

Assignment 1

**COSC2625 Building IT Systems**

Project Title : FlippingRooms

Team Name : Leftovers

Team members : 1. Ting Xian Sean Wong – Leader

2. Anasta Poeleongan

3. Benjamin Phan

4. Darien Nguyen

5. Guanhong Chen

6. Jann Christian Makiling

**Group Members**

**1. Ting Xian Sean Wong (s3496338)** [**s3496338@student.rmit.edu.au**](mailto:s3496338@student.rmit.edu.au) **- Leader**

I am from Malaysia and I am currently a first-year student in RMIT. I have always been interested in the field of IT as I have always been fascinated by the IT industry and how it is booming in this day and age. In addition, I am constantly intrigued by the technological advancements and how IT systems evolve at such a rapid rate. Upon completion of this degree, I am confident that RMIT would have equipped me with a set of skills obtained from problem-based learning for the ever-changing environment in the field of IT.

I am good at organizing my thought process and I am able to delegate tasks within my group without sounding too bossy. I give every team member a chance to speak their mind and take them into consideration. I am interested in creating applications and software that would better the lives of mankind and make processes to achieve that more efficiently and user friendly.

Besides that, I am a creative person and I love design. I have a good eye for detail.

I am not very good when it comes to programming as I tend to get confused and panic. Though I am bad at it, I have a strong sense of wanting to learn. I like to be challenged and programming is one of the challenges I tend to overcome at the end of my studying process.

I would be delegating the task and act as an overhead for all my team members and ensure that everyone would be on the correct path. I will also make sure that everyone is on the same page, so we do not stray too far from our initial idea for the project. I will also try to provide as much help as I can to any of my team members.

### 2. Anasta Poeloengan (s3829552) - [s3849552@student.rmit.edu.au](mailto:s3849552@student.rmit.edu.au)

I was born and raised in Australia, I’m 18 and am currently studying my Bachelors in IT. IT interests me as it is something, I use every day and as such I would like to learn more about it. I have been interested in IT since year 11 where I did some coding in my computing class. I found creating and making my own programs interesting and intriguing and as such decided to continue this curiosity in University. I also thought that the job security along with the pay that comes with the IT industry would be good for my future.

The skills that I am good at are creativity and design. Design is something that I have enjoyed in previous classes and I am just naturally a creative person. I think this allows us to have a variety of outlooks on things and can mean that we can tackle different problems in a creative way. As I am also outgoing, I believe that my communication skills will also be helpful in working with a group and make it more enjoyable. I’m interested in helping people and making their lives easier in any way and using my knowledge from the course I am doing is something I believe will be extremely joyful.

While I do enjoy programming and have some experience in it is not my strongest skill. I have enjoyed programming however I think there is lots for me to learn, which I am excited about. Programming is something that I have done in my spare time and would like to learn more about however it is also something I expect to improve on.

I believe I will be someone who comes up with unique and creative solutions for various problems. I think I will help my group by using my creativity to help solve problems from a different perspective or coming up with ideas which will help our group.

### 3. Benjamin Anh-Khoi Phan (s3854890) - [s3854890@student.rmit.edu.au](mailto:s3854890@student.rmit.edu.au)

I was born in Vietnam and lived there for 10 years before moving to Australia with my family, and I am now a freshman at RMIT University at the age of 19. My interests in IT are mainly in programming and video games development, though I am also interested in other areas and am willing to try new things out of my comfort zone. My passion in IT stems from the fact that I am amazed at the wonders of technology and how it helped us in advancing our civilisation. It is because of this wonder and amazement that I hope to one day become a part of the leading figures that spearhead cutting edge technology.

I am good at keeping focus to whatever I am doing as I tend to want to complete work to a satisfactory standard rather than just doing it for the sake of completion. Other than that, I am versatile in that I can help with most work so I can provide help when needed. I also think my communication skills are good enough to keep cohesion in a group project. Other than that, I think my comprehension is one of my greatest strengths as I can usually interpret information clearly and help solve problems more efficiently and quickly.

Finally, I am interested in being a part of advancing human civilization through cutting-edge technology.

That would be designing and coding. While I hold an interest and passion for programming, I am not particularly good at it. Furthermore, my creativity isn’t a part of my strength which means I am less likely to contribute to the design process of the project.

I expect to be the jack of all trades and provide help when it is needed. While I don’t specialise in anything, I can help with solving problems the group encounters. Otherwise, I will probably be mainly focusing on whatever my delegated task is.

### 4. Darien Nguyen (s3842726) - [s3842726@student.rmit.edu.au](mailto:s3842726@student.rmit.edu.au)

I was born in Australia however my background is Vietnamese. I am currently 18 and studying my first year of Bachelor of Information Technology. I got into IT because I am always playing games and on my computer so I wanted to do a profession that required me to use a computer to complete the tasks and also the fact that with IT you are able to do so many things just by using codes which I find interesting. IT also has a bright future as technology is advancing at a fast rate and so there would be a need for more individuals who can code, and I would like to help with the advancement of technology/

I am good at socialising and communicating with individuals as well as groups which I am able to make friends and make people feel more comfortable very easily. I am also able to understand people's feelings and thoughts once I get to know them. My concentration is another good thing as once I’ve started on the work, I would be focused on completing the work without getting distracted at all and coming up with solutions is another thing I’m good at as I am creative to an extent and very logical. I am interested in Cyber Security as the future would be relying on technology very heavily and I would like to feel secure with the technology I use so Cyber Security would be able to assist me in creating a program that would allow users to feel safe from any cyber-attacks.

Coding is very fun however this is one of my weaker points, but I strive to improve everyday as it is interesting and very enjoyable when I am able to write a code and find out it works. Another weak point is that I don’t have the motivation to start doing the work as I am generally a lazy person however once I do then all my focus would be on the task.

I would be assisting other group members with their work if it’s too much and they ask for help or come up with solutions to problems that occur during the project.

### 5. Guanhong Chen (s3777912) - [s3777912@student.rmit.edu.au](mailto:s3777912@student.rmit.edu.au)

Hello, I'm Chen Guanhong. I am 100% Chinese. After graduating from college, I worked for a while and found that I wanted to continue studying. After much consideration, I decided to come to Australia and learn IT-related knowledge. In the near future, I hope to become a cybersecurity Engineer, because I admire the profession of hacking very much, but after all it is illegal. By the way I like the Australian air and environment, although my nose suffers from pollen every day.

I wanted to be a hacker when I was a kid because it was cool, and I still think it's cool. But I had never been exposed to any knowledge related to IT before I entered the school. Now when I came into contact with IT, I thought it was too difficult to be a hacker. Maybe that kind of computer genius only appears in movies. However, I didn't want to give up. When I came to RMIT, I made my goal clearer. I wanted to develop towards network security. If I can't hack into someone else's system anytime, anywhere, I create a system that can't be hacked.

I am not good at coding, and I still need to improve my English, sometimes I have some difficulties in communicating with people. Although my weakness is very fatal, I will try my best to improve it.

If you compare the group to a machine, I want to be a screw, and I will try my best to help others when they need my help. I have a good talent for data research and analysis. I have undertaken most of the research work in the previous group work. I am willing to work for my team as part of the team.

### 6. Jann Christian Makiling (s3541234) - [s3541234@student.rmit.edu.au](mailto:s3541234@student.rmit.edu.au)

I was born in the Philippines and moved to New Zealand when I was 4. I eventually moved over to Australia at the age of 10 however I still hold a New Zealand passport. Whilst I am not in my first year of study like my fellow group mates, I have been studying part time whilst balancing work. I have bounced from course to course however my long interest in IT has brought me here. My passion in IT like many others stems from the wonder of its ever-evolving nature and the improved quality of life that we all get to experience as a result of these advancements.

I believe in my soft skills that I have developed in my working career that allow me to communicate and collaborate regardless of background or expertise. My greatest interest lies in Cyber Security as I believe it is of utmost importance in this day and age. As I currently work in a bank, I have encountered individuals who have fallen victim to cyber-attacks and scams, which has only further emphasized security’s importance and grown my interest.

I believe my lack of creativity is my weakest point leading to me lacking confidence and often lacking in contribution in the ideation phases. My overall workload including work and study may also leave me overwhelmed at some point, but I am confident in my ability to find a balance and manage both effectively and see the project through to completion.

With no specific technical expertise, I expect to complete tasks where assigned. However with the group all seeming to lack confidence in our coding skills, I hope to take on a partial role as a programmer so that I may learn and improve my skills.

**Group Contract**

1. Every group member is required to attend all group meetings on MS Teams on Thursday, 1430 – 1630 with their video and audio on.

2. Every group meeting on MS Teams will be recorded.

3. Every group member is required to engage in the meeting and give feedback whenever necessary.

4. Every group member is required to be on time for the meeting.

5. Every group member is required to reply promptly on each enquiry addressed by other team members.

6. Every group member is required to meet all deadlines set by the group leader and / or team members.

**Tasks**

|  |  |
| --- | --- |
| Team member | Task |
| Ting Xian Sean Wong | 1. Features  2. Extended features  3. Github  4. Trello Board |
| Jann Christian Makiling | 1. Validation testing  2. User stories |
| Anasta Poeloengan | 1. Project description  2. Motivation  3. Github |
| Darien Nguyen | 1. Resources |
| Benjamin Phan | 1. Justification  2. Risk  3. Trello Board |
| Guanhong Chen | 1. Justification  2. Risk  3. Trello Board |

**Agreement to contract**

I, **Ting Xian Sean Wong** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

I, **Jann Christian Makiling** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

I, **Anasta Poeloengan** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

I, **Darien Nguyen** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

I, **Benjamin Phan** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

I, **Guanhong Chen** agreed to all the terms and conditions applied in completing the project FlippingRooms, 2020. I will do the best of my ability to ensure this project goes on smoothly and to completion.

## **Project Description**

Our idea, FlippingRooms, is an Augmented Reality mobile app for interior design for both professionals and general people. FlippingRooms, is an app that allows users to organise their rooms using Augmented Reality on their smartphones and tablets to redecorate, remove and redesign their rooms. This will allow users to move furniture and decorations without having to physically move everything in the room. This will be done by taking a photo of the room from various angles and making it into a 2D diagram which can be interacted with. Users will have the ability to move the furniture around or even remove them to design the room to how they see fit. This will make interior designing tools much simpler and accessible for the general population while also being an effective tool for professionals.

## **Project Motivation**

Coming up with an idea which would challenge us was something our group as a whole agreed on. This would give us a greater understanding on how to build IT systems from scratch and the processes behind it as well. Before beginning the project, we discussed our strengths and weaknesses and what we would be bringing to the table. While most of us excel on creating the concept for the app, many of us share the same weakness of being inexperienced with programming. As a group, we decided on the idea of FlippingRooms as it would give us the opportunity to develop new skills and knowledge such as creating an AR environment, programming and UX design. In addition to that, we are able to build our repertoire in app development in which we can put to good use in our future endeavours.

FlippingRooms is an application designed to help the user with the processes of remodelling and redecorating a specific room without the hassle of moving the furniture around physically. FlippingRooms uses AR to help design the room and AR is an aspect that every team member is interested in. This would allow each member to brush up on their skills in 3D modelling and designing an app that is user friendly. These skills that would be incorporated into every member can be taken into the workforce and allows each member a taste of how the real world looks like. Moreover, this gives everyone an equal opportunity to deep their toes into the water and allows us to know if this is in the industry in IT that we want to further our skills in.

Furthermore, each team member set a target for themselves and wanted to create something that was useful and helpful. We wanted to create an app that would help others achieve their ideal look for their homes. We wanted to create an app that would simplify a task that is deemed complicated for others and make their lives easier. Interior designing can be hard to grasp for some and with FlippingRooms, the task of designing can be portrayed simpler in an accurate and in a timely manner. FlippingRooms allows the user to make quick changes to a room with simple functions and the user is able to know what the room would potentially look like immediately. This app idea has the potential because of the broad user group and would potentially help many immensely as it allows the user to visualise the design of the room with AR. The user groups we are trying to focus on would be Interior Designers and individuals who own their own home or who just purchased a home.

## **Minimum Viable Features (MVF)**

### 1. Camera feature

FlippingRooms allows the user to immerse themselves in an augmented reality (AR) when it comes to remodelling and redesigning their own rooms. With the camera feature installed in the application, the user is able to take a photo of the size of the room that they are planning to redecorate. In addition to that, if the camera is unable to capture every angle of the room, the user has the alternative to resize the room manually. The user has the choice to set the room to scale for easier manoeuvring when it comes to picking the right couch or right bedside table.

After decorating the room to the preferred choice of the user, the user is able to view the room from different perspectives. When the user is using the camera feature in FlippingRooms, the user can view the room from the side and top angle to ensure that this is the ideal final look for the specific room being remodelled. The user is allowed to look at a before and after layout as well.

**Validation Test**

* Test for the ability to utilize the camera on different devices
* Validate if room measurements are accurate
* Test manual specification of room size
* Take picture of various room sizes to test automatic scaling functionality
* Confirm if room can be viewed at the alternative top and side viewing angles
* If device does not have a functioning camera/permission is not granted to use the camera, ensure error message is displayed

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I want to be able to take a picture of any room of my choice so I may plan accordingly for remodelling | 1. Open the FlippingRooms app and turning on the camera function  2. Snap a photo of the assigned room from different angles that is being remodelled  3. Validate the measurements of the room. If incorrect, manually insert the measurements  4. Validate the room can be viewed from the top or side angle  5. Start decorating |

**2. Catalogue**

Redecorating a room may be a daunting experience for some people. Some people might find it hard to visualise how a room is going to look like when they purchase a new television set or a new L-shape couch. Furniture in general is also not cheap. FlippingRooms does not want the user to make a decision to purchase something that will create a hole in their wallets and potentially regretting it later on in the future. Well, FlippingRooms can be a solution to all of those problems.

FlippingRooms provides a catalogue of pre-installed furniture in the application. Users are allowed to experiment with different kinds of furniture to enhance the new look of their room and to make sure they are liking the final design before making any final decisions.

**Validation Test**

* Open catalogue with no items added in
* Test adding an item to the catalogue
* Test the ability to move and place an item from the catalogue within a room
* Browse through different items in the catalogue

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I want to be able to view various furniture options so that I can really find what suits my room | 1. Open the FlippingRooms app and access the catalogue tab  2. Browse the list of furniture in the catalogue  3. Drag and drop selected furniture onto the layout of the room  4. Move and remodel the selected furniture |

**3. Building tools**

Not only does FlippingRooms offer the different types of furniture in our catalogue, we offer the users a chance to renovate their homes as well. With the in build building tools provided by FlippingRooms, the user is able to view the entire room from a whole different look.

FlippingRooms provide the users the ability to do these things listed below:

1. User can add multiple partitions in the room for renovation purposes
2. User can add different types of floorings (wooden, tiles, carpet)
3. User can add different types of lighting
4. User can add different paint colours and wallpapers to their liking

**Validation Test**

* Test adding partitions into a room
* Test removing partitions
* Test replacing floor with different floor types
* Test various lighting options
* Change wall into solid block of colour
* Change wall to available wallpaper in catalogue

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I want to be able to make large changes in the room such as the walls, floor, lighting and partitions so I can truly perfect the aesthetic of my room without having to physically commit to the changes | 1. Open the FlippingRooms app and access the building tools tab  2. Browse the list of features in the building tools list  3. Drag and drop selected feature onto the layout of the room  4. Edit the dimensions of partitions in the room  5. Pick different types of flooring  6. Pick different types of lighting  7. Pick different paints and wallpaper for the walls  8. Add / remove building tools |

**4.** **Account creation**

Users are given the option to sign up with an account that allows them to save their designed layouts. With an account with FlippingRooms, users will be updated with the latest advancements our app has to offer. With secure login criteria, users will be able to decide whether to have their designs available publicly or have them private and be shared with those the user has chosen.

This feature is great for people who are interested in showcasing their work to potential clients. For example, an Interior Designer is able to wipe out their work at any given moment and redecorate the ideal room for the client in real time.

**Validation Test**

* Test account creation interface
* Test sign up form
* Test for logins to be saved
* Test logging in with correct details and ensure layouts have been saved correctly to the account
* Test logging in with incorrect username and correct password and ensure error message displays
* Test logging in with correct username and incorrect password and ensure error message displays

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I want to be able be able to make my own account so I can log in and easily access my saved work from any device | 1. Open the FlippingRooms app and sign up for an account  2. Login into their personal account  3. Save work done on FlippingRooms  4. Access saved work  5. Pick up from where user last logged in |

### 5. To-buy list

FlippingRooms also provides the user an option to create a to-buy list. When the user is satisfied with the layout of the new room, the user is allowed to add their desired furniture in a checklist to ensure nothing is missed out. Users are able to add notes and comments like dimensions to ensure the right product is bought when they are out to shop and make their ideal room a reality.

**Validation Test**

* Attempt to open empty buy list and ensure empty card message is displayed
* Add furniture from catalogue into buy list
* Remove item from buy list
* Ensure dimensions are viewable within buylist

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I want to be able to add items I like to an organized buy-list that includes specifications, so that the daunting process of shopping becomes easier | 1. Open the FlippingRooms app and access the to-buy list tab  2. Add items into cart  3. Remove items from cart  4. Add dimensions to the items added into cart  5. View quantities and items in cart |

**Extended Viable Features (EVF)**

### If the user is happy with our app, the user is able to purchase our application and create a premium account on FlippingRooms. With a purchase of $10.99, the user is exposed to a range of extended features provided by FlippingRooms. One of the many features provided by FlippingRooms is having the option to remove advertisements within the application.

### 1.  Templates

### For users that are having a hard time being inspired, FlippingRooms has provided users with simple templates for them to redecorate and remodel their dream home. Users are able to choose designs based on a specific colour chart to a style that the users wants to experiment with. With designs from minimalistic or retro, FlippingRooms has it all.

Users are also given the opportunity to unleash their inner creativity and just have fun with redecorating an AR version of their dream home and leave it in the application for browsing purposes.

**Validation Test**

* Test list of templates added
* Test functionality of templates
* Test inclusion of multiple templates
* Test colour charting
* Test ability to save and / or restart templates

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I would like to have various templates to choose from so I can find inspiration when I am lacking | 1. Open the FlippingRooms app and access the templates tab  2. Browse the list of templates provided on FlippingRooms  3. Select template  4. Restart template  5. Save template |

### 2. Professional Consultation

Besides being able to remove ads, users will be connected to various professional consultations that have partnered up with FlippingRooms. Users will be connected to top of the art consultants to ensure the perfect set up for their homes. Users get to choose from a plethora of Interior Designers, Architects and Engineers with their full profile to ensure they pick the perfect person to work with.

Users are able to give customer feedback as well if they are happy with the service. Moreover, a user is able to favourite a specific consultant for easier search in the future.

**Validation Test**

* Test professional consultants tab
* Ensure consultant profiles are functioning and display important information i.e contact details, company affiliation, etc
* Test ability to select consultants
* Test favourite button on consultant

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, I would like to be able to easily contact professionals who can implement my choices so that I do not have to go out of my way to find separate services | 1. Open the FlippingRooms app and access the professional consultant tab  2. Browse the list of consultants provided on FlippingRooms  3. Select type of consultant (interior designer, architects, engineers)  4. Select consultant for details  5. View full details on consultant selected  6. Favourite consultant for easy search in the future  7. Contact consultant |

### 3. Geotagging locations

Besides being connected to various professionals in the industry, users are given the choice to enable their geolocation services. Users who enable this function will be able to connect themselves with furniture stores around the vicinity and compare prices based on their own personal budgets.

To ensure their privacy is being taken care of, this information is strictly confidential and between the user and FlippingRooms. Once the user is satisfied with their findings, the user is able to turn off their locations at any point of time.

**Validation Test**

* Ensure error message is displayed correctly when geotagging function is turned on whilst location services on the device is off
* Test turning on geotagging location functionality
* Test turning off geotagging location functionality
* Test function of selecting store
* Test functionality of comparing prices
* Test functionality of details of store
* Test favourite button on store
* Test for item cannot be found nearby error

**User Stories**

|  |  |
| --- | --- |
| **User Story** | **Acceptance Criteria** |
| As a user, after adding items to my buy-list, I would like a way to find and purchase the furniture nearby in an accessible location so I can physically complete the remodelling of my room | 1. Open the FlippingRooms app and allow access to geotagging  2. Access the map function to locate stores around user  3. Select store  4. Compare prices  5. Details of store viewed  6. Favourite store for easy search in the future  7. Contact store  8. Save store |

**Project Justification**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Day / Week** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| **Week 3** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours  **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 4** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 5** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 6** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 7** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 8** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |
| **Week 9** | **Anasta**  2 hours  **Ben**  3 hours  **Darien**  2 hours  **Guan**  2 hours | **Anasta**  1 hour  **Darien**  1 hour | **Christian**  2 hours | **Sean**  1.5 hours **Christian**  2 hours | **Anasta**  1 hour  **Sean**  1 hour | **Anasta**  1 hour  **Ben**  2 hours  **Darien**  1 hour  **Guan**  3 hours  **Sean**  1 hour | **Sean**  1 hour  **Christian**  1 hour |

**Beyond Current Capabilities**

|  |  |  |
| --- | --- | --- |
| **Name** | **Strengths** | **Areas to develop** |
| **Ting Xian Sean Wong** | 1. User centred design  2. Organised  3. Good time management  4. Leadership skills  5. Design and photoshop | 1. Programming |
| **Anasta Poeleongan** | 1. User centred design  2. Python  3. Design and photoshop | 1. Programming  2. Database organisation skills |
| **Benjamin Phan** | 1. Python  2. Database organisation skills  3. User centred design | 1. Programming |
| **Darien Nguyen** | 1. Java  2. Python  3. Web design / HTML, CSS  4. User centred design | 1. Programming |
| **Guanhong Chen** | 1. HTML, CSS  2. Java | 1. Programming |
| **Jann Christian Makiling** | 1. Java  2. HTML, CSS, PHP, JavaScript  3. Database organisation skills | 1. Programming |

## **Project Risks**

**1. Risk: Project features and purpose are not well-defined**

**Example:** Features might not be as accessible to one client as it is to another. For example, cataloguing is a feature that might give the most trouble due to needing to accommodate for a wide range of customers. Furthermore, we might stray from the original purpose of being a furniture decoration app due to not defining our targeted audience or wanting to please everyone.

**Mitigation:** We can mitigate this by having a work plan that labels the core needs and purpose of the app. By doing this, we would look to this work plan before deciding to add any features or if we are uncertain about changing something. Furthermore, all work would be looked through before proceeding to the next development phase.

**2. Risk: Project design and deliverable definition is incomplete**

**Example:** Members or the whole group are not able to complete the project or reach a milestone due to problems like time constraints or lack of skills therefore rendering the project incomplete as it would be missing planned features. This could also refer to a part of the project not adhering to the core principles of said project, which would make it incomplete.

**Mitigation:** To prevent this, we can set up a schedule and proper workload for each member in accordance to their expertise. Furthermore, if any of the members need help or can’t complete their part, they are welcome to ask the team for assistance in a collaborative chat available to everyone in the group.

**3. Risk: Project schedule is not clearly defined or understood**

**Example:** The assigned workload or time conflicts with members’ availability and may result in confusion. Another example would be if a deadline isn’t made clear and not everyone would be ready to present their work.

**Mitigation:** This can be prevented by having a meeting before starting the project, with all members working out a schedule that fits everyone’s schedule. After that, the schedule is accessible by all members and if there are conflicts, it can be revised in another meeting or informing every one of the changes.

## **Team-Dynamics Risk**

**1. Risk: No control over members’ priorities**

**Example:** Members might not be aware that their part of the project takes priority over others or is needed by another member. This could mean that no one has control over members’ work and therefore might cause frustration or arguments since it could mean the work would be submitted late.

**Mitigation:** To prevent this, weekly meetings would make sure to check on everyone’s work and repeatedly inform members that have high priority work. Furthermore, everyone should be reminded of the deadline and what needs to be done before it.

**2. Risk: Unplanned work that must be accommodated**

**Example:** Missing features or functionality due to any type of error, therefore adding to everyone’s work time due to the need to accommodate the changes. This can cause stress or frustration as everyone would need to make up for someone’s mess.

**Mitigation:** Can be easily mitigated through the same methods above. Weekly meetings can be used to monitor members’ progress and sort out any errors brought up. Furthermore, each version of the app should be tested and verified by everyone in the group to make sure no errors are missed.

**3. Risk: Lack of communication, causing lack of clarity and confusion**

**Example:** Everyone can be working on their own parts without communicating with other members to check if their part is correct or not. This could result in a mess as each members’ work might not combine into a cohesive and functional app which means everyone would have to rework their part at the last minute. Furthermore, lack of communication could result in lower morale as everyone might feel like they are the only one doing work.

**Mitigation:** Again, easily mitigated through weekly meetings. Furthermore, a chat would also be available for everyone to join in and ask questions at any time. The meetings would ensure that everyone’s work fit the criteria and allow for a smooth development of the app.

**1. Resources & Tools**

Figma1

* Figma helps individuals or teams to create, design and test out their interface for an upcoming program or app.
* Using Figma would help the group to come up with designs for our project as well as seeing how it looks when combining different designs together to get a better idea of how the product would look like.
* The version of Figma is constantly being updated as it is a website-based program which means that you won’t need to download Figma however if you would like to download it you would be able to. The cost for this program however individuals are able to pay if they would like to upgrade.

**2. Collaborative Workspaces**

a) Microsoft Teams2

This will be used for communicating with one another as well as setting up calls and meetings with each other regularly so the group would be able to plan the assignment accordingly

* This is accessible through the Microsoft Teams program which is logged in using RMIT credentials and going to ‘Teams’ then clicking TR-WE-230-Leftovers as well as going to ‘Chat’ and clicking TR-WE-230-Leftovers.

b) Google Drive3

* This is used for storing the group’s work as different members of the group are able to access the document which they will be allowed to upload their parts to the document or directly write into the document so other group members would be able to see as well.
* This is accessible by any group members on Google Drive4.

c) Trello5

* This is used for organising projects into boards which allows members of the group to see what is being worked on, by whom and what is currently in the process.
* This is accessible through logging in with RMIT Credentials or using this link6to access the group’s board.

d) AWS ()

* The group will be using AWS to host our website which will display information about the project and each group member.
* This is accessible through

**3. Communication Expectations**

Group members are expected to check their emails and constantly be checking Microsoft Teams to ensure they know what is going on with the group project. They will also need to check Trello to update the board cards to allow other group members to know where they are up to. If any group member is stuck or needs clarification on the work given to them, they will need to ask for assistance from other group members as soon as possible and not leave it to the last minute. Group meetings will be held regularly and are expected for all members to attend unless they have an event on or a problem has occurred which they wouldn’t be able to attend. Group meetings would usually be assigned to dates where every group member is free and able to attend. Outside of group meetings, members are expected to use Microsoft Teams chat function to message each other about group work.

**4. Decision-making Processes**

For decision-making and the resolution of disputes, we have collectively agreed to discuss with everyone where possible. We have scheduled weekly meetings during which all members may voice their opinions and concerns, and after discussing and voting, a decision can be made. As mentioned within our communication expectations, if anything comes up throughout the week, each member should be available at some point of the day on Microsoft Teams so that any pressing concerns may be swiftly addressed.

**Project Timetable**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **Planned Start** | **Planned Due** | **Lead by** |
| **Week 3** | | | |
| Came up with the idea of FlippingRooms | 30.07.2020 | 30.07.2020 | Sean |
| Drafted out protocols and proposal | 30.07.2020 | 06.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| Features | 03.08.2020 | 05.08.2020 | Sean |
| Validation Testing | 03.08.2020 | 05.08.2020 | Christian |
| User Stories | 03.08.2020 | 05.08.2020 | Sean  Christian |
| Motivation | 03.08.2020 | 05.08.2020 | Anasta |
| Justification and Risk | 03.08.2020 | 05.08.2020 | Benjamin  Guanhong |
| Resources | 03.08.2020 | 05.08.2020 | Darien |
| Meeting on MS Teams to wrap up proposal | 06.08.2020 | 06.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 4** | | | |
| Moving documents onto the website | 10.08.2020 | 12.08.2020 | Sean  Anasta |
| Prepare Github and AWS | 10.08.2020 | 12.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| Meeting on MS Teams to wrap up website | 13.08.2020 | 13.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| Submit website | 14.08.2020 | 14.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 5** | | | |
| Feature development:  Camera | 17.08.2020 | 21.08.2020 | Anasta  Sean |
| Feature development:  Catalogue | 17.08.2020 | 21.08.2020 | Christian  Darien |
| Validation testing | 17.08.2020 | 21.08.2020 | Benjamin  Guanhong |
| Meeting on MS Teams to check on progress | 20.08.2020 | 20.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 6** | | | |
| Feature development:  Building tools | 24.08.2020 | 28.08.2020 | Anasta  Christian |
| Feature development:  Account creation | 24.08.2020 | 28.08.2020 | Darien  Guanhong |
| Validation testing | 24.08.2020 | 28.08.2020 | Benjamin  Sean |
| Created mock-up and design | 29.08.2020 | 30.08.2020 | Anasta  Benjamin  Sean |
| Meeting on MS Teams to check on progress | 27.08.2020 | 27.08.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 7** | | | |
| Feature development:  To buy list | 31.08.2020 | 04.09.2020 | Guanhong  Sean |
| Validation Testing | 31.08.2020 | 04.09.2020 | Anasta  Benjamin |
| Check for bugs and updates on FlippingRooms | 02.09.2020 | 04.09.2020 | Christian  Darien |
| Fix bugs | 02.09.2020 | 04.09.2020 | Christian  Darien |
| Meeting on MS Teams to check on progress | 03.09.2020 | 03.09.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 8** | | | |
| Extended feature development:  Templates | 07.09.2020 | 11.09.2020 | Darien  Guanhong |
| Extended feature development:  Professional consultants | 07.09.2020 | 11.09.2020 | Anasta  Benjamin |
| Scout for interior designers, engineers, architects | 07.09.2020 | 11.09.2020 | Sean |
| Validation Testing | 09.09.2020 | 11.09.2020 | Christian |
| Meeting on MS Teams to check on progress | 10.09.2020 | 10.09.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |
| **Week 9** | | | |
| Extended feature development:  Geotagging locations | 14.09.2020 | 18.09.2020 | Anasta  Darien  Sean  Guanhong |
| Validation Testing | 16.09.2020 | 18.09.2020 | Benjamin |
| Check for bugs and updates on FlippingRooms | 16.09.2020 | 18.09.2020 | Christian |
| Fix bugs | 16.09.2020 | 18.09.2020 | Benjamin  Christian |
| Meeting on MS Teams to check on progress | 17.09.2020 | 17.09.2020 | Sean  Anasta  Benjamin  Christian  Darien  Guanhong |

**Links**

1. https://www.figma.com/

2. https://www.microsoft.com/en-au/microsoft-365/microsoft-teams/group-chat-software

3. https://drive.google.com/drive/u/1/my-drive

4. https://docs.google.com/document/d/1Iwl-3mBpo-S9NLnOy863gF24GQ9-15VsRWA76b13tu8/edit

5. https://trello.com/

6. https://trello.com/trwe230leftovers

7. http://leftoverswebsite.s3-website-us-east-1.amazonaws.com/ProjectDescription.html