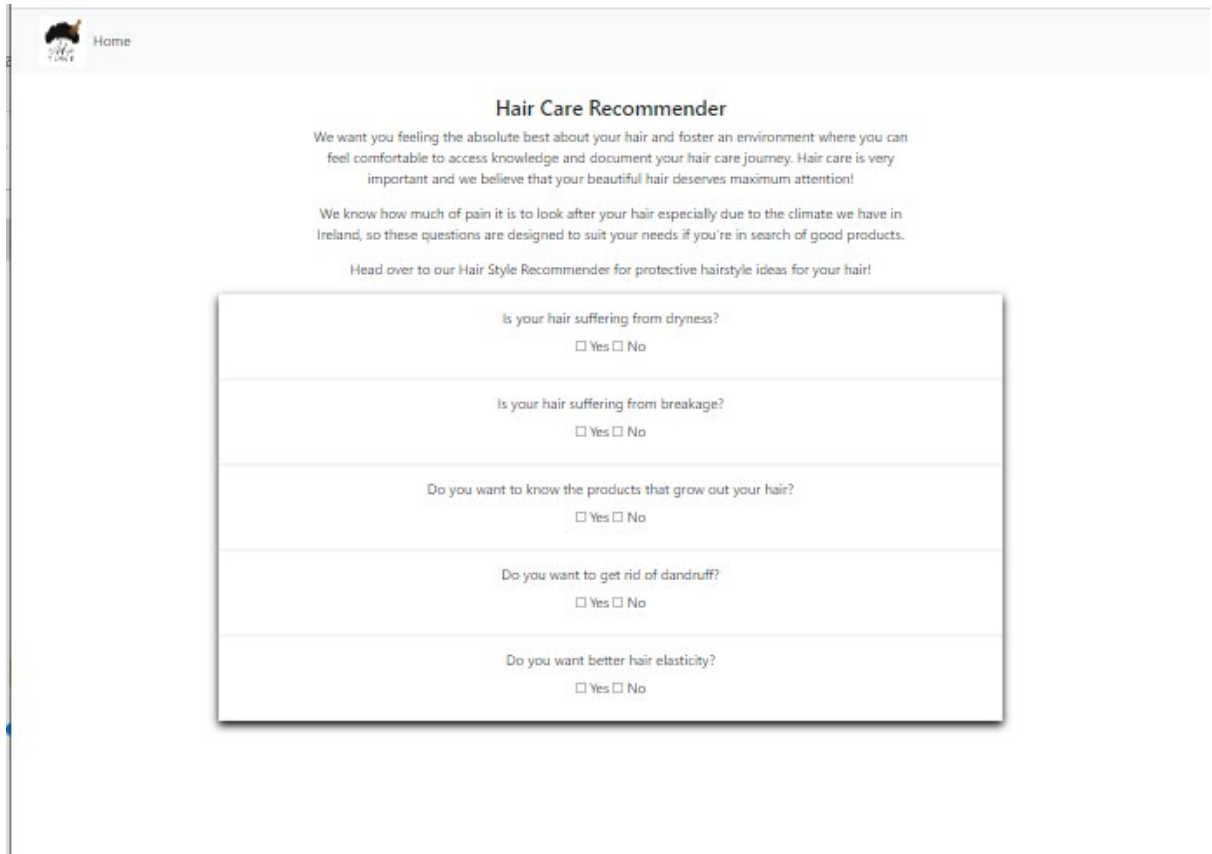
    if(mysqli_num_rows($result) > 0){
        header('location:home.php');
    }else{
        $error[] = 'incorect email or password!';
    }
};
?>

```

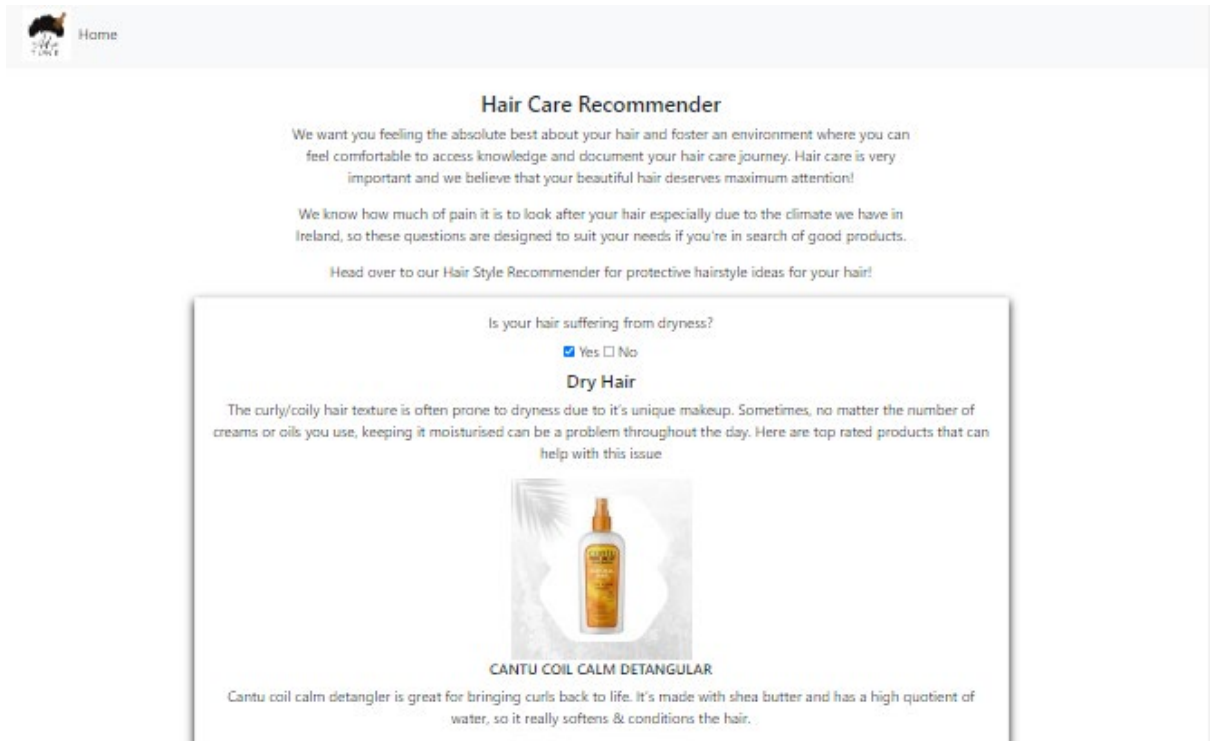
1.3. Graphical User Interface (GUI)



This is the homepage and the navigation page. Pictures we're created using Canva.



This is a snippet of the hair care recommender questionnaire page with the checkboxes.



This is a snippet of the hair care recommender page when a user selects yes based on the question. The products are displayed.




Hair Style Recommender




We want you feeling the absolute best about your hair and foster an environment where you can feel comfortable to access knowledge and document your hair care journey. Hair care is very important and we believe that your beautiful hair deserves maximum attention!

We know how much of pain it is to look after your hair especially due to the climate we have in Ireland, so we have a number of protective hairstyles displayed to assist you!


Select the headshape that you think best appeals to you!

OvalSquareRoundDiamondHeart


OVALSQUAREROUND


DIAMONDRECTANGULARHEART

OVAL FACE



OVAL
HEADSHAPE

An oval face shape is thought to be the most frequent of them all, with a middle-part complementing it because of how it highlights features while displaying symmetry. Shoulder length styles lets you to set the stage for everything that makes your face gorgeous, whether it's with a straight or Brazilian curl!

This is the hair style recommender page when a link is selected which is the oval headshape. The system displays the result. Canva was used to design images



NOTES & REMINDERS

We want you feeling the absolute best about your hair and foster an environment where you can feel comfortable to access knowledge and document your hair care journey. Hair care is very important and we believe that your beautiful hair deserves maximum attention!

Here you can document your hair care journey and also schedule reminders !

Title:

Date:

Type: Reminder ▼

Description:

NOTES & REMINDERS

ADD A NOTE OR REMINDER TO GET STARTED

No notes or reminders are available for reading.

This is the notes and reminder page without any notes on it.

Title:

Date:

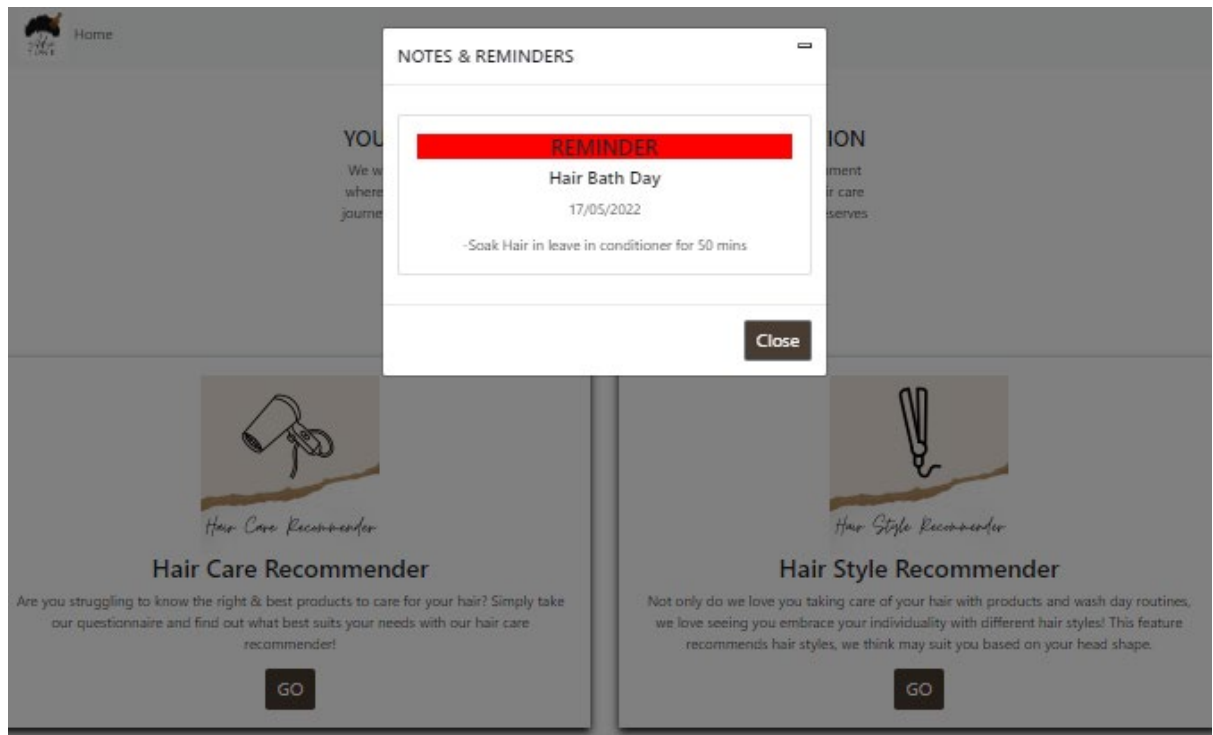
Type: Reminder ▼

Description:

NOTES & REMINDERS

REMINDER
Hair Bath Day
17/05/2022
-Soak Hair in leave in conditioner for 50 mins

This is the notes page when the user inserts a reminder note. The reminder note is displayed. It can also be deleted and edited.



This is the pop up when you click on the reminders button on the homepage. It displays the reminder note inserted above

1.4. Testing

Unit, integration & system testing was conducted manually by checking if function work on chrome browser.

Test Case ID	Test Scenario	Pre-Condition	Test Steps	Expected Result	Actual Result	Test Result
TC_1	Register	The registration page is displayed	1.Enter registration details 2.Click register button	Registration must be successful & details stored in database	Registration successful & details stored in database	Pass
TC_2	Login	The login page is displayed	1.Enter valid login details 2.Click login button	Login must be successful & if not error message pops up	Login is successful & if not error message pops up	Pass
TC_3	Recommend appropriate hair care	The hair care recommender	1. Answer the yes / no questions	If yes is checked then results must be emitted. If no,	If yes is checked then results show. If no,	Pass

		page is displayed		results must not show	results don't show	
TC_4	Recommend appropriate hair style	Hair style recommender page is displayed	1.Click appropriate head shape link 2. Click on it again	If clicked on once, then results must show. If clicked on a 2 nd time result must be hidden	If clicked on once, then results show. If clicked on a 2 nd time results are hidden	Pass
TC_5	Notes	Notes page is displayed	1.Type out note/reminder and click add 2. Click edit button and edit note/reminder 3. Click delete note	1.Note/reminder must be displayed and stored in database 2.Note/reminder must be successfully updated in database & shown 3.Note must be deleted from database and GUI	1.Note/reminder is displayed and stored in database 2.Note/reminder is successfully updated in database & shown 3.Note is deleted from database and GUI	Pass
TC_6	Hair stylist	Hair stylists page is shown	1.Click button to view hair stylists Instagram page	Hair stylists page must be shown on GUI and also buttons to Instagram must work	Hair stylists page is shown on GUI and also buttons to Instagram work	Pass
TC_7	Reminders	Homepage is shown	1.Click Reminders button	Pop up must show, displaying note reminders inputted by user from database	Pop up shows, displaying note reminders inputted by user from database	Pass

1.5. Evaluation

The system was evaluated by seeing if all the requirements set out at the start of the project were met and seeing if the end goals of the project were also met too. It was also tested for speed and performance and whether there is a connection to the created database.

2.0 Conclusions

This project is user based, so it's designed to meet the needs of the end-user. As stated before, this application has a high advantage compared to other applications like its kind because of the features it acquires and the way everything is situated under the one belt. All requirements were met, and the projects reached it's complete state. Testing was conducted and the system is free from errors. The goals & milestones of the overall project scope have also been met. As a result the end-users confidence can be boosted and the end-user can enjoy an application free of bugs and errors

One disadvantage that the project idea may have is that the idea isn't centred around all hair care types or all genders.

3.0 Further Development or Research

With further development and research, more information can be added to the project, such as more hair care products, more hair styles for the end user to choose from and also more hairstylist to look at. The hair style recommender feature can include a feature whereby the user can upload a picture of their face instead of answering question. With more development the application could be made available for all genders too.

4.0 References

App Store. 2022. *Hair Journal*. [online] Available at: <<https://apps.apple.com/us/app/hair-journal/id633303245>> [Accessed 15 May 2022].

Myavana. 2022. *Myavana*. [online] Available at: <<https://www.myavana.com/>> [Accessed 15 May 2022].

W. Sunhem, K. Pasupa and P. Jansiripitikul, "Hairstyle recommendation system for women," *2016 Fifth ICT International Student Project Conference (ICT-ISPC)*, 2016, pp. 166-169, doi: 10.1109/ICT-ISPC.2016.7519262.

5.0 Appendices

5.1. Project Proposal

5.1.1. Objectives

I would like to build an application to tackle the problems associated with hair care and hair styling for individuals of African descent, living in Ireland and who are interested in caring for their hair. There are many objectives / goals that I plan on setting out for this particular project mainly for the end user. The application will have specific features like a log in feature, hair questionnaire, hair style recommender, hair care recommender and a hair care calendar. Each feature has its own goal attached to it that will benefit the end user. Outlined briefly below.

- **Log in feature:** enables the users information to be safely stored, retained, and easily accessible.

- **Hair questionnaire:** A questionnaire to get the users hair information to recommend hair care products & methodologies
- **Hair care recommender:** (goes hand in hand with the questionnaire) to emit the results such as hair care methodologies & products based on the users answers to the hair questionnaire, also to recommend hair salons & hair dressers in Ireland.
- **Hair style recommender:** This will ask the user their head shape and from there recommend styles that best suits their look.
- **Hair Notes calendar:** for the user to schedule wash days, reminders etc and to document their hair care journey.

All in all, this application main objective is to enhance the confidence of users when it comes to their hair and to bring awareness on how important it is to take care of your hair.

5.1.2. Background

I decided to go ahead with this idea because firstly, I am a hair care addict myself. From a very young age I have been fascinated about my hair and I am always switching up my hair styles and so forth. When I was younger, I found it hard to find information about my hair as I was using so many different websites and YouTube videos to do so. Not only that, it was also very hard to find products for my hair because of location etc. This was a huge problem to me as it was draining and tedious. I wanted to create an application where a user doesn't need to go through all the hassle and stress in order to find solutions on how to take care of their hair and also to create an easier way to find hair salons & hair stylists that cater to the Afro hair texture. (As there isn't many in Ireland and they're hard to find)

In addition, I wanted to make users confident about how their hair is, looks and feels and to provide a space to promote the importance of hair care and hair styling. In order to achieve these objectives, I decided to come up with an idea to create a personalised application with features tailored to suit the needs of African hair types.

5.1.3. State of the Art

From interacting with similar hair care applications in the past I saw that they weren't so personalised, and the user interface wasn't up to standard, so I just stuck to my ways of gathering information (about my hair) from videos and websites and jotting them down on notepads/ note apps on my phone. However, I have done some up-to-date research on hair care applications and have seen somewhat of an improvement due to the enhancement of technology and its global widespread.

Hair Journal: This is an application for both IOS and android. It's designed to give hair enthusiasts a platform to track their hair growth and goals. It does have similar features to my project idea (hair journal & calendar) but with a few features missing it doesn't make the application as personal as I would've liked it to be. My application has features not only to help the user achieve hair goals but also to enhance the confidence of the user and I believe that, that is done by getting to know personal details about the user to clearly solve their issues and concerns.

MyAvana AI: This application is centred around users with curly type hair and its main objective is to recommend specific hair care products that suit the user. The user achieves this goal by taking a picture of their hair. Again, it has features similar to my application but is lacking in personalisation.

My Application's objective is to get to know a user so that results can be more defined and more useful for the users. The features are quite unique as it limits the frustration of users by creating a one-way system to get information for their hair.

5.1.4. Technical Approach

I plan on taking the iterative approach to develop my application.



As already specified, I would like to make the application personalised and in order to do that I would like to make a list of the problems that potential may users face when it comes to hair care & hair styling in Ireland. In order to identify requirements, I will further investigate about these problems online around hair care & styling for my focused target group and use those results to know what areas I should focus deeply on when creating my application.

I also plan on creating use case diagrams to clearly state how my application will run then from there create wireframes and storyboards for the design phase of my application as I think it's important for the user interface to be eye-catching and engaging.

When the application is developed, I plan on letting a potential end-user test the app to see if it meets their standard and also requirements outlined. In addition, I plan on working closely with stakeholders, such as my super-visor etc, to make sure I'm hitting goals and milestones correctly.

5.1.5. Technical Details

I'm still figuring out whether this will be a web application or a normal application.

Machine Learning may have a part to play in this project because of how the structure of the project is.

Languages that are being considered for this project are HTML ,Java, JavaScript, PHP, and Bootstrap.

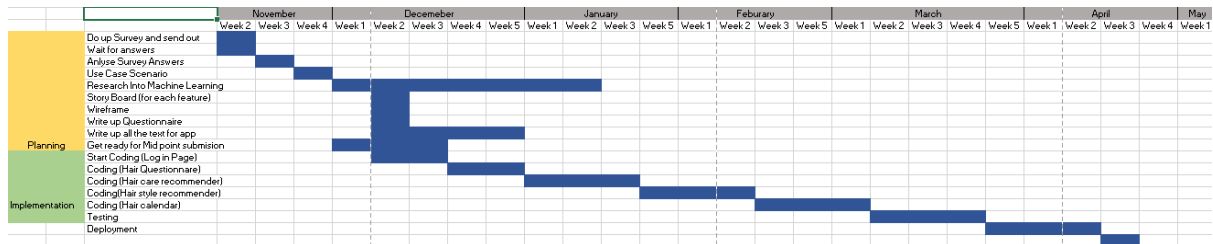
The application will need a database to store and retain information when logged into a specific account created by a user and that where I'm looking to use PHP.

5.1.6. Special Resources Required

Not applicable

5.1.7. Project Plan

(Below I have my proposed Gantt Chart, zoom in to read.)



As I will be adopting the iterative approach, My idea is to start off by planning and outlining the specific ideas I have in mind for my project to make it as clear and precise as possible for when I want to build the application. I also would like to plan to ensure I hit certain goals & targets set out by myself and stakeholders.

My first plan is to gather and seek out requirements. (Please note survey has been replaced with seeking information online)

I will then create use case scenarios to depict how the system is supposed to work to help me map out its functionalities and so forth. Story Boards and Wireframes will also be used to map out functionalities and to create the basic design structure of the user interface.

I will also research a lot into Machine Learning so I can implement it into my project as I see fit.

I will write up the logical road map and the questions for the hair care questionnaire. Following on from that I will begin writing up the text per page for the application as a whole.

When I'm finished with the Planning Stage, I will then move onto the Implementation which is writing up the code itself. I will do this step-by-step, covering one feature at a time.

My hopes after that is to then move onto Testing and from there Deployment.

5.2. Reflective Journals

6.0 Supervision & Reflection Template

Student Name	Sharon Okobi
Student Number	X18434826
Course	BIS

7.0

8.0 Month: October

What?

-Pondered on the requirement's for my project

-Met up with my supervisors

So What?

-Was a success to discuss ideas and get extra help and feedback from my supervisor.

-Need to read up on machine learning as don't know enough about it

Now What? Need to read up on machine learning

Apprentice Signature



Supervision & Reflection Template

Student Name	Sharon Okobi
Student Number	X18434826
Course	BIS

Month: November

What?

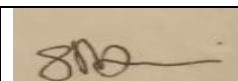
- Research on machine learning
- Met up with my supervisors
- Started looking at template for technical report

So What?

- Was a success to discuss ideas and get extra help and feedback from my supervisor.
- Need to read up on machine learning as it's very tricky and ive never done something like it before

Now What? Need to read up on machine learning

Apprentice Signature



9.0 Supervision & Reflection Template

Student Name	Sharon Okobi
Student Number	X18434826
Course	BIS

10.0

11.0 Month: December

What?

- Finished Mid-Point Submission
- Started implementation of project.

So What?

- Was good to start building app and have an understanding of requirements

Now What? Need to continue coding

Apprentice Signature



12.0 Supervision & Reflection Template

Student Name

Sharon Okobi

Student Number

X18434826

Course	BIS
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13.0

14.0 Month: January

<p>What?</p> <p>-Continued to code and meet up with supervisor</p>

<p>So What?</p> <p>-Was good to continue coding project</p>
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<p>Now What? Need to continue coding</p>

Apprentice Signature	
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15.0 Supervision & Reflection Template

Student Name	Sharon Okobi
Student Number	X18434826

Course	BIS
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16.0

17.0 Month: February

<p>What?</p> <p>-Continued to code and meet up with supervisor</p>

<p>So What?</p> <p>-Was good to continue coding project</p>
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<p>Now What? Need to continue coding</p>

Apprentice Signature	
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18.0 Supervision & Reflection Template

Student Name	Sharon Okobi
Student Number	X18434826

Course	BIS
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19.0

20.0 Month: March

What?
 -Continued to code and meet up with supervisor

So What?
 -Was good to continue coding project

Now What? Need to continue coding

Apprentice Signature	
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21.0 Supervision & Reflection Template

Student Name	Sharon Okobi
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Student Number	X18434826
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Course	BIS
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22.0

23.0 Month: April

What?

- Continued to code and meet up with supervisor
- created showcase poster
- started technical report
- started getting ready for testing and deployment

So What?

- Was good to continue coding project and get certain things done

Now What? Need to finalise project

Apprentice Signature

