

# Room-me Application



Jamie Moore X14443268

Requirements Documentation for Room-me Application

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## Room-me

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Specialisation: Business Analysis

Date 30/11/2017

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**Declaration Cover Sheet for Project Submission**

**SECTION 1** *Student to complete*

<b>Name:</b>  Jamie Moore
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<b>Supervisor:</b>  Pat Delaney

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## **SECTION 2 Confirmation of Authorship**

*The acceptance of your work is subject to your signature on the following declaration:*

I confirm that I have read the College statement on plagiarism (summarised overleaf and printed in full in the Student Handbook) and that the work I have submitted for assessment is entirely my own work.

Signature: Jamie Moore

Date:13/05/17

NB. If it is suspected that your assignment contains the work of others falsely represented as your own, it will be referred to the College's Disciplinary Committee. Should the Committee be satisfied that plagiarism has occurred this is likely to lead to your failing the module and possibly to your being suspended or expelled from college.

**Complete the sections above and attach it to the front of one of the copies of your assignment,**

### **What constitutes plagiarism or cheating?**

The following is extracted from the college's formal statement on plagiarism as quoted in the Student Handbooks. References to "assignments" should be taken to include any piece of work submitted for assessment.

Paraphrasing refers to taking the ideas, words or work of another, putting it into your own words and crediting the source. This is acceptable academic practice provided you ensure that credit is given to the author. Plagiarism refers to copying the ideas and work of another and misrepresenting it as your own. This is completely unacceptable and is prohibited in all academic institutions. It is a serious offence and may result in a fail grade and/or disciplinary action. All sources that you use in your writing must be acknowledged and included in the reference or bibliography section. If a particular piece of writing proves difficult to paraphrase, or you want to include it in its original form, it must be enclosed in quotation marks

and credit given to the author.

When referring to the work of another author within the text of your project you must give the author's surname and the date the work was published. Full details for each source must then be given in the bibliography at the end of the project

### **Penalties for Plagiarism**

If it is suspected that your assignment contains the work of others falsely represented as your own, it will be referred to the college's Disciplinary Committee. Where the Disciplinary Committee makes a finding that there has been plagiarism, the Disciplinary Committee may recommend

- that a student's marks shall be reduced
- that the student be deemed not to have passed the assignment
- that other forms of assessment undertaken in that academic year by the same student be declared void

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- that other examinations sat by the same student at the same sitting be declared void

Further penalties are also possible including

- suspending a student college for a specified time,
- expelling a student from college,
- prohibiting a student from sitting any examination or assessment.
- the imposition of a fine
- the requirement that a student to attend additional or other lectures or courses or undertake additional academic work.

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**The Preliminary Requirements Elicitation:**



### ***1.1. Introduction***

It is important to have a plan before I begin the Requirements elicitation for my project. This will give me an insight into the elicitation activity. It will help me identify the elicitation techniques I should use and help me identify the ones that are not necessary for my project. This can also help identify other resources that may be useful during the requirements elicitation. The requirements I will be gathering will be for my student accommodation application Room-me. This application is designed for students who have to travel long distances from home to attend college and need accommodation for the year. The app should offer the best prices for students as well as meet some of their requirements such as distance willing to travel, type of home they are looking for, price and wheelchair access etc.

### ***1.2. Business Need***

There will always be students attending the variety of colleges around Ireland each year. Many of these people live in rural parts of Ireland and therefore travelling to different counties to attend third level education is necessary. Due to the high demand of young students looking for accommodation and many colleges not having the resources to accommodate all those students in need, many students result in searching independently for accommodation. This can result in many home owners charging the rates that they want. This results in many students having to work long hours to pay for their living space and can have a negative impact on their examination results. The accommodation needs of students can vary some may want their own apartment, some may want just a private room, some may need wheelchair accessible homes however it is important to be realistic and weigh up the costs of these requirements and identifying how necessary they really are. Renting your own apartment is an unrealistic option when attending a college full time therefore the practical option is to stay with a host family or to rent with others in a similar situation.

To understand the business need in more detail, it is important that I conduct a requirements elicitation so I can determine what requirements stakeholders would want from such an application. For example this could include specific information about the guest, information about colleges and information about the hosts.

### **1.3. Business Case:**

The concept of Room-me is to provide a service to students who are looking for long term accommodation, hosts who have spare rooms that they are willing to let out and potentially increase the number of students attending colleges. The overall goal is to find students affordable living space that tailors for their needs, give the host the opportunity to earn some extra cash. Room-me will work by both hosts and guest creating a personal profile that gives some basic information about themselves for example name, age, sex, interests, likes and dislikes. The host could have images uploaded of the room/rooms they wish to let out and provide details about the home such as who lives there, family interests and local attractions that are nearby. Students will enter a minimum and maximum amount they are willing to spend, the distance they are willing to travel from the accommodation to their college, the college they are attending and can refine their search based on things such as home type, House rules and accessibility. Students will be able to make contact with hosts through a messaging feature and the two parties can then connect with each other and finalize the living arrangements.

### **1.4. Stakeholders List:**

- Colleges
- Students
- Erasmus Students
- Bank
- Business Analyst
- SUSI Grant
- Students union
- Hosts
- Department of Education

- Family members
- Project Sponsor

**1.5. Importance Matrix:**

High Importance – High Influence <ul style="list-style-type: none"><li>• Developers</li><li>• Bank</li><li>• Host</li><li>• Business Analyst</li><li>• Project sponsor</li></ul>	High Importance <ul style="list-style-type: none"><li>• Undergraduate Students</li><li>• Postgraduate Students</li><li>• Family Members</li></ul>
Low Importance- Low Influence <ul style="list-style-type: none"><li>• Students Union</li><li>•</li></ul>	Low Importance- High Influence <ul style="list-style-type: none"><li>• College Accommodation support</li><li>• Department of Education</li><li>• Susi Grant</li></ul>

From the above diagram you can see that the most influential and most important stakeholders are located in the top half of the matrix. Students, Bank, Hosts and business analyst are all considered highly influential and important because they are the most important stakeholders to be considered in this project. Although the Susi Grant is highly influential it does not apply as one of the most important stakeholders due to the fact that only certain students are applicable for this grant. Students who do not receive the Susi Grant would then need to turn to either the Bank or family members for the loan needed.

**Requirements Elicitation Techniques:**

### ***2.1. Brainstorming***

#### **Brief Overview:**

The objective of the brainstorming session is to listen to the inputs of each of the relevant stakeholders and take note of what they would like to see implemented into the application. The ideas offered by the stakeholders will be highly beneficial to me and can point me in the right direction when thinking about what the app should do functionally.

#### **Elements of Brainstorming:**

Preparation:

- ❖ Develop a clear definition of the area that will be discussed
- ❖ Identify a time limit to generate ideas
- ❖ Generate a facilitator and participants for the brainstorming session
- ❖ Let the participants know your expectations and what you aim to get out of the session

Session:

- ❖ Share ideas without any criticism
- ❖ Make note of all ideas generated
- ❖ Encourage creativity among the participants

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- ❖ Do not put a limit on the number of ideas that can be generated

Wrap up:

- ❖ Evaluate and discuss ideas once the time limit has been reached.
- ❖ Condense the list of ideas that have been generated during the brainstorm session
- ❖ Distribute the final list of ideas to the appropriate parties after they have been rated

### **The Objectives of the Brainstorming Sessions:**

The first elicitation technique I will use to gather the requirements for my application is brainstorming. Brainstorming is an excellent way to foster creative thinking. The aim of brainstorming is to produce numerous ideas and drive from them themes of further analysis. I will achieve this by meeting with the stakeholders and having a central idea on paper. The ideas generated by the brainstorming session will be noted by a moderator and can provide me with a better understanding of what should be included in my application. To avoid confusion the requirements that have been gathered in the brainstorming session will be documented and ranked by importance. This will be done by using a MOSCOW matrix.

**Participants:** Students of NCI

**Location:** Oriel Suite

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**Date of Brainstorm session:** Wednesday 22<sup>nd</sup> November 2017

**Time of Brainstorm session:** 11 am – 12pm

**Participants:** Hosts and current Undergraduate students

**Location:** Kay's Kitchen Café Ballinteer

**Rules of Brainstorm session:**

1. No negativity. No comparing, analysing or editing other people's ideas
2. All ideas are valid
3. Everyone must engage in the brainstorm and offer a contribution
4. No mobile phones, laptops or computers. Have someone who will take note of ideas but this person must contribute their own ideas too.  
The person who is taking notes of ideas may be changed every couple of minutes
5. Building on ideas is welcome, participants may combine ideas during the brainstorming session
6. Generate as many ideas as we can
7. Listen attentively when not talking
8. Resist joking and losing focus, too much talking can drain group energy.

**Benefits of Brainstorm:**

- Creative thinking is encouraged- Ideas give birth to more ideas and people will bounce off each other's ideas.

- All ideas are accepted- any ideas offered are never wrong and because of this people can afford to put their ideas forward
- Everyone is part of a team- Group brainstorming sessions can make people feel as if they are part of a team.

## **2.2. Surveys:**

After the brainstorming has been completed successfully, the next elicitation technique to be completed will be conducting a survey/questionnaire. Surveys are used to gather business analysis information which includes information about customers, products attitudes and work practices from a group structured in a specific way and generally in a short period of time. A survey presents a set of questions about a subject matter to relevant stakeholders in this case the specific stakeholders being students who have previously rented accommodation while attending college or who are currently renting accommodation while attending college. The data is then collected and examined to gather knowledge about the subject matter of interest. Surveys can be submitted through written form, telephone or using technology to record answers. Surveys offer two types of questions in questionnaires these are Close-ended and Open-ended.

### **Brief Overview:**

I will create a survey using Google Forms to gather and record the relevant information needed by the relevant stakeholders. Students who are currently renting or leasing accommodation, or who intend to rent accommodation in the future will be encouraged to complete the survey so I

can identify what features they would like to see on the application, how relevant an application like this will be to them and how likely they are to use the Room-me application. I also aim to get a general idea of how much students think is an acceptable price to pay monthly for accommodation and Identify what region of Ireland most students are travelling from to attend college. I intend on using a Close ended survey to gather the relevant requirements due to the fact that it is easier to analyze. Once the survey has been successfully completed I will study the results to determine the demand for the features that were mentioned.

#### **Benefits of Surveys:**

- Quick and inexpensive to distribute
- Easier to collect data and requirements from larger audiences than other elicitation techniques
- Typically does not require a specific time for responses
- Effective when stakeholders are geographically distributed
- Close end surveys can be effective for gathering quantitative data

#### **Survey Participants:**

- ❖ Students who have previously rented accommodation while attending college
- ❖ Students who are currently renting accommodation

#### **Methods of Distribution:**

- ❖ Social media pages
- ❖ Email to relevant participants via NCI Courses
- ❖ Messenger Groups



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**Survey questions:**

**What is your gender?**

- Male
- Female
- Other

**You are from which region?**

- Leinster
- Munster
- Connacht
- Ulster

**How Long would you be willing to travel to college?**

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- 5-10km
- 10-15km
- 15-20km

**It is important to me to stay with someone of the same sex:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**It is important to me to stay with someone who speaks the same language:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**How much would you be willing to spend on student accommodation monthly**

- €100-€200
- €200-€300
- €300-€400
- €400+

**A message Feature between Guests and Hosts would be useful:**

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- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**A favourites feature would be useful for this application:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**A quick-search function would be a useful feature for this application:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**A list of public transports to your college would be a useful feature:**

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- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**Tips regarding safety around the area you will be staying would be a useful feature:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**An option to review guests/hosts would be a useful feature:**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**Which of these are most important to you:**

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- Wifi
- En suite
- Personal Living Space
- Personal Shower

### ***2.3. Interviews***

#### **Interview 1: Student**

##### **Participant:**

Full Time Undergraduate Student

##### **Date of Interview:**

Tuesday April 3<sup>rd</sup> 2018

##### **Time of Interview:**

1pm-2pm

### **Objective of the Interview:**

Once I am content with the amount of responses and the data I have received from my survey intend to conduct interviews with relevant stakeholders. An interview is a process designed to collect details from a variety of groups of stakeholders. I will firstly interview a student who is currently staying in accommodation while attending college. The objective of interviewing a student is to get an understanding of what issues they currently face when trying to find accommodation for the academic year and whether an application like Room-me could help solve some of these problems. Another goal of the interview is to try and identify any other requirements students may have that have not already been identified in the two previous elicitation techniques.

### **Interview Questions (Student):**

1. Where are you currently staying for the academic year and what was the reason for choosing your current accommodation
2. Did it take you long to find your current accommodation? And was there any issues when trying to obtain accommodation
3. If there was an application specifically tailored for sourcing student accommodation would you use it? If so what features would you like this application to have
4. When signing up for the application would you prefer to create your own account via the application, such as creating your own username and password or would you rather log in via social media ( example Facebook profile) and why?
5. How did you find your current accommodation and is there anything you may do different if trying to source another accommodation in the future

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**Interview 2: Host**

**Participant:**

Host who is currently hosting a student attending college full time

**Date of Interview:**

Thursday April 12<sup>th</sup> 2018

**Time of Interview:**

10am-11am

**Interview Questions (Host):**

1. How many years have you been renting a room/home?
2. How do you currently acquire students that stay in your home?
3. Is there any improvements you feel could be made to the process that you are currently using to acquire students?
4. Do you think an application that allows you to advertise your room or home and view the profiles of potential renters would be beneficial to you?
5. What features do you think would be most beneficial to you as a host?
6. Do you think there is a market for an application like Room-me?
7. If so would you use the application and in what way would the Room-me application be most beneficial to you?

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### **Interview 3: Software Developer**

**Participant:** Past Computer Science Graduate currently working in software development

**Date of Interview:**

Tuesday April 17<sup>th</sup> 2018

**Time of Interview:**

11:30am-12:30am

**Objective of Interview:**

The objective of conducting an interview with the software developer is to gather the necessary information about the development stage of the application. Questions about previous experiences with application development and lesson learned in regards to issues from previous projects will be asked. By talking about previous projects more requirements for the Room-me application could be identified. Cost of production and administrator functionality will be another conversation point as this will give me a general idea of how much the application development will cost and if an administrator will have access to edit content within the application. Due to the new Data protection Bill 2018 that will be implemented in May of this year, the developer must provide details of how the GDPR guidelines will be integrated to the application.

**Interview Questions (Software Developer):**

1. Do you think it will be relatively easy to develop this application or can you see any issue with creating this application
2. Can you describe to me a similar project you have worked on if any, and is there any features you would recommend for this application



3. In your opinion where should this application be hosted and do you have a rough estimate how much it will cost to develop this app
4. Do you think the development process for this application will take long? Is there any information I could give you to aid you in the development process
5. The Data Protection Bill 2018 will be introduced in May of this year, do you see this posing any problems to application development and how do you intend to incorporate this new legislation to the application.
6. Users will have the option to sign in via social media or by creating their own username and password. If a user forgets their username and password will there be a forgotten username/password option
7. Will there be access for an administrator to update, add and delete content if necessary
8. What Language will you use for programming?

#### **Advantages of Interviews:**

- Stakeholder participation is encouraged
- Interviewing is a simple technique that can be used in numerous situations
- Allows the interviewer and interviewee have a full discussion about the questions and answers
- Observations of non-verbal behaviour can be made
- The interviewer has the ability to ask follow-up questions to confirm their own understanding
- Allows the interviewee voice their opinion in private which they may not want to express public, especially when interview results are kept confidential

#### **2.4. Prototype:**

Prototyping is used to validate the needs of the stakeholders by using a design or model of the requirements gathered. Prototyping is also used to create more design options and optimize user experience. I will create a wireframe for the Room-me application to kick start the prototype development process. This wireframe will be presented in my mid-point presentation to outline a general idea of how the application will be laid out. Once the prototype has been designed I will arrange a meeting with stakeholders to make sure that everything has been implemented as intended. I will listen carefully to the feedback the stakeholders present to me and will implement any changes or additions that have been suggested to me. I will use the application tool Balsamiq to create the first visual image of the Room-me application. The previously completed elicitation techniques (brainstorm, survey and interview) will be taken into account when developing this visual image to make sure that all the necessary requirements gathered are implemented and that all the stakeholder needs are satisfied.

#### **Resources Needed:**

- Balsamiq tool Application to construct image
- . Results from Brainstorming session , results from the survey and the answers from the three interviews conducted will all be taken into account when creating the first prototype of Room-me

#### **Guidelines to Prototype Development:**

- Review contributions made by stakeholders during the brainstorming session towards the Room-me application
- Identify all the necessary requirements that have been gathered by the completed survey
- inspect the results of the completed interviews and add additional features that are identified
- create the prototype
- Review prototype with stakeholders during a requirements workshop to make sure they are happy with the design and features of the application and make any modifications or implementations of new features

#### **Due Date for Prototype:**

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Tuesday April 17<sup>th</sup> 2018

**Date Prototype was completed:**

Sunday April 15<sup>th</sup> 2018

***2.5. Requirements Workshop:***

The goal of conducting a requirements workshop is to meet with carefully selected stakeholders so we can collaborate define and refine prototype requirements. The workshop will consist of four processes these are forming, storming, norming and performing. The forming process is where the stakeholders have found common ground this being looking to rent student accommodation and looking to rent out free rooms or homes to students. Storming involves members of the workshop openly disagreeing I expect this mainly to be between students and hosts for example some hosts may not be as use to using applications for advertising their homes and want a simplistic design. Storming will promote deeper understanding and diversity among stakeholders. Norming is the way the in which the stakeholders will interact with each other about the Room-me Prototype. During the performing process the stakeholders will be focused on producing and agreeing upon a finished application prototype. To get the ball rolling and gain ideas about the features that will be added to the prototype we may look at current competitors applications and websites for any features that could be added to the Room-me application and make it stand out.

**Preparations for workshop:**

- Carefully select stakeholders to partake in workshop
- Organize a time the date and the location of where the Requirements Workshop will take place
- Select a venue that is suitable for all participants
- Prepare an agenda and Stick to the plan
- Prepare visual aids for stakeholders about prototype
- Attach a copy of workshop rules to all invitations sent out to stakeholders
- Ensure a date and time is agreed upon by all stakeholders
- Outline the anticipated outcome of the Requirements Workshop

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**Participants:**

- Business Analyst –(facilitator)
- Undergraduate students currently living in rented accommodation for academic year
- One host who is currently renting out a room/home
- Software developer

**Workshop Location:**

Kay's Kitchen Café (Ballinteer shopping centre)

**Date of Workshop:**

Friday April 20<sup>th</sup> 2018

**Time of Workshop:**

12:30pm - 1:30pm

**Agenda of Workshop:**

- Explain the purpose of the requirements workshop
- Outline the ground rules of the workshop clearly to all participants
- Explain the overall goal and what we are trying to accomplish by the end of the requirements workshop
- Examine the first prototype with stakeholders and make note of feedback given
- Examine websites and applications of competitors
- discover new features that will be added to the Room-me application
- Make sure an agreement is made between the stakeholders about layout, design and features that must be added to the application

Required Resources:

- Laptop for viewing competitor websites
- Wifi internet connection
- Smartphones to view competitor applications
- Microsoft word/Notes for taking notes
- Sitting area that accommodates all participants

**Workshop ground rules:**

- Participants are asked to arrive to the workshop location twenty minutes early to enjoy some light refreshments and to ensure that the starting time of the workshop is not delayed
- All participants inputs are of equal value
- All relevant information is expected to be shared by participants
- The workshop session will start and finish on time
- Only one person can talk at one time
- The group of stakeholders are responsible for the deliverables
- Criticisms will be focused on interests not on people
- Use of mobile phones will be permitted only to facilitate the requirements workshop
- Participants will be asked prior to attending the workshop to download any applications they deem relevant and that will contribute positively to the requirements workshop

**Deliverables of requirements workshop:**

- A word document detailing all changes that have been made to the initial prototype including both features and application layout
- A second visual image made using the Balsamiq tool that shows the improved application prototype where all implemented changes can be seen

### **2.6. Interface Analysis:**

Upon completing the requirements workshop and any other features that were identified have been added to the final prototype for the application I will begin the interface analysis process. I intend to describe all of the actions that the Room-me application will perform in collaboration with the users (Actors/Stakeholders). This will be done by creating a UML use case diagram. Each of the stakeholders will have access to specific features of the application. For example Hosts will only have access to the host aspect of the application. The use case diagram will help avoid any discrepancies with the application development.

#### **Resources Needed:**

- HP Elitebook laptop loaded with Microsoft office
- An online tool called Creatly will be used to construct the UML use case diagram

#### **Checklist for UML Use Case Diagram**

- ✓ Evaluate previous elicitation results to pinpoint potential varieties of interface
- ✓ Conduct an analysis on previous documents of similar projects
- ✓ Identify possible stakeholder-application interactions by examining application prototype
- ✓ Create the Room-me UML use case diagram with Microsoft PowerPoint
- ✓ Collect feedback about the UML use case diagram from stakeholders and make any adjustments or necessary implementations if considered appropriate to do so

#### **Name of UML Use Case Diagram:**

Room-me Application

UML Use Case Diagram Actors:

- Hosts
- Students

**UML Use Case Diagram date of completion:**

Saturday 28<sup>th</sup> of April 2018

**Results of Requirements Elicitation techniques:**

***3.1. Results Of Brainstorms:***

**Brainstorm Results Students :**

The application features should outline and simplify the opportunities for student accommodation. The search feature on the application should offer both a quick search function as well as a filtered search option. This should allow users to select what amenities would be most suitable to them. These amenities will include things such as the college they are attending, the distance they are willing to travel from their accommodation to their college and the type of accommodation they are looking for, such as an entire home or just a single room as well as other options such as a home that prohibits smoking etc. A favourites feature was discussed and agreements were made that its addition to the app would be beneficial as one of the main functions. The favourites feature will allow the user to add accommodation they believe could be most suitable to them to a shortened list before making their final decision. This will rule out conducting continuous searches for homes. A communication feature is key for the application so both the host and student can discuss what exactly the student would expect such as will the student expect food and clothes to be washed if staying with a host or most importantly to come to an agreement with the monthly rate that will be paid to the home owner. The students also outlined that once a particular home has been filled it should no longer be available for them to view on the application this will rule out the students wasting time trying to contact a host that does no longer have any space left in the home. Other features such as a personal profile and a Google maps/Public transport were mentioned during the brainstorming session. The students stated that they would like to write a little bit about themselves to give the host a general idea of who they are, what they like to do in their spare time and the college and course they will be attending as well as being able to edit their profile and add additional information if

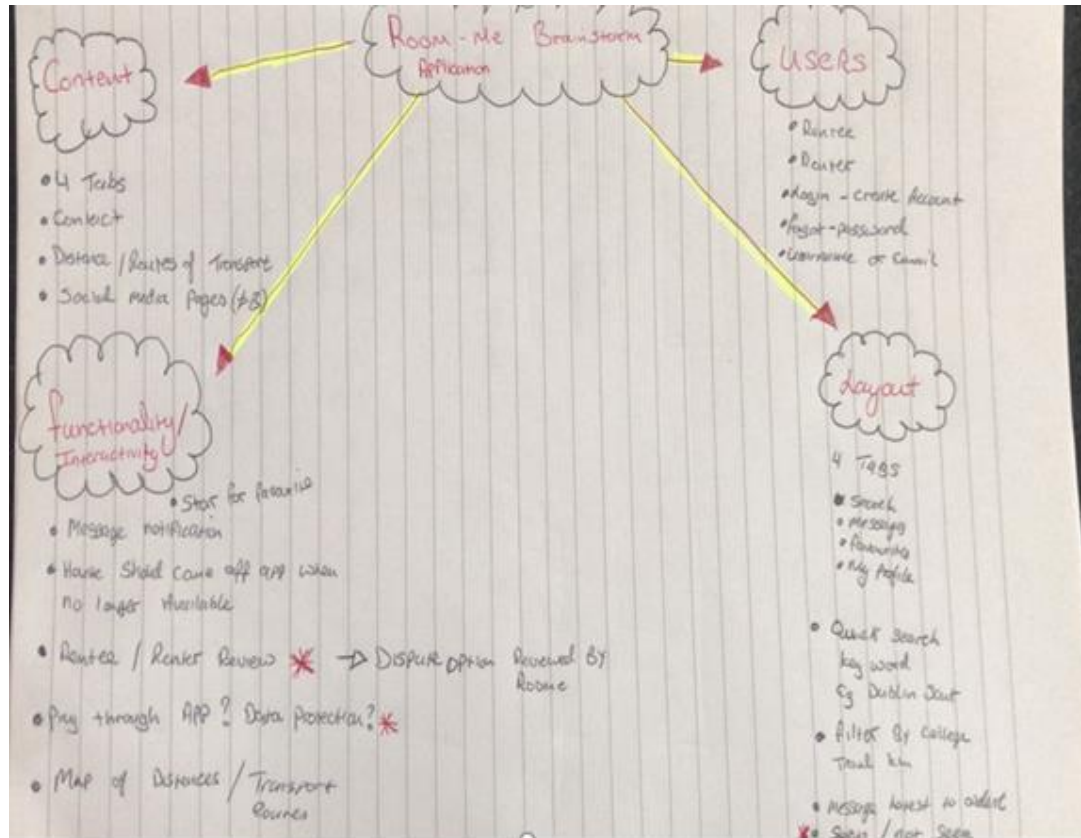
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needs be . The role of the Google maps/ Public Transport function would be to give students who may not be familiar with the public transport routes in the area an indication of the best possible transportation to take to their college.

### **Brainstorm Results Host:**

The host has stated that the simplicity is key from their point of view and that the application should cater for people who are not technologically advanced. After signing up as a host there should be four tabs to pick from these being profile, potential renters, messages and search. The personal profile is where the host can state what the nature of the home. This being either a entire home or room to rent, the rules of the home, how many free rooms there are and a gallery on their profile where they can upload images of their home for students to view. The Host also fed off the favourites feature that was mentioned by the students. They believed that it could also be a useful feature from their point of view where they could short list potential lodgers before finally choosing the one that best suites their home. The messages feature will be the link between the host and the students and will be used for negotiations. A search function should also be available to hosts. The host believe they should be able to choose between Irish and international students, choose an age bracket they think will be most suitable for them and also be able to choose either student that plan on staying for the whole year, just the academic year or weekly students. By having the option to take on weekly students opens the doors to take on some international students for a period of time while the college year is completed. From conducting the brainstorm elicitation technique with both the students and a host a number of requirements were identified. The requirements that were identified came from four headings that can be seen from the photo below. These include Content, Users, functionality/Interactivity and layout.



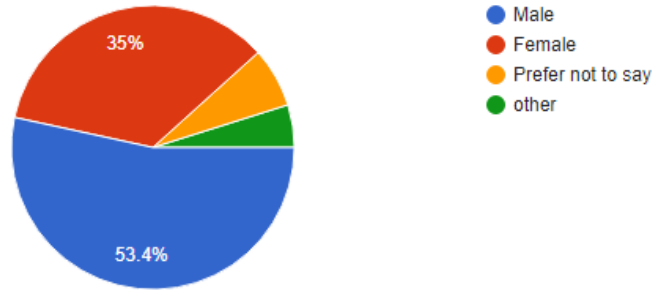


### 3.2. Result of Survey:

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### Please State your Gender:

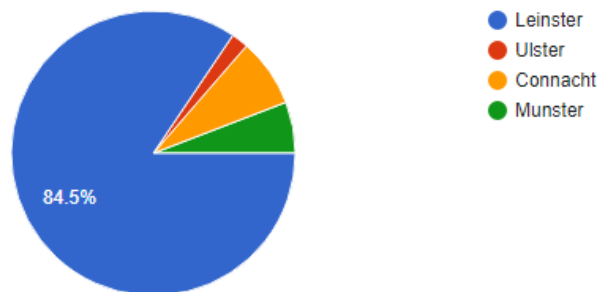
103 responses



Jamie Moore  
X14443268

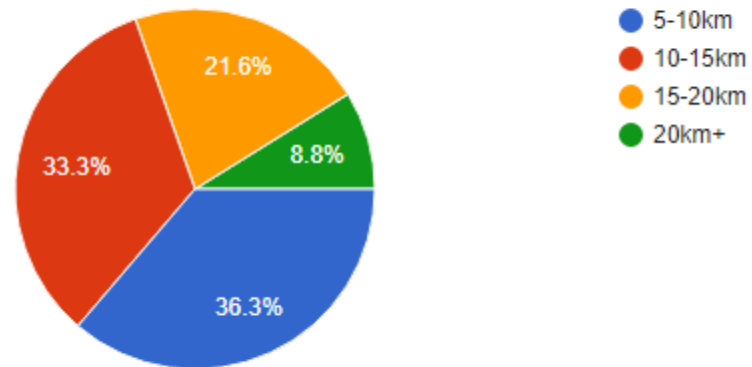
### What region are you from:

103 responses



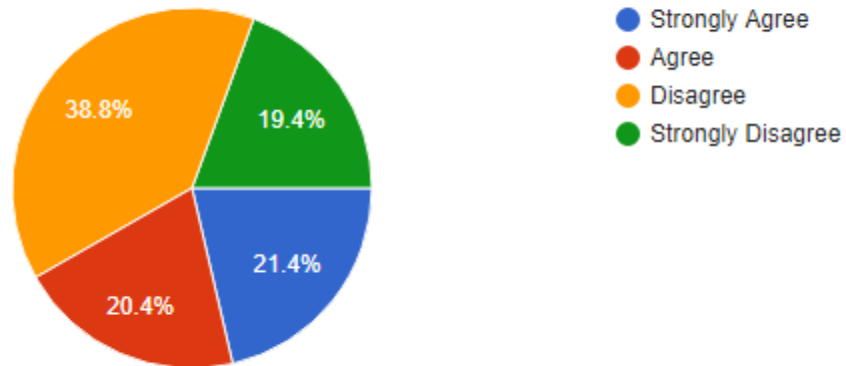
### What distance are you willing to travel to college?

102 responses



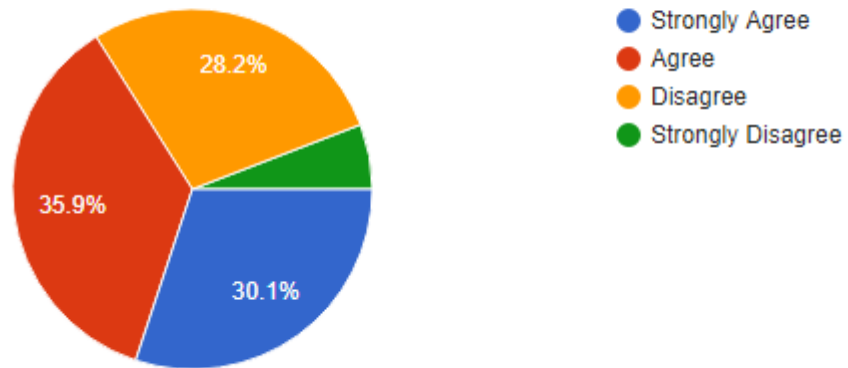
### It is important to me to stay with someone of the same sex:

103 responses



## It is important to me to stay with someone who speaks the same language:

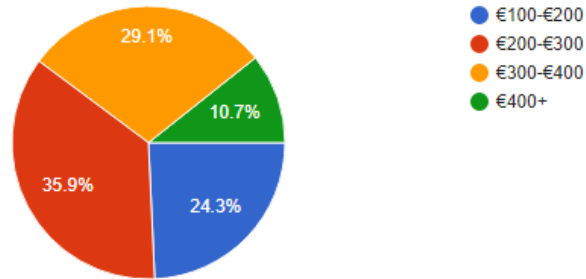
103 responses



Jamie Moore  
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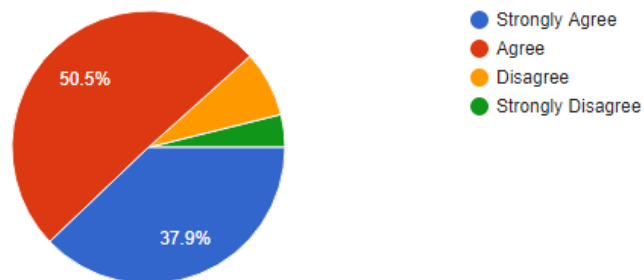
How much would you be willing to spend on student accommodation monthly:

103 responses



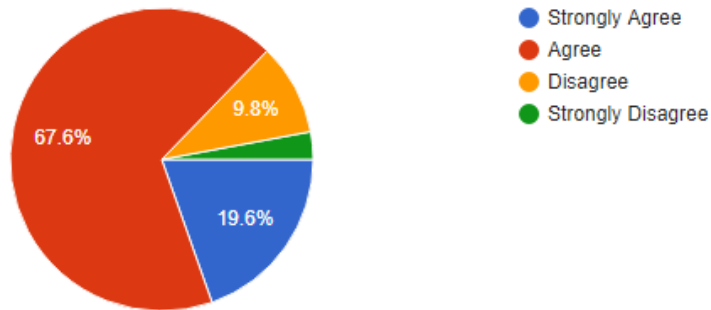
A messaging Feature between Guests and Hosts would be a useful for this application:

103 responses



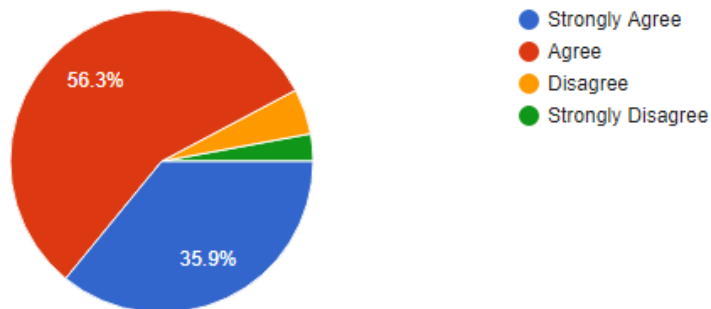
### A favourites feature would be useful for this application:

102 responses



### A quick-search function would be a useful feature for this application:

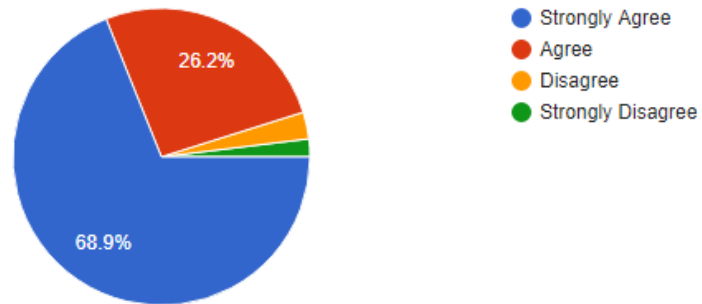
103 responses





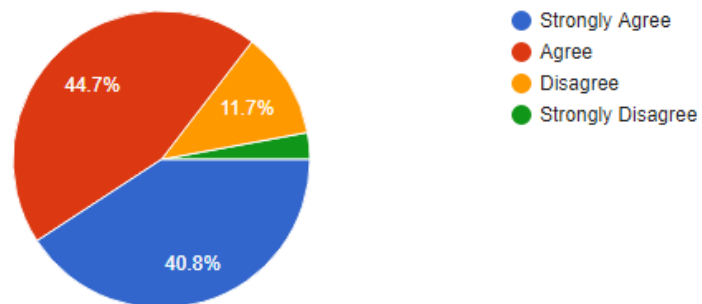
### A list of all public transport to your college would be a useful feature:

103 responses



### Tips regarding safety around the area you will be staying would be a useful feature:

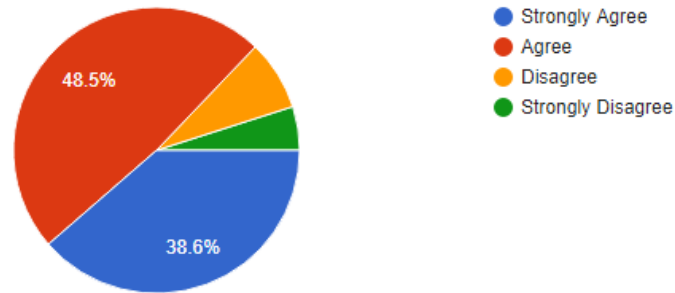
103 responses



### An option to review guests/hosts would be a useful feature:

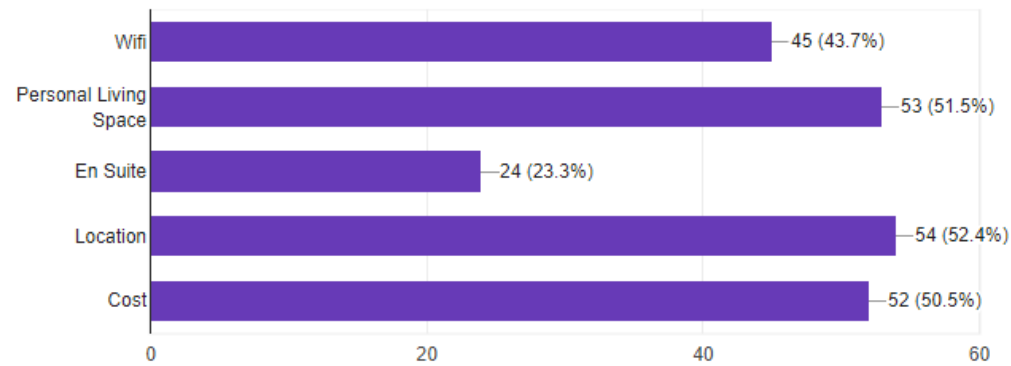


101 responses



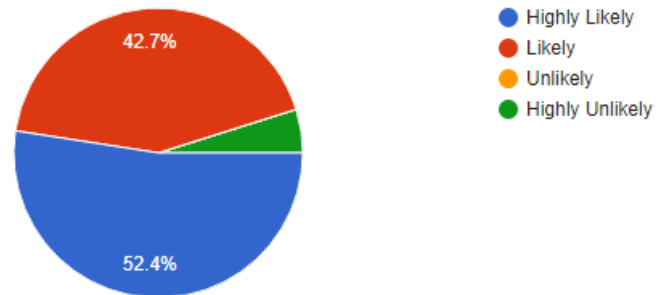
### Which of these are most important to you:

103 responses



### How likely would you be to use an application like this to find accommodation:

103 responses



### Survey Results:

The 105 stakeholders that took part in completing this survey vary in gender type with a smaller majority of these being male. The vast majority of stakeholders are currently residing in the Leinster region with the result coming in at 84.6% and in second place the Connacht region coming in with only 7.7%. There results show a variation in answers to all questions asked, but questions such as distance willing to travel, staying with the same sex, speaking the same language, the price of accommodation and most important amenities show a higher variation to that of other questions. It is evident from the survey that students are willing to travel as little as possible from their residence when attending third level education with 5-10km coming in with the highest percentage of 35.9% followed by 10-15km with a result of 34%. By acquiring this information

we can get a general idea of the maximum and minimum kilometers that should be available for students to select when using the application. I was surprised with the results of the importance of staying with the same sex question with disagree being the most popular answer with a result of 39.4% and strongly disagree with a result of 19.2% this makes up for almost 60% of participants believing that staying with the same sex is not important to them. I thought there would have been a strong importance for people to stay with people of the same sex but this obviously is not the case. Again there was a higher variety in answers when it came to staying with people who speak the same language this time the majority of the participants agreed with the statement. Agree resulting with 36.5% and Strongly Agree resulting with 29.8% totaling 66.3% of participants agreeing that it is important to them to stay with someone who speaks the same language. By identifying what is and what is not of high importance to the stakeholders we can outline what could be potentially included or not included within the filter function of the application. Finally the question that resulted in the highest variety in answers was the amenities importance. Personal living space, Location and cost proved most favorable benchmarking within the 50% margin. The remainder of the questions that were asked was based on potential application features and if they would be beneficial to the stakeholders involved. The features in question included messaging feature, favorites feature, list of public transport feature, a quick search function, a review feature and tips regarding safety. It's clear from studying the survey results that the majority the participants agreed or highly agreed that all of these potential application features would be useful and beneficial to have included in the application. Although some stakeholders believe these functions will be useful they may or may not end up in the end product. After all of the elicitation techniques have been completed we will identify all the requirements and begin to order them by importance. This will be completed by using the MOSCOW matrix to identify what features must, should, could and wont be included in the end product.

When conducting the survey I decided to use the Likert scale to determine the answers of the participants. The likert scale is the most universal method for collecting data from surveys. It does not force the participant to give a yes or no answer but to answer with a degree of agreement. The responses of the surveys are also very easy to read when using the likard scale.

### ***3.3. Results of Interviews:***

#### **Interview One:**

#### **Participants: Student Renting Accommodation**

#### **Interview Questions and Answers:**

**Where are you currently staying for the academic year and what was the reason for choosing your current accommodation?**

I'm staying in Wilton, Cork. For 1 semester this year and 1 semester next year I am on student placement with a company in Ringaskiddy called BioMarin. Wilton is an ideal location for me as it is a halfway point between town and Ringaskiddy. For me, it is important that I can get in and out of town quick and easy as it makes it easier for going out at night, shopping and getting the bus home to Dublin but I also need to get to easily get to work. There are at least two buses that go into town from Wilton and Wilton is also very close to the N40, which I take to get to work. Therefore, there is a good balance in this location between getting to work and into town.

**Did it take you long to find your current accommodation? And was there any issues when trying to obtain accommodation?**

It took about 5 weeks to get accommodation. However, there was a delay as we started to look the week before Christmas and estate agents were closed over the festive period. The main problem we faced was the fact we were young males competing against families or couples in their late twenties. Most landlords would rather not have a group of 4 young lads in their accommodation as they would think we are going to trash the place.

**If there was an application specifically tailored for sourcing student accommodation would you use it? If so what features would you like this application to have**

Yes, absolutely. If this sort of application was available we would not have been discriminated against for being young males. I would like this application to have the public transport readily available in the area. A built in Google maps sort of system would be nice also, whereby I could search locations and see how I would get there, how long it would take, etc. I could use this feature to find out how I could get to work if I wasn't familiar with the local roads.

I would also like the feature of receiving a notification if a house which meets the criteria became available. I've found from my own experience and talking with people who have also been looking for housing that the quicker the response to an advertisement, from the time it was posted, the better the chance you have of getting it.

**When signing up for the application would you prefer to create your own account via the application, such as creating your own username and password or would you rather log in via social media (example Facebook profile) and why?**

I usually prefer to create a separate username and password on these sort of websites/applications as I don't want all of my data stored together. E.g. I don't want data about my social life being stored with data being used to search for housing. Also, if there was a data breach on this application, would that mean that data from my Facebook would also be leaked? I don't know the answer to this but it's not worth the risk for me.

**How did you find your current accommodation and is there anything you may do different if trying to source another accommodation in the future?**

I found the current accommodation from responding to an ad on daft.ie. The ad was posted by the landlord himself, no letting agent was used. I called him an hour after the ad was posted and I went to view the house an hour later. After talking to him, he seemed happy to have me as a tenant and we put down a deposit then and there. In the future, I will make sure to look at the housing website more frequently so that I could be one of the first people to contact the landlord to express interest. Again, if a notification on this application was available to inform me of a new posting which may be suitable, this would make this a lot easier than constantly refreshing the website and making a new search to see if there was a new ad posted since the last time I searched.

**Interview Two:**

## **Participants: Host renting Accommodation**

### **Interview Questions and Answers:**

**1. How many years have you been renting a room/home?**

I have been renting my home to both Irish and international college students and international students attending my local community school for the last 10 years

**2. How do you currently acquire students that stay in your home?**

I am currently getting my students through contacting the schools in my area and I have also placed an advertisement on a website called Hosting Power. I obtain most of my international students from hosting power some who stay for just the academic year and others for the whole year round.

**3. Is there any improvements you feel could be made to the process that you are currently using to acquire students?**

Yes. I think if there was an online system or application that connected hosts and students directly would be an improvement to the renting process. If I had the ability to select a certain type of student that I feel would suit my household rather than the student being selected to me could also prove as a big advantage from a host point of view. For example if there was an option to select between Irish and international students I personally would pick an Irish student because they may decided to return home for the weekend and when the academic college year ends I then have the option to select international students who may be coming for the summer period. Another improvement I feel could be beneficial is the ability to view information about potential renters. For me personally I like to put a face to a name and get a general insight into the type of person who may be staying with me.

**4. Do you think an application that allows you to advertise your room or home and view the profiles of potential renters would be beneficial to you?**

Absolutely, this would be of huge benefit and a great way to connect hosts with the right type of student for their household. I feel though that the potential renter should have some sort of link or evidence to support that they are in fact who they say they are and that they are currently a student with a college or that they will be starting their third level education in September. This is an important safety and security measure in my opinion.

**5. What features do you think would be most beneficial to you as a host?**

I have used renting applications myself to find somewhere to stay when travelling abroad such as Air bnb and it is typically the renter who only has a search option. But as a host, again I believe it would be beneficial if I could search for students that I think may be most suitable for my home. Such as having a search and filter function where you can pick between Irish and International students as I find the Irish students may be more inclined go home for the weekend. I'd also like to filter by age group as I prefer a mature student staying with me because I find the younger students are a lot of responsibility and honestly I don't need any more stress in my life. It is important to ensure there is full information on the colleges or schools they are attending for security reasons. Finally with younger students such as international students that come to Ireland for the summer time to learn English their profile should make sure there is information on events they are attending and contact details for teachers

**6. Do you think there is a market for an application like Room-me?**

Yes, I would definitely use this application and I know other hosts in the area would also find it beneficial if there was the option to have an input into who will be staying with you and be able to narrow down which students would be most suitable for your home and lifestyle. I can see this being a hit with not just the hosts but students also, rather than the student doing all the searching for a home it could prove an advantage to them if the hosts could also get in contact with the students and this could narrow down the overall search



time for both parties. The fact that younger people never seem to be off their smart phones could be another advantage for the students. I think an application on their phone would suit their habits.

**7. If so would you use the application and in what way would the Room-me application be most beneficial to you?**

Yes, I would use the application. The application would be most beneficial in the way that I can put a face to the name of the person I may have staying in my home. The profile with evidence that the person is actually a student takes away any insecurities that may come with renting a room or home and finally to have the ability to narrow down a list of students that would be best suited for my home would benefit me most

**Interview Three:**

**Participants: Software Developer**

**Interview Questions and Answers:**

**Do you think it will be relatively easy to develop this application or can you see any issue with creating this application.**

Developing any application is no easy task, there will be unexpected challenges during the process but in this case we will have a solid foundation by using the AirBnB or Uniplaces API. Using these APIs gives us a strong base in functionality and UI, the challenge will be customising and modifying this to the business' needs and adding our own functionality.

**Can you describe to me a similar project you have worked on if any, and is there any features you would recommend for this application?**

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I previously worked on a project for Dublin tourism where it takes the users current location and maps out a route to the major landmarks of Dublin. This was created for Android using Java, Javascript and PHP along with a MySQL database. I used the Google Maps API and developed a script which marked a route on the map. This could be implemented for this project by showing how far away the property is the chosen University.

**In your opinion where should this application be hosted and do you have a rough estimate how much it will cost do develop this app?**

There's a few options... the most popular world wide is Amazon Web Services... why you would go with them is that they have scalability... meaning you can add resources like CPU & memory to the server on the fly and also create new servers to your pool depending on traffic... you can add web apps via containers on the fly also... it's the most popular one world wide. The first year if you sign up its a free server and then after that I think its 20euro per month as the minimum package... the second is if you want to do it cheaply use scaleway servers. They can boot up Linux OS's for 3euro a month and that is what I have used in the past. It comes with an image to boot up a word press site when you start the server so if its WP site being used

**Do you think the development process for this application will take long? Is there any information I could give you do aid you in the development process**

Between developing, QA and testing, this should be released in 4 months. Constant communication between the business and developers will be instrumental in how long this takes. A common issue that delays projects is the business giving developers a generic overview of what they want, the developers create it and when it is presented to the business, it's not what they want. So if we can get as much detail as possible on the functionality, layout etc with bi weekly meetings to give updates, this should be a smooth process.

**The Data Protection Bill 2018 will be introduced in May of this year, do you see this posing any problems to application development and how to you intend to incorporate this new legislation to the application.**

From an app development perspective... we take the "personal data" of a student... we must firstly ensure that it is secure and encrypted as GDPR demands this to take the "appropriate measures according to the risk". if we want to use their personal data for marketing or anything

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X14443268

extra, we must get consent from the person, so a consent tick form may be needed when signing up to the website. There is now rights of the data subject so if they want to be deleted and removed we must have a procedure in place to show this and we must also document all the business processes that we use that touch "personal data". It brings a little more work for the developers but as long as the correct processes are in place, it should not be a problem.

**Users will have the option to sign in via social media or by creating their own username and password. If a user forgets their username and password will there be a forgotten username/password option**

Yes there will. This is done by using HTTPS and generating tokens, this will protect against user enumeration. Another important aspect is to avoid referrer leakage, ensuring no external links or external resources are present on the target link. One way to mitigate this is to redirect after the initial link is followed so that the token is no longer in the query string .Once the password has been reset to one of the user's choice, we will need to expire the token and send the user an email to let them know this has happened just in case an attacker has somehow managed to reset their password (without necessarily having control of their mail account) defense in depth.

**What Language will you use for programming?**

For the web application, this will be done using Java. Java is a stable language and the library enables cross platform development. Programs are compiled independent of platform so it can be compiled on any machine that has a JVM, this cannot be done in C. The development tools are more advance than what other languages offer. Java has powerful development tools like Eclipse SDK and NetBeans which have debugging capability and offer integrated development environment.

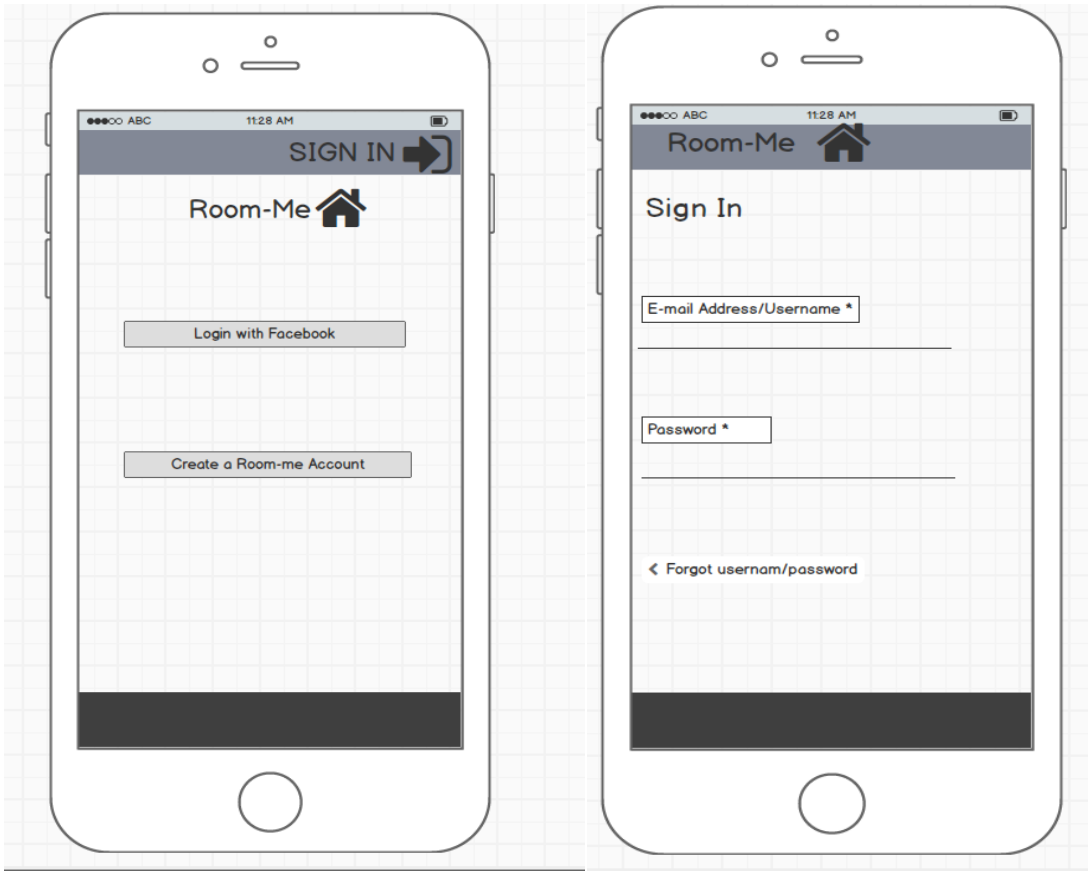
For the mobile app, we will be using Android. The Android platform is open source which means the Android Software Development Kit (SDK) can be leveraged without having to worry about the licensing costs or royalty. Developers can interact with the Android developer community for the forthcoming versions which they can incorporate into their Android app development projects. These benefits make Android a lucrative prospect for enterprises, device manufacturers and wireless operators alike, resulting in rapid development of the applications.

Jamie Moore  
X14443268

Android apps are also scripted in Java programming language that leverages a rich set of libraries. Any developer familiar with Java can build Android applications easily. As per a developer survey, many Java experts find it easier to write apps for Android as compared to programmers with command over other programming languages.

#### ***3.4. Prototype Results:***

**Prototype for Student:**



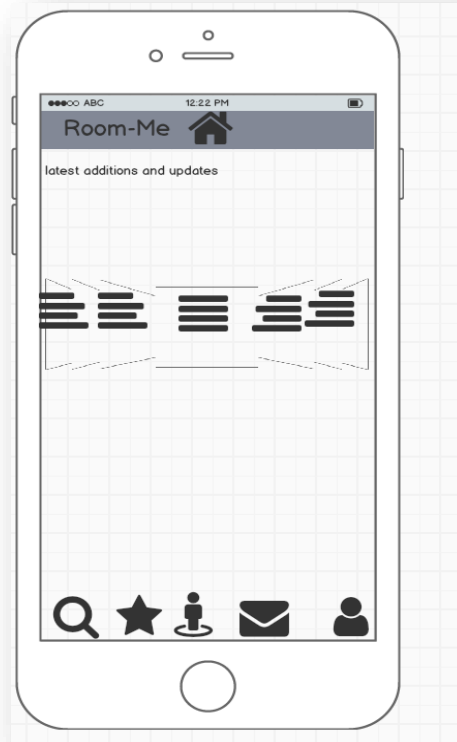
**Login Page:**

**Sign In Page:**

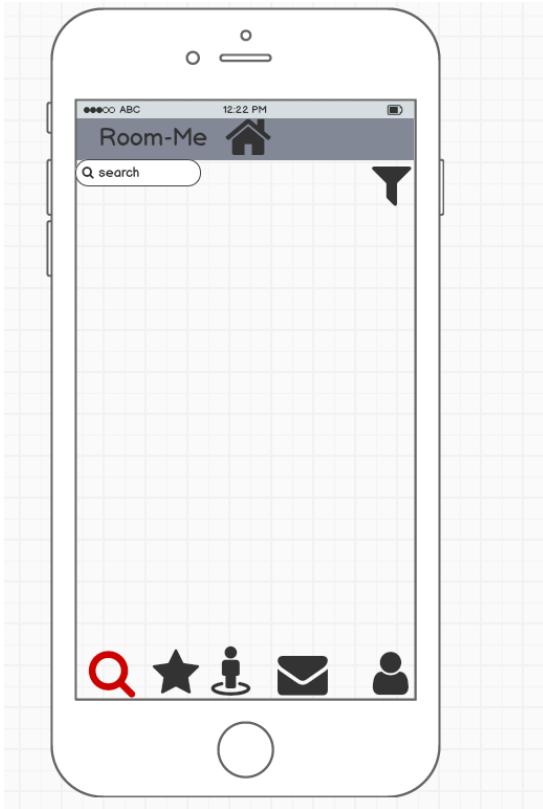


**Terms and Condition**

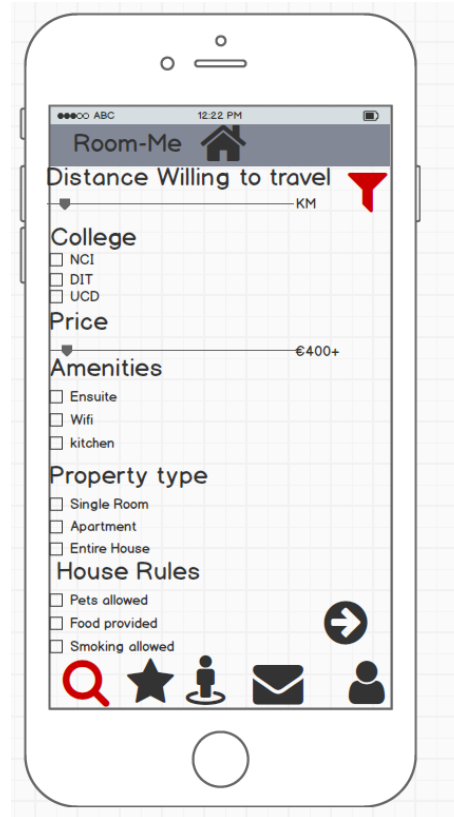
**Conformation:**



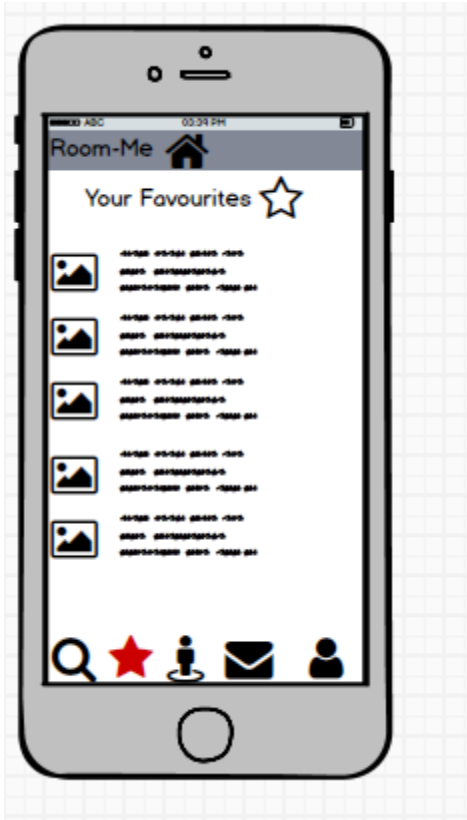
**Home Page:**



Search page



Filter Search Option

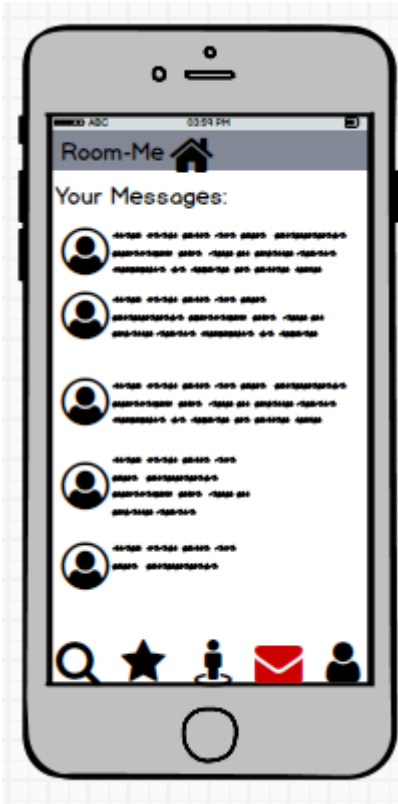


Favourites page

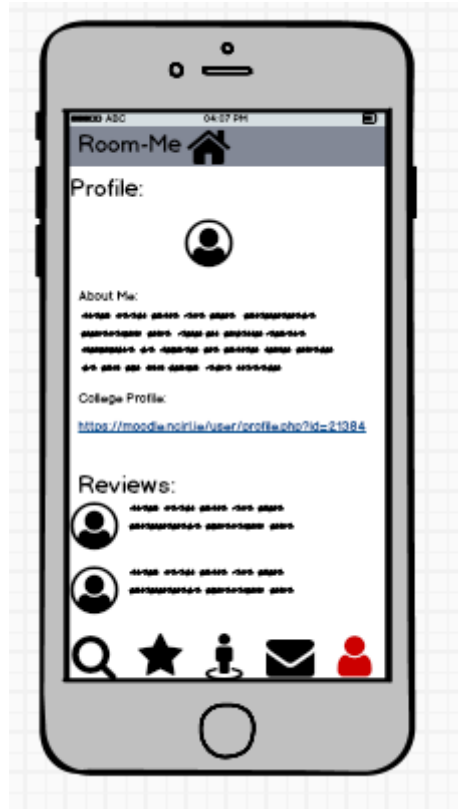


Google maps and public transport lists



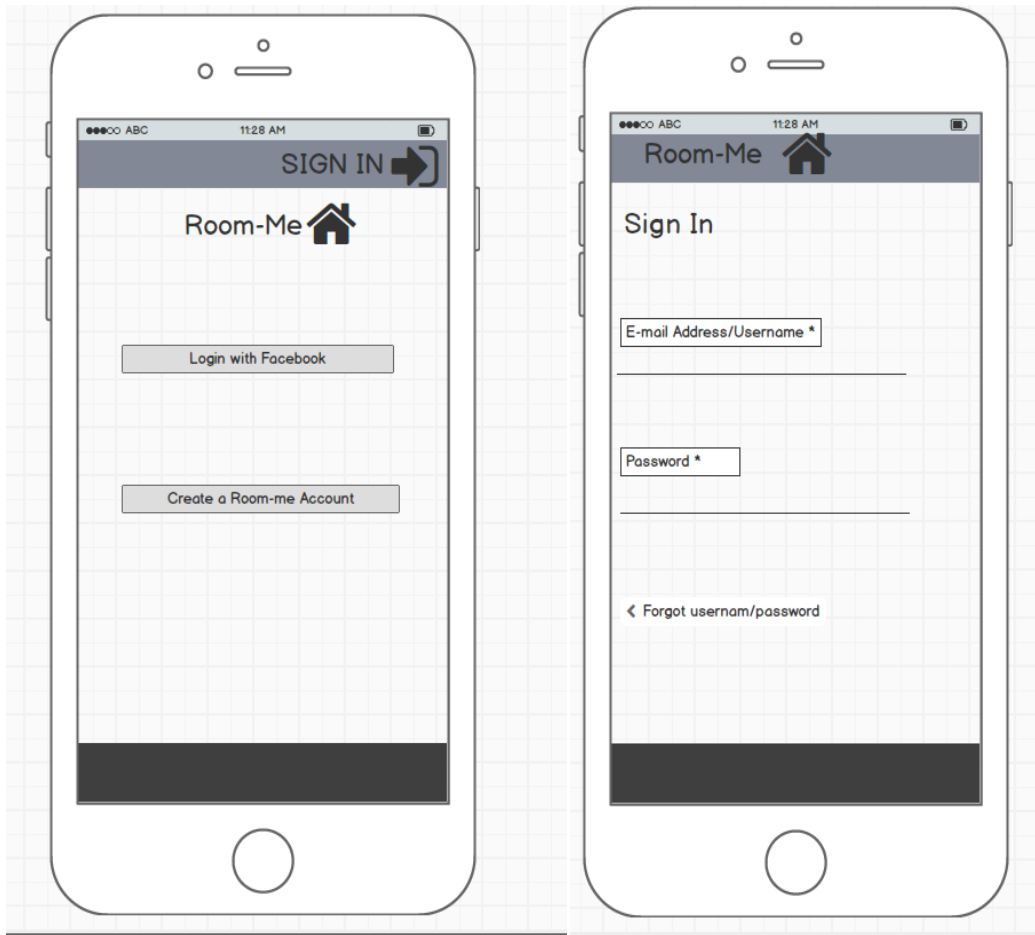


Messages Page



Profile Page

**Host Prototype:**



**Host Login Page**

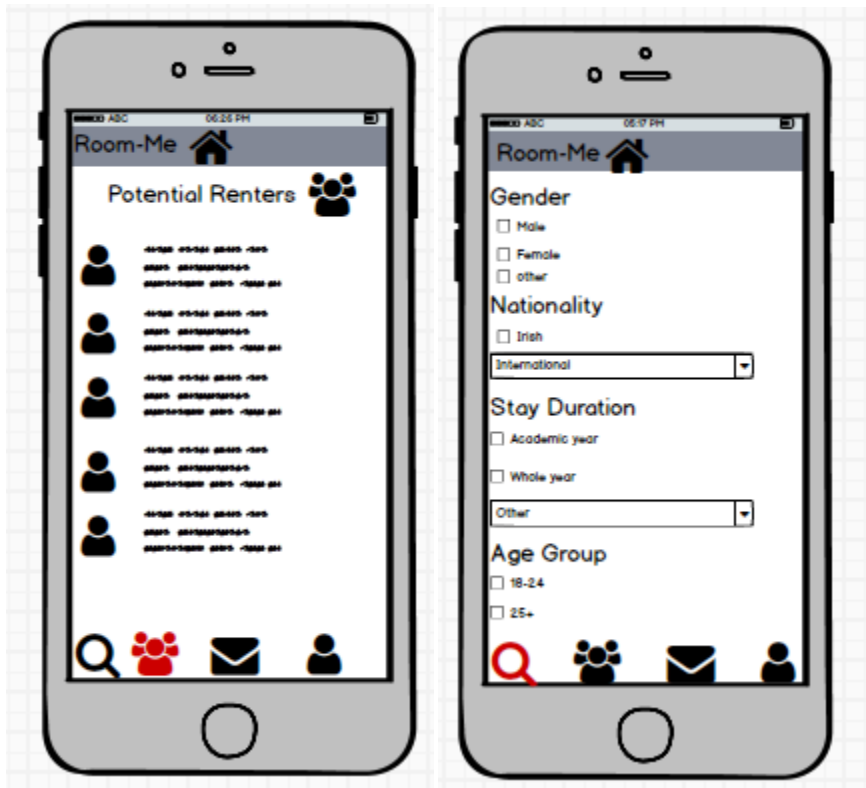
**Host Sign In page**



Term and conditons  
notification

Host Profile

Host Messages



Favorites /List of Potential renters

Host Search Function

### Prototype conclusion:

The prototype was created on the results of the elicitation techniques that were conducted with a variety of stakeholders. These techniques included brainstorming with a number of college students, an online survey targeted at students and three interviews that were completed with a student, a host and an application developer. The brainstorm that was conducted with a number of students that are currently attending college gave me a list of possible features that they outlined they would like to see in an application of this sort and that the layout of the application should be simple and easy to use for both hosts and students. The aim of the survey was to outline how beneficial some of the

features that were generated in the brainstorming session would be and gave me a good indication of which of these features should be included should be included in the prototype. The three interviews conducted gave me an insight into the current methods that are being used to both find and rent out their accommodation and if they could change anything that they are currently doing what would those changes be. Conducting a competitor analysis outlined the weaknesses of these companies and outlined how these issues could be resolved. It was important to find out if there would be any major issues regarding cost and data protection when actually building the App especially with the Data Protection Bill 2018 being put in place. I met with the relevant stakeholders during the requirements workshop to show them the application prototype and ask them for the feedback that they may have for me.

### ***3.5. Requirements Workshop Results:***

The gathering and the validation of the requirements workshop took place with two undergraduate students, one accommodation host, a software developer and a business analyst. After going through the different pages and functions within the application the stakeholders involved in the workshop provided the business analyst with some feedback and recommendations. The feedback given to the business analyst was taken on board and the recommendations that were outlined will be incorporated to the second prototype of the Room-me application.

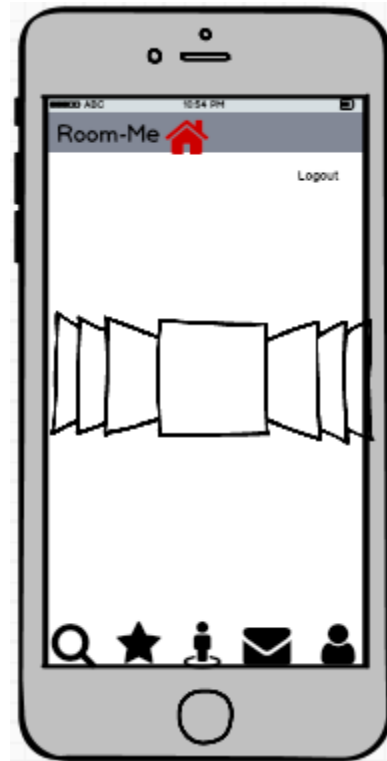
Overall the stakeholders at the workshop were generally happy with the layout and design of the initial prototype this mainly being due to its simplistic layout. There was a variety of additional features mentioned by the stakeholders that should be included in the second prototype and ideally the end product. It was outlined from the student that had previously been interviewed that the option to receive a push notification when new homes have been added could be a potential addition to the prototype. After some discussion we agreed that the push notification could benefit both students and hosts with the potential of acquiring a home or guest that little bit quicker. The students also noticed that when they initially log into the app they are brought to a homepage, but there was no option to return to the homepage when on other feature pages, The students also identified that there was no option to log out and it could be useful for a remember login details option.

The Host pointed out that after the signup page there was no option to select weather you were using the application for the purpose of finding a home or renting a home and a feature choose a student or host option after registration should be implemented. The host also pointed out that there was no option to view frequently asked questions or help and support. Other than these minor additions the stakeholders were content with the first version of the prototype. This was due to its simplistic layout that they stated was important from the beginning of the project. They stakeholders felt that if any other additional features were added to the application it may end up resulting with the application being more difficult to use and not catered for people who are not technologically advanced.

Updated Prototype Version 2:



Updated prototype with host

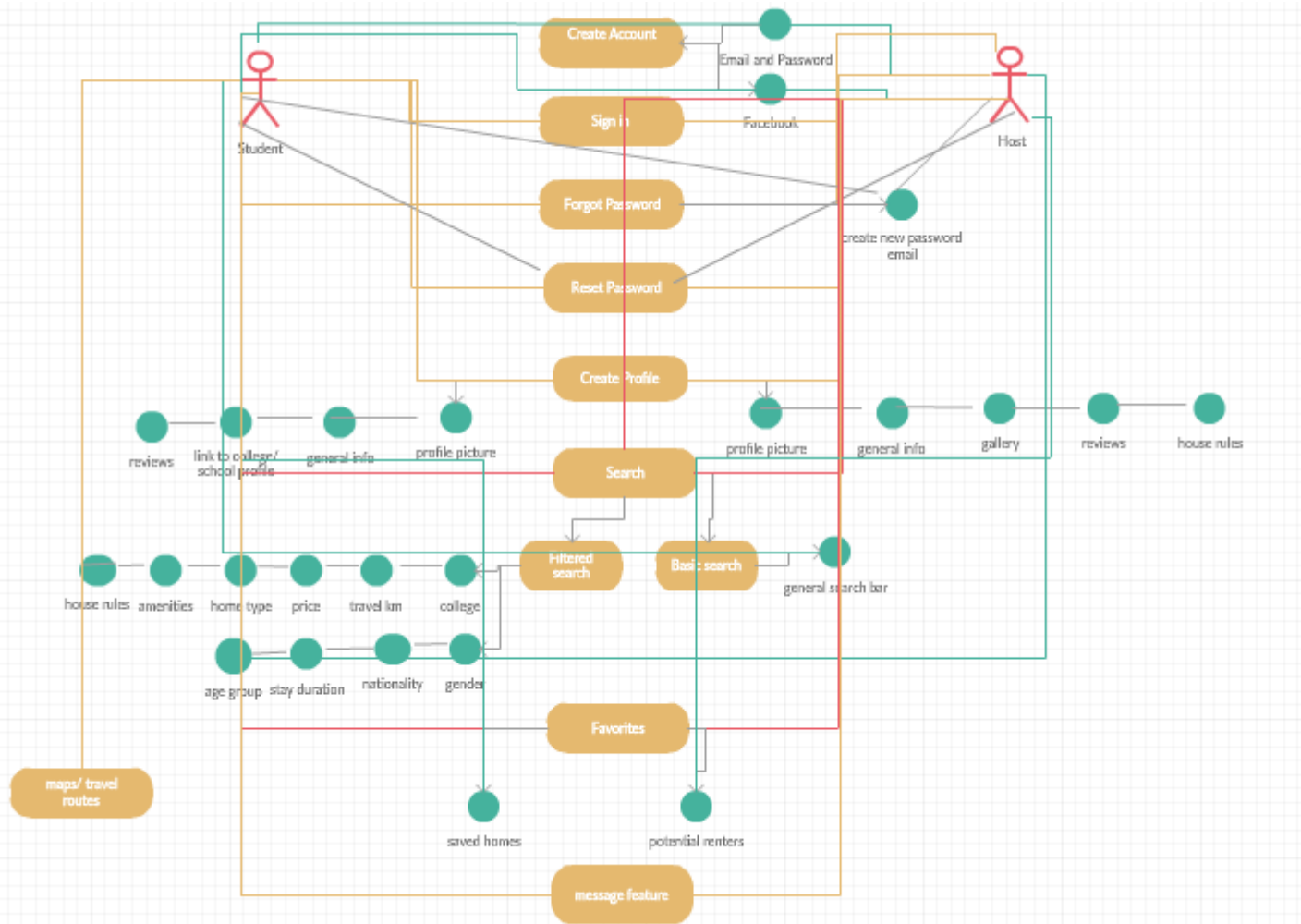


Room-me Homepage link and Logout feature

or student open and help & support link

### ***3.6. Results of Interface Analysis***

**UML Use Case Diagram form Room-me Application:**



### UML Use Case Diagram Conclusion:

The UML Use Case Diagram shows the relationship between the main stakeholders of the project these being the students and the hosts, and the Room-me application itself. The use cases are distributed through the center of the diagram clearly while the actors are located on the

external boundaries of the UML use case diagram. The orange arrows that connect from the actors to the use cases represents the steps and procedures that are taken when using the Room-me application. Other than the host not having a relationship with the maps and travel routes use case the two actors have relationships with all of the other use cases. Numerous relationships between the use cases can be seen throughout the UML use case diagram. For example the sign in, forgot password and reset password. The blue icons in the UML use case diagram outline the steps that the hosts and students can then take from a specific use case.

Describing the process of the Room-me UML Use Case Diagram: The student or host will have the option to sign up to or log into the application this can be achieved by logging in via Facebook or creating a Room-me account. If the student or host creates a Room-me account and forget their login password they can click the “forgot password” link which will then send them an email allowing them to reset their password. Both students and hosts can then begin to set up and customize their personal profiles such as personal info, pictures reviews etc. Once the profiles have been created the students and host can conduct searches these being a general search or filtered search. The filters provided will be different depending on whether the profile created was a student profile or host profile. After the searches have been conducted the students and host can both save to their favorites tab. Finally the students are the only actor that will have access to the Maps and Travel routes user case so they can determine the quickest routes ways to and from college.

### **3.7. MoSCoW Matrix:**

The MoSCoW technique will be used to prioritize the requirements that have been gathered from the various completed elicitation techniques. The techniques will be prioritized by a **Must** have, **Should** have, **Could** have and **Wont** have bases. The MoSCoW analysis was put forward to the stakeholders and they were all in agreement that this technique would be relevant to use. MoSCoW Analysis can cause conflicts between stakeholders as their needs are dependent on different requirements. In this case we will choose the requirements that will offer the highest benefit to the users and will not impact on the cost, schedule or quality of the application.

### **3.8. IEE Application Requirements Specification:**

#### **Purpose:**

The IEE requirements documentation is being established for the student accommodation application Room-me. This report will clearly specify the essential functional and non-functional requirements that will be related to this application. It is necessary that this document is accepted by



the customer before it can be passed onto the software developer. Any changes that are recommended by the stakeholders of the Room-me application must be applied before it can be developed.

**Scope:**

The Room-me application is being developed for numerous stakeholders with the biggest benefiter being both students and accommodation hosts. The goal of the application is for students to quickly secure accommodation that is financially feasible and caters for all their needs such as traveling distance, home type price etc. Hosts are also major benefiter of the Room-me application due to the fact that they can make money from leasing out a home or spare room that they may have and will have the option to choose who they feel will be most suitable for their home. Each year more and more people are attending third level education with the attendance level rising from 14% of males and 13.2 % of females in 1991 to 40.7% of males and 43.2% females in 2016 attending third level education. With the attendance levels rising the competition between students looking for accommodation is becoming greater and many college campuses cannot meet the demand. Although there will be a high demand for hosts the hosts will have to take into consideration that the students are looking for the best property for them at an affordable price. This could result with hosts competing against each other by lowering prices benefitting the students. The student users can create a personal profile, search from homes with filters that will be most beneficial to them, save homes to a favorites page so they do not have to continuously have to re-search, reach out to home owners through the messaging feature and use the maps and public transport feature to identify the best routes and forms of public transport to take to college if not familiar with the area. Host users can also set up their personal profile, can contact or respond to hosts through the messaging feature, can search for most suitable renter profiles with filters such as gender, age group or Irish or International students and add renters they feel are most suitable to a potential renter's page.

**Definitions, Acronyms and Abbreviations:**

**User:** A participant that interacts with the application

**Administrator:** A stakeholder with the authority to add, update or delete content to and from the application

**Stakeholder:** A person with an interest or concern with the Room-me application

**References:** IEEE Software Engineering Standards Committee, "IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications", October 20, 1998.

Jamie Moore  
X14443268

### ***3.9. Functional Requirements:***

#### **Functional Requirement 1.1**

##### **Identification Code:**

FR1

##### **Title:**

Application Android Store Accessibility

##### **Description:**

This application should be available to all users that wish to sign up as students on the android application store

##### **Reasoning:**

The reason behind this feature is so student users can download the Room-me application and create register or login to their Room-me profiles

##### **Priority:**

Must have – High Priority

#### **User Class One – User**

#### **Functional Requirement 1.2**

##### **Identification Code:**

FR2

##### **Title:**

Jamie Moore  
X14443268

Room-me account Register Link.

**Description:**

This is the first step when choosing to set up a Room-me account. The account will be created by providing an email address and creating a password so the student can successfully log into their Room-me profile.

**Location:**

Register page.

**Reasoning:**

This will allow the student to log into the Room-me application using their personal email and password if they do not want to register via social media link and have their social life data stored with their data being used to search for housing.

**Priority:**

Must have – High Priority

**Functional Requirement 1.3**

**Identification Code:**

FR3

**Title:**

**Email address function**

**Description:**

The application should have a function that allows students to enter their email address when creating a Room-me account

Jamie Moore  
X14443268

**Reasoning:**

The reason behind this feature is if the student forgets their password they can request to change or update their password via a link emailed to them.

**Functional Requirement 1.4**

**Identification Code:**

FR4

**Title:**

**Password function**

**Description:**

The application should request that the student provides a password in order to create a Room-me account

**Reasoning:**

The reason behind this feature is for student user security purposes. By having a password to gain access to their profile the user narrows down the likely hood of their personal data being leaked

**Priority:**

Must have – High Priority

**Functional Requirement 1.5**

**Identification Code:**

FR5

Jamie Moore  
X14443268

**Title:**

**Save login details function**

**Description:**

The student could use this function to save their email address and password for their Room-me account

Location:

Register page link

**Reasoning:**

The reason behind this function is so students do not have to constantly enter their login details when using the Room-me application

**Priority:**

Could have – Low Priority

**Functional Requirement 1.6**

**Identification Code:**

FR6

**Title:**

Facebook register link.

**Description:**

Jamie Moore  
X14443268

The Facebook register link option will allow students to set up a Room-me account using the details from their Facebook social media page such as email address, Facebook password, Facebook profile picture etc.

**Location:**

Register page.

**Reasoning:**

This will rule out having to create a password and email verification when creating a Room-me profile. Student users who want to get quick access to the application and do not mind the application having access to data about their social life

**Priority:**

Must have – High Priority

**Functional Requirement 1.7**

**Identification Code:**

FR7

**Title:**

**Student or host Function**

**Description:**

The student should be able to choose they are creating a student profile when registering for the application

Location:

Jamie Moore  
X14443268

Register page link

**Reasoning:**

The reason behind this feature is so students can set up the profile that suits them. This being a student looking for accommodation

**Priority:**

Must have – High Priority

**Functional Requirement 1.8**

**Identification Code:**

FR8

**Title:**

Login page Link

**Description:**

The login page is where the student that chose to create a Room-me account using an email address and password can enter their credentials to gain access to their Room-me profile.

**Location:**

Login page.

**Reasoning:**

Jamie Moore  
X14443268

The reason this function will be available is due to the interview that was conducted with the current college student who outlined that they did not want to mix their social data with their data connected to searching accommodation. The student also expressed concerns that if there was a data leak with the Room-me application it could result in their social data also being leaked and it was not worth the risk.

**Priority:**

Must have – High Priority

**Functional Requirement 1.9**

**Identification Code:**

FR9

**Title:**

Home page Link

**Description:**

The home page link will be visual across all the Room-me application pages and the home icon will be located at the top center of all the application pages for the student users. The students will be able to view the latest homes that have been added to the Room-me application. There will not be a home link page for the Hosts as there may be way too many users for the host to scroll through. If the host wants to view user profiles they can use their search function.

**Location:**

Across all Room-me application pages.

**Reasoning:**



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X14443268

The reason this function will be available is so students can continuously see the latest homes that have been added to the accommodation and are available for rent. Whenever the students hit the home page link the home page should update with the latest home appearing at the front of the application.

**Priority:**

Must have – High Priority

**Functional Requirement 1.10**

**Identification Code:**

FR10

**Title:**

Profile page Link

**Description:**

The profile link will be available across all pages of the Room-me application and will be located in the bottom right hand corner of the app. The profile link will allow the student users to update and edit their personal information, their college details, their profile pictures and read the reviews left on their page by hosts.

**Location:**

Across all Room-me application pages.

**Reasoning:**

The reason this function will be available is so students can make any necessary changes to their personal profile as they wish.

**Priority:**

Jamie Moore  
X14443268

Must have – High Priority

### **Functional Requirement 1.11**

#### **Identification Code:**

FR11

#### **Title:**

messages page Link

#### **Description:**

The messages link will be available across all pages of the Room-me application and will be located to the left of the profile page link. The messages feature is the communication connection between the students and the host.

#### **Location:**

Across all Room-me application pages.

#### **Reasoning:**

The reason this function will be available is so students can make contact with hosts

#### **Priority:**

Must have – High Priority

### **Functional Requirement 1.12**

#### **Identification Code:**

FR12

Jamie Moore  
X14443268

**Title:**

**Send message function**

**Description:**

This function will allow the user to send their message to the other users

**Location:**

message page link

**Reasoning:**

The reason behind this function is so users can effectively communicate with each other and send each other messages back and forth

**Priority:**

Must have – High Priority

**Functional Requirement 1.13**

**Identification Code:**

FR13

**Title:**

Search function Link

Jamie Moore  
X14443268

**Description:**

The search function link will be available across all pages of the Room-me application and will be located to far left of the application. The search function will allow students to quickly search for accommodation by entering key words such as location name or house type.

**Location:**

Across all Room-me application pages.

**Reasoning:**

The reason this function will be available is so users can conduct a quick search when looking for accommodation.

**Priority:**

Must have – High Priority

**Functional Requirement 1.14**

**Identification Code:**

FR14

**Title:**

Filtered Search function link

**Description:**

Jamie Moore  
X14443268

The search filter function link will be available within the search function link. The filtered search function will allow students to search for homes that satisfy their needs such as distance from college, price, house amenities and house rules.

**Location:**

Within the search function link

**Reasoning:**

The reason this function will be available is so students can narrow down their search to homes that are tailored to them and will save them time when conducting searches

**Priority:**

Must have – High Priority

**Functional Requirement 1.15**

**Identification Code:**

FR15

**Title:**

Favorites page link

**Description:**

The favorites page link will be available on all pages of the application. The favorites feature will be located to the right of the search function link and will store all the homes the student feels may be suitable for them.

Jamie Moore  
X14443268

**Location:**

Across all Room-me application pages.

**Reasoning:**

The reason this function will be available is so students can add homes they find that are suitable to them to a page that will save them. By having this function available the students will not have to continuously re-search for a home they may have previously seen.

**Priority:**

Must have – High Priority

**Functional Requirement 1.16**

**Identification Code:**

FR16

**Title:**

Add to favorites feature

**Description:**

The add to favorites feature is how the users will add the homes they think is most suitable for them to their favorites page

**Location:**

Within host profile page link.

**Reasoning:**

The reason this function will be available is so the student can add the home to their favorites page

Jamie Moore  
X14443268

**Priority:**

Must have – High Priority

**Functional Requirement 1.17**

**Identification Code:**

FR17

**Title:**

**Maps/Public Transport feature link**

**Description:**

The Maps/Public transport feature link will be available across all the Room-me application pages. The Maps/Public transport feature will be located in the bottom center of the tabs bar between the favorites and messages feature links

**Location:**

Across all Room-me application pages

**Reasoning:**

The reason this function will be available is so the student users can identify all the best travel routes to take when travelling to college.

**Priority:**

Must have – High Priority

**Functional Requirement 1.18**

Jamie Moore  
X14443268

**Identification Code:**

FR18

**Title:**

**Choose destination feature**

**Description:**

This feature will allow the student to choose where they are travelling to and where they are travelling from. Such as to their college from their accommodation

**Location:**

Within the Maps/Public transport feature link

**Reasoning:**

The reason this function will be available is so the google maps feature within the application can generate the quickest route to the destination for the user

**Priority:**

Must have – High Priority

**Functional Requirement 1.19**

**Identification Code:**

FR19

**Title:**



Jamie Moore  
X14443268

## **Choose form of transport**

### **Description:**

This feature will allow the student to choose what form of public transport they wish to take to their destination of choice if needs be.

### **Location:**

Within the Maps/Public transport feature link

### **Reasoning:**

The reason this function will be available is so the google maps function can outline what forms of public transport will take the student to their destination. For Example if the student choose a bus as their mode of transport then a list of the bus routes that go to that location should be listed.

### **Priority:**

Must have – High Priority

### **Functional Requirement 1.20**

### **Identification Code:**

FR20

### **Title:**

### **Help and Support Link**

### **Description:**

This feature will allow the student to go the application social media pages that will provide them with any support or information they may have.

Jamie Moore  
X14443268

**Location:**

Within the Maps/Public transport feature link

**Reasoning:**

The reason for the help and support link is so the student can go to the Room-me application social media pages and get help with any issues they may have, read frequently asked questions and find solutions to any problems they have.

**Priority:**

Must have – High Priority

**Functional Requirement 1.21**

**Identification Code:**

FR21

**Title:**

**Help and Support Link**

**Description:**

This feature will allow the host to read previous reviews from other hosts about the student, and leave their own reviews on the student profile.

**Location:**

Within the user profile link

**Reasoning:**

The reason for the help and support link is so other users of the application can write a review about the student user.

Jamie Moore  
X14443268

**Priority:**

Must have – High Priority

**Functional Requirement 1.22**

**Identification Code:**

FR22

**Title:**

**Push notification**

**Description:**

This feature will send the student a notification when a new home has been uploaded to the Room-me application

**Reasoning:**

This reason behind this feature is so users could have quicker accessibility when it comes to contacting the host about a home

**Priority:**

Could have – Medium Priority

**Functional Requirement 1.23**

**Identification Code:**

FR23

**Title:**

Payment feature

Jamie Moore  
X14443268

**Description:**

This feature would have allowed students to pay for their accommodation through their Room-me profile via credit card/ Paypal profile.

**Reasoning:**

This feature will not be present in the final project due to the cost, coding and timing constraints it will have on the project

**Priority:**

Won't have – Low Priority

**Functional Requirement 1.24**

**Identification Code:**

FR24

**Title:**

**Log out function link**

**Description:**

This feature will allow the Student to log out of their Room-me account

**Location:**

This will be located on the Room-me Home page

**Reasoning:**

This reason behind this feature is so the Host can log out of their Room-me profile. This will allow other users to log into their profile from one smart device

Jamie Moore  
X14443268

**Priority:**

Must have – High Priority

**User Class Two: Host**

**Functional Requirement 1.25**

**Identification Code:**

FR25

**Title:**

Application Android Store Accessibility

**Description:**

This application should be available to all users that wish to be a host on the android application store

**Reasoning:**

Jamie Moore  
X14443268

The reason behind this feature is so Home owners who wish to rent a room/home can download the Room-me application and register or login to their Room-me profiles

**Priority:**

Must have – High Priority

**Functional Requirement 1.26**

**Identification Code:**

FR26

**Title:**

Room-me account Register Link.

**Description:**

After downloading the Room-me application the host can then begin to register an account for the application.

**Location:**

Register page.

**Reasoning:**

This will allow the host to log into the Room-me application using their personal email and password if they do not want to register via social media link and have their social life data stored with their data being used to search for housing.

**Priority:**

Jamie Moore  
X14443268

Must have – High Priority

### **Functional Requirement 1.27**

#### **Identification Code:**

FR27

#### **Title:**

**Email address function**

#### **Description:**

If the host wishes to create a Room-me account they will need to provide an email address for verification reasons and if they ever need to request a password change.

#### **Reasoning:**

The reason behind this feature is if the host forgets their password they can request to change or update their password via a link emailed to them.

### **Functional Requirement 1.28**

#### **Identification Code:**

FR28

#### **Title:**

**Password function**

#### **Description:**

Jamie Moore  
X14443268

The application should request that the host provides a password in order to create a Room-me account

**Reasoning:**

The reason behind this feature is for user security purposes. By having a password to gain access to their profile the host limits the risk of data leakage.

**Priority:**

Must have – High Priority

**Functional Requirement 1.29**

**Identification Code:**

FR29

**Title:**

**Save login details function**

**Description:**

This function could allow the host to save their email address and password for their Room-me account

Location:

Register page link

**Reasoning:**

The reason behind this function is so the host do not have to constantly enter their login details when using the Room-me application

**Priority:**



Jamie Moore  
X14443268

Could have – Low Priority

### **Functional Requirement 1.30**

#### **Identification Code:**

FR30

#### **Title:**

Facebook register link.

#### **Description:**

The Facebook register link option will allow the host to set up a Room-me account using the details from their Facebook social media page such as email address, Facebook password, Facebook profile picture etc.

#### **Location:**

Register page.

#### **Reasoning:**

This will rule out having to create a password and email verification when creating a Room-me profile. Hosts who want to get quick access to the application and do not mind the application having access to data about their social life

#### **Priority:**

Jamie Moore  
X14443268

Must have – High Priority

### **Functional Requirement 1.31**

#### **Identification Code:**

FR31

#### **Title:**

#### **Student or host Function**

#### **Description:**

The user should be able to choose whether they are creating a student or host profile when registering for the application

#### **Location:**

Register page link

#### **Reasoning:**

The reason behind this feature is so users can set up the profile that suits them. This being a host advertising a property/room or a student looking for accommodation

#### **Priority:**

Must have – High Priority

### **Functional Requirement 1.32**

#### **Identification Code:**

Jamie Moore  
X14443268

FR32

**Title:**

Login page Link

**Description:**

The login page is where the users that chose to create a Room-me account using an email address and password can enter their credentials to gain access to their Room-me profile.

**Location:**

Login page.

**Reasoning:**

The reason this function will be available is due to the interview that was conducted with the current college student who outlined that they did not want to mix their social data with their data connected to searching accommodation. The student also expressed concerns that if there was a data leak with the Room-me application it could result in their social data also being leaked and it was not worth the risk.

**Priority:**

Must have – High Priority

**Functional Requirement 1.33**

**Identification Code:**

FR33

**Title:**

Jamie Moore  
X14443268

### **Host Profile link function**

#### **Description:**

The profile icon link will be displayed at the bottom right hand corner of the application. This link will allow the host to edit, update and change any personal information to their profile as well as adding pictures to their gallery.

#### **Location:**

Across all the Room-me application pages

#### **Reasoning:**

The reason behind this requirement is so host can edit their profile as they wish, add content to their profile such as photos and read reviews on their profile pages left from previous renters

#### **Priority:**

Must have – High priority

#### **Functional Requirement 34**

#### **Identification Code:**

FR34

#### **Title:**

**Add photos link**

#### **Description:**

This function will allow the host to upload pictures to their profile gallery from their camera roll.

Jamie Moore  
X14443268

**Location:**

Within the profile link

**Reasoning:**

The reason behind this function is to make the process of uploading pictures of host homes easy and not time consuming

**Priority:**

Should have – Medium Priority

**Functional Requirement 35**

**Identification Code:**

FR35

**Title:**

**Messages Link Page**

**Description:**

This function will allow the host to send messages to students they feel will be suitable for their home and will allow them to reply to any messages sent to them from students, the messages link page will be located to the left of the profile link tab.

**Location:**

Jamie Moore  
X14443268

Across all pages of the Room-me Application

**Reasoning:**

The reason behind this function is so hosts can read and reply to any messages that have been sent to them from students about accommodation as well as being able to contact students also

**Priority:**

Must have – High Priority

**Functional Requirement 1.36**

**Identification Code:**

FR36

**Title:**

**Send message function**

**Description:**

This function will allow the host to send a message to a student or send a reply message to a student

**Location:**

message page link

**Reasoning:**

The reason behind this function is so users can effectively communicate with each other and send each other messages back and forth

Jamie Moore  
X14443268

**Priority:**

Must have – High Priority

**Functional Requirement 1.37**

**Identification Code:**

FR37

**Title:**

Filtered Search function link

**Description:**

The search filter function link will be located at the bottom of the application to the far left. This link will allow the host to conduct searches on students.

**Location:**

Within the search function link

**Reasoning:**

The reason this function will be available is so the hosts can search for students with the characteristics that will best suit them such as, Irish or international students, age group and gender

**Priority:**

Must have – High Priority

**Functional Requirement 1.38**

Jamie Moore  
X14443268

**Identification Code:**

FR38

**Title:**

Potential Renters link

**Description:**

The potential renters link will allow the host to shortlist any profiles they feel may be suitable for their home.

**Location:**

Across all Room-me application pages.

**Reasoning:**

The reason this function will be available is so hosts can narrow down a list of students they feel would be most suitable for their home before they make their final decision.

**Priority:**

Must have – High Priority

**Functional Requirement 1.39**

**Identification Code:**

FR39

**Title:**



Jamie Moore  
X14443268

Add to Potential renter's feature

**Description:**

The add to Potential renter's feature is the function that will allow the user to add students to their potential renters list

**Location:**

Within Potential renters link.

**Reasoning:**

The reason this function will be available is so host can make a shortlist of potential students that they feel may be suitable for their home before making a decision.

**Priority:**

Must have – High Priority

**Functional Requirement 1.40**

**Identification Code:**

FR40

**Title:**

**Log out function link**

**Description:**

This feature will allow the Student to log out of their Room-me account

**Location:**

Jamie Moore  
X14443268

This will be located on the Room-me Home page

**Reasoning:**

This reason behind this feature is so the Host can log out of their Room-me profile. This will allow other users to log into their profile from one smart device

**Priority:**

Must have – High Priority

**3.10. Non Functional Requirements**

**Performance requirements**

**Identification Code:**

NF 1

**Title:**

Login Credentials

**Justification:**

If the user password is incorrect the application should identify so within a timely manner such as 2 seconds.

**Identification Code:**

NF 2

**Title:**

User Friendly

Jamie Moore  
X14443268

**Justification:**

The hosts specified in their interview that it is essential that the Application is user friendly and caters for people who are not technologically advanced.

**Identification Code:**

NF 3

**Title:**

Page Loading

**Justification:**

When the user clicks on one of the feature links the page should be loaded within 1 second.

**Security requirements**

**Identification Code:**

NF 4

**Title:**

**Password Criteria**

Jamie Moore  
X14443268

**Justification:**

The Users password should have one upper case letter and a number for security purposes and to limit hacking

**Identification Code:**

NF 5

**Title:**

Accessibility

**Justification:**

Accessibility to users should be limited to their purpose intended. By having accessibility security requirements hosts and students would be able to edit one others profiles.

**Identification Code:**

NF 6

**Title:**

**GDBR regulations**

**Justification:**

With the new Data Protection Act 2018 coming into play for security reasons we will not be able to store a lot of data about the users of the Room-me application and must ask the users for their consent to have access to their personal data.

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#### **Appendices:**

##### **5.1. Project Proposal**

##### **5.2. Objectives**

The Primary objective of my final year project is to create a requirements specification document in great detail for a student accommodation application. This will be completed by examining the viewpoints of all stakeholders that will be linked to this application. This project will involve communicating with stakeholders such as students, colleges and homeowners to identify their requirements for the application. The aspects I

will cover will include application design, layout, function, required features and many more aspects during the elicitation stage of my project. After identifying all the necessary requirements by using a number of elicitation techniques such as brainstorming they will then have to be documented in high detail within a requirements specification document. There is a list of other tasks that will have to be completed for this project such as developing a project proposal, conducting the project layout, the mid-point presentation, submission of the final document and the final presentation of the project.

The objective of this application is to allow students who must travel long distances to college easily find accommodation that is both a satisfactory travel distance to their college and within their budget. The user should be able to select the college they are attending, the number of km they are willing to travel and the price they are willing to pay per month. The application should show images of the available accommodations that are within the fields selected by the user.

As I continue to work on this project I will have to correctly and efficiently manage my time. Completing other tasks such as assignments from other modules will have an effect on the amount of time I spend on this project. This is why it is important to manage my time well. One of my goals is to complete all the deliverables on time and to be of good quality.

### ***5.3. Background***

I decided to create this application as there is no accommodation applications specifically tailored to students. This idea came to me after a friend had recently moved to cork to start an internship he obtained. He was in contact with me and a group of friends everyday via whatsapp messenger and outlined how difficult it was for him and some of his classmates to find accommodation. He also outlined that because he was not familiar with the bus and train routes in Cork city getting to work was proving difficult. I then remembered my recent travels to the United States last year and how we nearly always used the Air bnb app to rent out accommodation and how simple it was to use. By using my previous experiences with using the Air bnb application and applying it to the problems my friend had faced is where the Room-me idea came from. Each year more and more students have to leave their homes in order to attend college and looking for accommodation can prove difficult for them. This application should cater for all students needs and should allow them to select the college they will be attending, the amount of km they are willing to travel, the amount they are willing to spend monthly on accommodation and if they want a single, shared room or an entire home. Students can make their own personal profile with some information about themselves and the college/course they are attending and possibly outline what type of home they are looking for and the amenities they would like included .The results should provide images of the available houses and pricing. The homeowners should be specifically tailored to students and offer competitive pricing and services. Students will not be the only benefiter of the Room-me application. Hosts can also set up their own profiles with some information about themselves post pictures of their property and can send messages to students they think would be most suitable for their home. Reviews can be left by both parties that

will be posted on their Room-me profile to give an insight about the renter and host. If a student comes across a number of properties they like while searching they can add them to their favorites page to rule out having to continuously research. This will also be the case for the hosts they could add to a list of potential renters that they think would be most suitable for their home. Room-me will strictly be an application that builds the bridge between the student and the host. No method of payment will be conducted through the application this will be strictly down to the host and student to make an agreement on.

#### **5.4. Technical Approach**

After coming up with this project idea I then had to consider the technologies and tool I could use to create a visual image of how the application would visually look for the project showcase and what the application could functionally do for the final presentation. These tools included, WordPress, WIX, Balsamiq and. On the advice of a lecturer I decided to use the WordPress tool as it offers more features than that of WIX.

#### **Tasks that building the application will involve**

1. Requirements Documentation  
This will require meeting with all stakeholders that will be associated with the setup of the application. We will need to discuss who the target market of the application is and then outline what the requirements should be featured on the application. These requirements will then be submitted into a detailed requirements document.
2. Prototype Development:  
This will involve creating a prototype of the finished product. This can be achieved by using the online tools such as Balsamiq. The application prototype can be presented in the mid-point presentation and be shown to stakeholders who can then request changes or include more requirements.
3. Project Application Development:  
This step will involve using the requirements I have identified by using elicitation techniques and the requirements requested by the stakeholders. I aim to be satisfied with how the application looks and should perform for the project showcase and reflects the hard work and commitment I put into the project.

### ***5.5. Special resources required***

I have never constructed a website on online applications such as WordPress or WIX in order to gain the knowledge on how to do this I will have to do the following

- View videos online on how to use WordPress
- Read online forums on what features WordPress offers and how to use them
- View websites that have been constructed on WordPress and see how well they function.

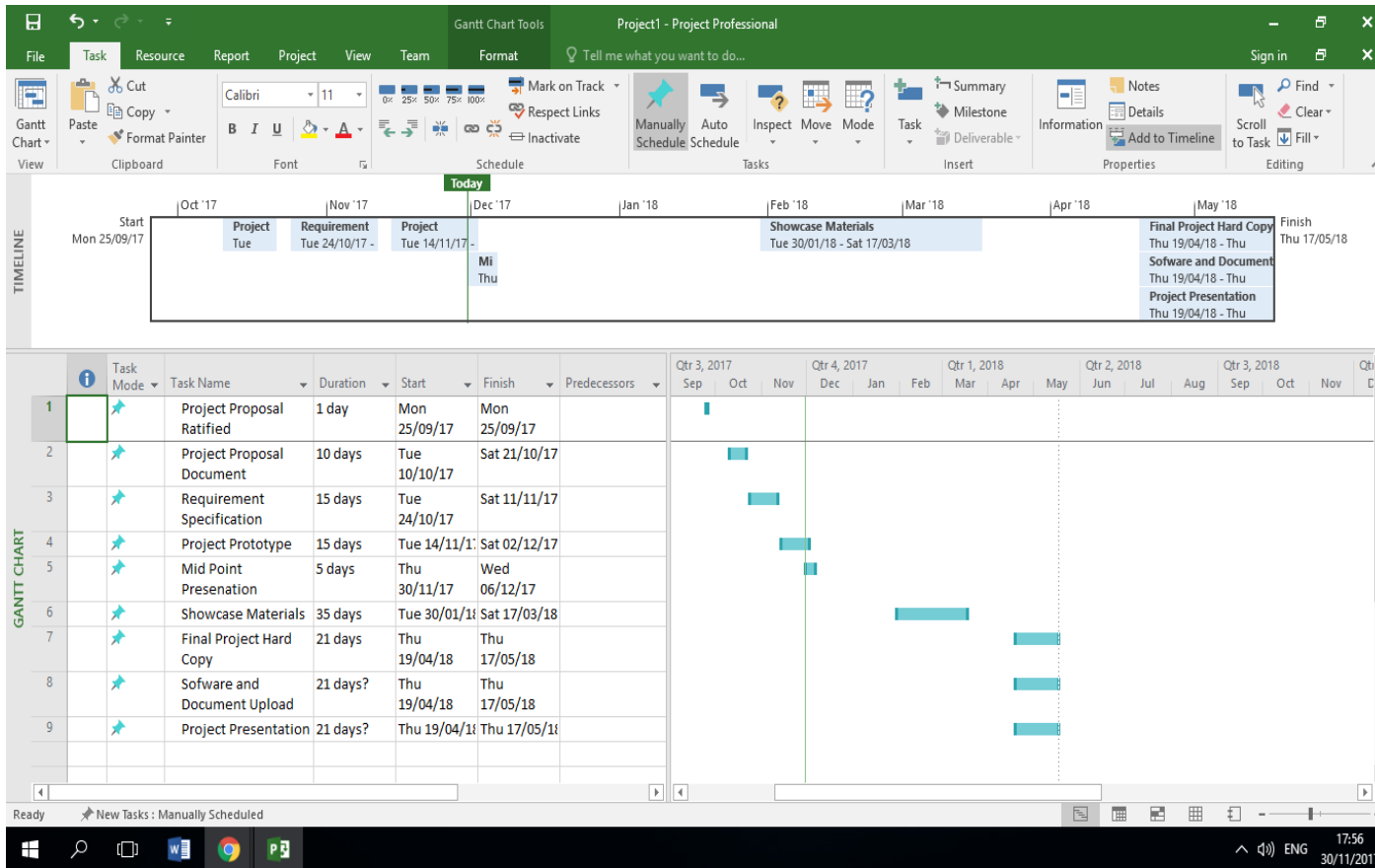
I will also need the following basic Hardware/Software

- laptop
- Dropbox
- Information technology project management, international edition book by Kathy Schwalbe (7<sup>th</sup> edition).
- The IEEE guide for effective requirements gathering.
- IEEE requirements documentation templates.
- BABOK A Guide to the Business Analysis Body of Knowledge- by the International Institute of Business Analysis.

### ***5.6. Project Plan***

Gantt chart using Microsoft Project with details on implementation steps and timelines:





### 5.7. Evaluation

I will use a number of elicitation techniques as the basis for my final requirements specification document. These techniques will include brainstorming sessions with stakeholders, lessons learned, interviews and surveys. These are the main techniques I intend to use but other techniques such as evaluation criteria and document analysis may be used. By using these techniques a great foundation for writing a high standard and highly detailed requirements specification will be made. When my requirements specification document is completed the project

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application must be created using WordPress. I will need to meet regularly with my project supervisor who could offer some support and advice in any areas needed.

**Project Website:**


**Room-me Application** HOME ABOUT EUCATION TECHNIQUES SAMS PROF

The Latest Student Accommodation Application

Get app

How it works?

Create Add your Favourites List ofPublic Find your Home




# Room-me Application

- HOME
- ABOUT
- ELICITATION TECHNIQUES
- BALSAMIC PROTOTYPE

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## About Room-me




### You will find the latest information...

About us on this page. Room-me is an application specifically designed to satisfy the needs of both students looking for accommodation and host who are looking to rent out a spare room/home they have. Students can find their perfect home by conducting a filtered search and choose the price they are willing to pay and the distance they are willing to travel to college.

### Please insert information...

On your personal profile outlining who you are, what type of home or guest you are looking for and the facilities you want to see in a home or the facilities you have in your home



### Business Case:

The concept of Room-me is to provide a service to students who are looking for long term accommodation, hosts who have spare rooms that they are willing to let out and potentially increase the number of students attending colleges. The overall goal is to find students affordable living space that tailors for their needs, give the host the opportunity to earn some extra cash. Room-me will work by both hosts and guest creating a personal profile that gives some basic information about themselves for example name, age, sex, interests, likes and dislikes.



## Brainstorm

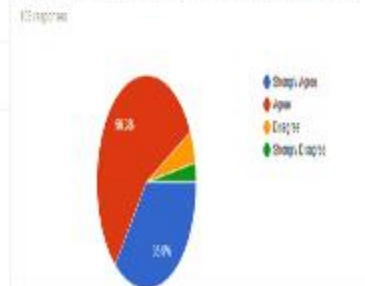
The brainstorm was conducted with students and a home host. Some features were suggested by both stakeholders and these were derived from the brainstorm headings which consisted of Content, Users, Functionality and Layout. Some of the suggested features included a filtered search function, a messages feature a profile feature and a favourites feature.



## Survey

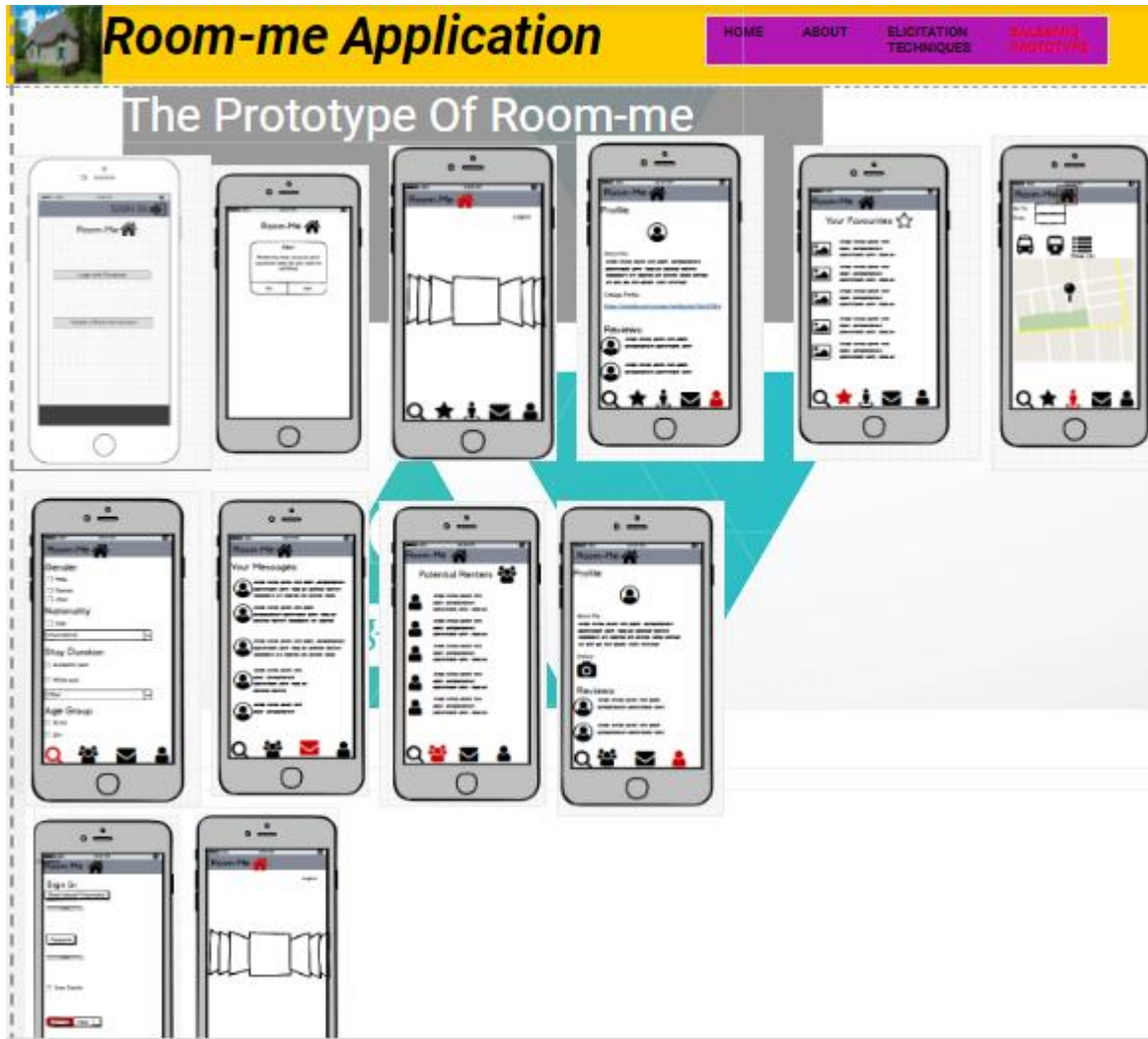
The Survey was used to gather the opinions of a wider audience on whether the features of the application that were suggested in the brainstorm. The likert scale was used when asking the survey questions it is the most widely used approach to scaling responses in survey research.

A quick-search function would be a useful feature for this application:



## Requirements Workshop

There was a total of three interviews conducted. The interviews took place with a current undergraduate student, a Host and a Software developer. The goal of the interviews that took place with the student and host were to identify other requirements that had not been previously outlined in previous techniques. We identified that a list of transportation routes was a requirement from the student and the search feature was a requirement from the host. The interview that took place with the software developer was to identify any issue that could come up when developing this app and what measures would be taken with the introduction of the new Data Protection Act 2018.



<http://us.zyro.com/>

## Reflective Journal:

### ***6.1. Month: September***

I have returned to college this month after completing a six-month internship last year with a company called Sandvik Mining and Construction. It was an eye opening experience getting to work in a multinational company and seeing how they conduct business daily. I knew when starting fourth year that one of the main modules would be my final year project. However I didn't know that the project was worth 20 credits out of a total 60 so I know that if I want to graduate with a good grade I'm going to have to deliver a high standard project. I knew I was set on the project being application based rather than being website based. Thinking of a project idea proved difficult but I finally came up with a project idea. I got my project idea from using Uber eats when I was away in Chicago for the summer. Uber eats is an app where you can order the delivery of fast foods that do not offer a delivery service such as McDonalds and KFC. Instead of using food as my product for delivering I believe there is a niche in the market for delivering pharmaceuticals. The project application will be called Phast Pharmaceuticals. Users should be able to have their prescription drugs delivered to them. Their prescription can be emailed to our company by their doctor and then be delivered to them for a small charge. The Phast Pharmaceuticals app should be able to alert users when they may need to reorder their prescription and could have a map so users can see where the delivery driver is and how long it will take them to make their delivery. Phast Pharmaceuticals will benefit numerous targets these being elderly people, people living in rural areas who may not drive and people who may only work night shifts and may not live near a pharmacy that operates 24 hours.

### **My Achievements**

This month, I was able to identify who my target market would be and identify that there were no competitors on the market. My next task will be to present my project idea to the lecturers.

### ***6.2. Month: October***

### **My Achievements**

I met with three lecturers to discuss my project idea Phast Pharmaceuticals and what the application would do. I felt as if the discussion or dragons den style meeting was going quite well and I felt that the lecturers were finding my project idea intriguing and interesting . To my misfortune one of the lecturers has extensive knowledge about the pharmaceutical industry and outlined that there would be some legal issues associated with this application idea regarding customer personal data as well as a few other legal issues .After my initial project idea was

rejected from the interview with the lecturers it was back to the drawing board. I was disappointed but I couldn't let it slow me down the was work due such as the project proposal in the upcoming weeks. I finally came up with a new project application idea. It was an accommodation application specifically tailored to students. I got this idea when a friend who was attending college in cork described how hard it was do sort accommodation and expressed he felt it was due to him and some college friends being "young lads". The application would be specifically tailored to students who are attending third level education and its layout will be based off that of another renting application Air bnb.

### **My Reflection**

I conducted my research and although there are accommodation websites such as rent.ie and hosting power that also focuses on a variety of students none of these are available on an application platform. Being a student myself and having a smart phone I personally feel people would find it easier to search for accommodation though an application than searching online on both their smart phones and desktops.

### **Intended Changes**

Next month, I will try to outline what elicitation techniques I will use to gather all the necessary requirements needed to create the Room-me application successfully. Examples of elicitation techniques include brainstorming sessions, polls and questionnaires, interviews, document analysis, interface analysis workshops and prototypes.

### ***6.3. Month: November***

The month of November has been the most difficult month so far. During this month I have completed and uploaded my project proposal and my preliminary requirements document. My time management took a hit this month as a variety of assignments from other various modules were due such as Requirements Management, Global Supply Chain management and Strategic Management. The amount of time that I could put into this project has been restricted and has suffered because of these other assignments. At the beginning of the month I met with my project coordinator Eugene McLaughlin. This meeting was extremely beneficial as Eugene pointed out areas that could improve my project idea such as not only Irish students being the target but also international students and even international students that attend schools to improve their use of the English language. The Final task that had to be completed for the month of November was the midpoint presentation document. This was basically my Preliminary requirements and project proposal merged into one document that I would be graded on. I felt there was a lack of or error in communication to us as a class about the preliminary requirements document. On one hand were told that we did not have to complete a preliminary requirements document because our project overall is a requirements specification document, while on the other hand we were told that even though our project is a requirements specification that a preliminary requirements document must still be completed.



Due to the fact that that there was some communication errors resulted in having less time to complete preliminary requirements document and because I have not conducted my elicitation techniques yet this document lacked some results. My next task is to create a PowerPoint document that I will present in my midpoint presentation on Wednesday December 6<sup>th</sup>

#### ***6.4. Month: December***

##### **My Achievements**

Like November, December was extremely busy with more module assignments being due such as Information Systems Management, as well as our Mid Point Presentation. I spent some of my time developing a work plan so I could keep on top of things. The only attention the project got in December was the Mid Point presentation. This was mainly due to the fact that Christmas exams were commencing from the 4<sup>th</sup> of January and with there being 5 exams study was my main priority.

This year the Mid Point presentations were taking place earlier than previous years so it was important to have my presentation completed and learned off on time if it was to be a success. My Mid Point presentation was dated for the 6<sup>th</sup> of December and this was to take place in front of my project supervisor and another unknown lecturer. My presentation was created on Microsoft PowerPoint and I discussed what the app would do, who it would benefit and why it would be of benefit. I had drawn a basic image of a prototype that portrayed what the app should look like and how it should function and outlined what the next steps to take were.

I met with Eugene in December and discussed what would be expected from me for the presentation. I felt there must have been some confusion with what we were supposed to present and what the lecturers were expecting. When I first walked into the room my supervisor asked me what I was supposed to present and I believe they said they had the wrong marking scheme. I felt the presentation went well because I knew my slides, how the application would work and my prototype inside out. The only bit of criticism I received was on my sample survey questions which the lecturers felt were poor. I told them that as these were only samples and have not been broadcasted so I could make the necessary changes recommended. I was happy with how my presentation went and was confident that I would receive a high mark. After I was finished my presentation I talked to another student who had to present to the same lecturers. His presentation was before mine and told me that the lecturers were expecting something different to what he presented. I suspected that was what the confusion was about and because the lecturers had a different marking scheme. We received our results a short time later and I have to say I was not happy at all, myself and the other student got a similar mark of 13% out of a possible 25% while other students from our class that presented to different lecturers received higher marks such as 18% and 19%+. I feel there was a misunderstanding of what was expected and hence the low mark.

My goals in the coming few weeks and month is too solely focus on my exams. Once the exams are finished I will start conducting my elicitation techniques such as a brainstorming session and a survey.

### ***6.5. Month: January***

#### **My Achievements**

With there being five modules each which had an exam January was also a demanding and stressful month. The Christmas examinations started the 4<sup>th</sup> of January and finished on the 12<sup>th</sup>. Exams started earlier this year than what we were used to so there was no time for New Year celebrations. The project took a back seat for a number of weeks but was always in the back of my mind. Once exams were completed more time could be spent on the project. However, there were another two modules to focus on for the semester Agile project management which requires a group project and Business process management which carried 10 credit so I know it will be an important one to focus on. I knew The Requirements management module that we had completed in semester one would benefit me a lot with the project. I have been using the Business Analyst Book of Knowledge (BABOK) to identify what other elicitation techniques I could use and would be most beneficial to my particular project. Due to the poor result of my Mid Point presentation I knew it would be important to try and do a few more elicitation techniques than the minimum that was required. By completing more techniques I will be able to identify more stakeholder requirements which I will then have to prioritize by importance. Using techniques that we have learned in the previous semester modules will prioritize the stakeholder requirements. An example of a prioritizing technique that I will use is a MOSCOW matrix.

### ***6.6. Month: February***

#### **My Achievements**

Unfortunately, February did not start off well as a class mate and I received news that our final year project supervisor Eugene McLaughlin had fallen ill and can no longer take part in the project. We were quickly assigned a new project supervisor Pat Delaney. Although the supervisor change over was instant I feel there was a some delay as we had to meet with Pat and explain our project ideas all over again and take note of his recommendations. I felt it was necessary to email Pat and arrange a meeting as quick as possible to try and minimize any more delay. Within a day or two myself and my class mate met with Pat and described our project ideas. We discussed some elicitation techniques such as our survey questions and he provided some useful recommendations that we did not previously think of such as using the likert scale for survey answers. Potential candidates to interview were discussed these included students, current accommodation hosts and an application developer. We ran through some potential questions and concluded with the ones we thought would provide us with the most information necessary. Exams results from semester one were received this month and I was happy with the majority of my results especially with there being 5 exams. There was one exam that could have been a better result and brought me down from having a 2.1 average to an average of 58.5%. If I want to achieve a 2.1 I will have to get in the 60% range for both of my module examinations and with my final project. There were two seminars set up for us during February with Sam Cogan on how to build a WordPress website. These seminars were extremely beneficial. Eamon Nolan also gave some seminars on what was expected for the project showcase and our showcase profile which was worth 3%.

### **6.7. Month: March**

#### **My Achievements**

March has been the most productive month so far. This is because we had two weeks off college and I spent a lot of my time working on my project but also had to work on the assignments for my other two modules that were due for the week we were due back. It was constant work for the two weeks and absolutely no time for the pub. It was a bitter pill to swallow but I just had to keep telling myself if I put the work in now I will reap the rewards at the end of the academic year. I gathered some results from a few of the elicitation techniques that I conducted. These techniques included a brainstorming session, and a survey mainly targeted for students to see if a wider audience agreed on some of the application feature ideas generated in the brainstorm would be useful. I was surprised with the high amount of survey responses I received this totalling to 102 responses.

Our project showcase profiles were also due this month. The profiles consisted a brief overview of our project, the technologies used for the project and the professional photograph that was taken of us in the atrium earlier in the month. Because we would be marked on our showcase profile and it had to be up to a certain standard it had to be approved by Eamon Nolan. We received a class email to say that we were the first class that had the majority of the showcase profiles uploaded and approved. Our Course Director Eugene O'Loughlin conducted a seminar on how the project would be marked. To be honest it scared me a little but I'm sure if I keep the head down I will be alright.

#### **Acknowledgements:**

I wish to express my sincerest thanks to my project supervisor Pat Delaney for taking time out of his day to meet with me and help me with any issues I had regarding the project and providing me with feedback and recommendations for my project. I would also like to express a thank you to my class mates who have helped me who have helped with conducting some of my elicitation techniques and my family who have had to listen to me moaning about this project .