

IFB399 Final Report

Team Omnipotent

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1. Introduction

1.1 Domain

Augmented reality holds the promise of creating direct, automatic, and actionable links between the physical world and electronic information. It provides a simple and immediate user interface to an electronically enhanced physical world (Schmalstieg, D., & Höllerer, T, 2016). The rapid development of computer science leads to innovation in the application of computer-generated images such as VR and AR. Virtual reality simulated the digital world based on virtual images while Augmented Reality focuses on bridging the gap between the virtual world and the real world. It provides a platform where users can interact with electronic information and the physical world in real-time, directly, and immediately. With AR, a world mixed with digital information and physical elements is presented to the user. The history of AR lasts for almost 50 years, countless applications based on AR technology were created and developed throughout this period. AR technology was first practiced in the industry when the need for combining 3D models created by software such as CAD with the real-world environment becomes necessary. In addition, with the ability to present digital instruction on physical equipment on the same screen which help user quickly understand and learn how things work, AR was widely used in maintenance and training. Consequently, the interactions between humanity and the AR technology is worth deep explore to discover the impact of mixed reality on the society, leading to the research of Augmented Sociality.

1.2 Client and Goal

As a funded research project aims to develop new social use for AR, the School of Computer Science seeks to create new prototypes and raise awareness of new ways to use AR. Our client is Joel Harman, he is a researcher at Science and Engineering Faculty and School of Computer Science in QUT. Our industry partner is QUT School of Computer Science. Our team's goal is to develop a website that can host information related to AR and provide an online platform where prototypes can be demonstrated and explore the influence of AR on the social skill and beliefs of users, supporting the School of Computer Science to achieve their goal.

1.3 Technical Context

To provide a clear plan for designing the website, we first and created the structure of website (Fig 1.3-1). The language and platform that we used in this project is JavaScript (JS) and PHP. JavaScript is a client scripting language which is used for creating web pages. It is a standalone language developed in Netscape. It is used when a webpage is to be made dynamic and add effects on pages.

Nowadays, JavaScript is not restricted to client side only. It also being adopted to be used cross platform from simple scripts in the browser to rich web, mobile and desktop applications. It evolved a lot and now it is widely used on the back-end side also. For time being JavaScript is the most universal, demanding and widely used programming language for web development. PHP is a sever scripting language which is responsible of executing code on a sever and act as a backbone of application. PHP is responsible for the actions behind the scenes such as APIs, database when interact with a web application. In our project, we bought a domain address, and we use FileZilla to update the changes of our website.

Focused codes in our project

```

132 </div>
133 <div class="content" data-num="8">
134   <p></p>
135   <p class="cate">CONTACT LENS</p>
136   <p class="subject">DISPLAY OF THE FUTURE MIGHT BE IN YOUR CONTACT LENS</p>
137   <p class="name">This startup wants to put a tiny display on a contact lens.</p>
138   <p class="name">READ MORE "CLICK"</p>
139 </div>
140 </div>
141
142 <div class="box">
143   <div class="content" data-num="9">
144     <p></p>
145     <p class="name">EASTER BUNNY</p>
146     <p class="subject">Google's AR Easter Bunny Can Still Visit This Holiday Weekend, Even If You're Stuck Inside</p>
147     <p class="name">READ MORE "CLICK"</p>
148   </div>
149   <div class="content" data-num="10">
150     <p></p>
151     <p class="name">VIRTUAL WORK</p>
152     <p class="subject">Virtual Work Platform Spatial Now Available Free On All VR & AR Devices</p>
153     <p class="name">READ MORE "CLICK"</p>
154   </div>
155 </div>
156 </div>
157 </div>
158
159 <div class="pop-content" id="pop1">
160   <div class="contents">
161     <div class="close"><i class="far fa-times-circle"></i></div>
162     <div class="text">
163       <p class="date">Mar 26, 2020</p>
164       <p class="subject">How to See the World's Reflection From a Bag of Chips</p>
165       <div class="content">
166         <p>YOU see objects outside of your line of sight, whether it's a car passing you on the highway or an unfor
167         processing, shiny and old shiny object can serve as a decent mirror. In new research, computer scientists at the University of Washi
168         bag of snacks to create a relatively faithful reconstruction of its surroundings.<br><br>
169         "Remarkably, images of the shiny bag of chips contain sufficient clues to be able to reconstruct a detailed image of
170         outside that are visible through windows," coauthor Jeong Joon Park, Aleksander Holynski, and Steve Seitz of the University of Washi
171         on Computer Vision and Pattern Recognition proceedings. Their research helps to resolve a technical hurdle for virtual and augmented
172         uses-and-abuses-is much larger.<br><br>
173         Technically speaking, the researchers didn't actually use chips; they reconstructed a room using a Korean brand of ct
174         potato chips, the snack bag acts like a bad, warped mirror. A heavily-distorted reflection of the room is contained in the glint of 1
175         unwarps that glint into a blurry but recognizable image.
176       </div>
177     </div>
178   </div>
179 </div>

```

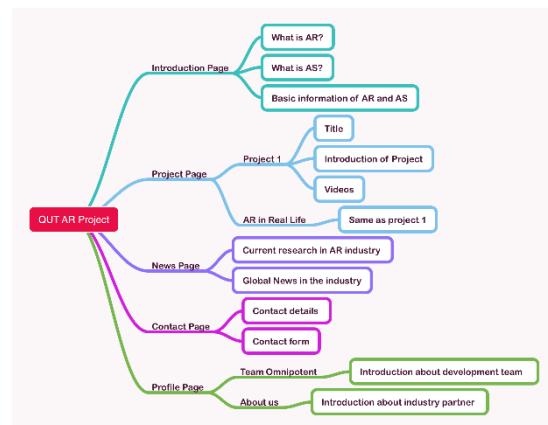


Fig 1.3-1

```

60 <div id="snb" class="om">
61   <div class="btn">
62     <p class="hide"><i class="fas fa-chevron-left"></i></p>
63     <p class="show"><i class="fas fa-chevron-right"></i></p>
64   </div>
65   <div class="contents">
66     <p class="title">Omnipotent</p>
67     <p class="summary">NAVIGATION</p>
68     <ul>
69       <li nav="1">Augmented reality value</li>
70       <li nav="2">Example of Use</li>
71       <li nav="3">The Impact of Augmented Reality-Industry</li>
72       <li nav="4">A Case of Augmented Reality</li>
73     </ul>
74   </div>
75 </div>
76
77 <div class="pop-content" id="pop1">
78   <div class="contents">
79     <div class="close"><i class="far fa-times-circle"></i></div>
80     <div class="text">
81       <p class="date">Mar 26, 2020</p>
82       <p class="subject">How to See the World's Reflection From a Bag of Chips</p>
83     </div>
84   </div>
85 </div>

```

EASTER BUNNY
Google's AR Easter Bunny Can Still Visit This Holiday Weekend, Even If You're Stuck Inside
[READ MORE "CLICK"](#)

VIRTUAL WORK
Virtual Work Platform Spatial Now Available Free On All VR & AR Devices
[READ MORE "CLICK"](#)

Omnipotent

NAVIGATION

- Augmented reality value
- Example of Use
- The Impact of Augmented Reality-Industry
- A Case of Augmented Reality

In this case, we create a pop-up contents that will pop up the message for user by clicking it. In addition, we also create a navigation bar which the code is in the right side. The navigation bar will link to the content by clicking it.

2. Project Outcome

The project we delivered to our client is a website about the QUT AR project, which includes 7 different pages: Introduction, AR in Real Life, AR News, Contact, Team Omnipotent, About Us, and QUT project AR. First of all, the Introduction page which host basic information about Augmented Reality and Augmented Sociality is created for user to understand the basic definition of Augmented Reality and difference between AR and AS. The AR in Real Life page aims at delivering the outcome of QUT AR project team to the customer in a concise and professional way, images and videos were also included in this page to demonstrate the project. The news about the Augment Reality in today's world can be found on the AR News page with every news article is presented in blocks. Users can submit their feedback or further request of the project in contact page where a feedback form and contact information of the project owner is provided. The Team Omnipotent page contains information about the website development team while About Us page includes the profile information about the AR project team with a link to their QUT profile page. The final page: QUT project AR is a template project page provided for the owner to easily create a project page for other projects. In summary, the final outcome of our capstone project is a website that provides an easy way for the potential audience or user to understand, interact, and explore the world of Augmented Reality, supporting the owner of the project to discover the social influence of AR and facilitate the research of Augmented Sociality.

3. Project Progress and Risk

In phase 2 of the project, the major focus of our team is to improve the website in terms of visual elements and user interactions since basic developments of the website like fundamental elements of pages and the general layout of the web are implemented in phase 1 process (refer to Appendix 1).

To receive valuable feedback from the perspective of users, our team designed two website satisfaction surveys and a wide range of respondents was included such as QUT staff, university students, general users to increase the comprehensiveness and representativeness of the result of the surveys (refer to Appendix 2). The website surveys include two versions as some problems were encountered in the first survey. Therefore, our team summarized the first data and create a more specific and suitable form.

After analyzing and comparing two website surveys, our team sorted out the disadvantages and problems which should be improved in the next step and discussed these with the client. Finally, our team decided to delete the landing page and create two new pages about the introduction of the team and industry partners. Image problems like whether the background images of pages are related to the Augmented Reality were also be considered during the phase 2 development process. In this way, release plan, artefact agreement and other things related to the potential changes of the project were also be updated during the process.

In the phase 2 process, given the impact of COVID-19, our team continued to have an online ZOOM meeting with the client once a week. We also report and update the progress of the project or ask some detailed questions about the website with client through email (refer to Appendix 3 & 4). To have a better communication with the client in the online meeting and avoid misunderstanding since our team consists of international students, our team will have a team meeting before the client meeting to discuss the content we are going to demonstrate, share work process done by different team members, and prepare slides that include division of work and meeting schedule, which help us prepare well for the meeting and participate in the meeting in a professional and effective way despite the communication problems like the low quality of voice in the online ZOOM meeting. Furthermore, we received the progress report from client every two weeks which includes whether our team meets the expectation and some comments about the progress, which support us to access the teamwork we have done and improvements that should be made.

As the Covid-19 epidemic continue to have a deep impact on daily life in Australia, our team decided to adopt the same development method as last semester to keep safe and reduce the potential risk. In this way, we are confident to deliver higher quality teamwork than last semester to our client because we are already familiar with these online development and communication ways and have a good understanding of what the challenges are and what improvements can be made through the previous teamwork experience. Our team communicated with each other regularly in the WeChat and each team member would upload their work on the Trello before the team meetings (refer to Appendix 6). Though our team consists of international students and many misunderstandings exist during communication online, our team always faces conflicts positively. Finally, after all the implementations were complete, we deployed a functionality and to the website (refer to Appendix 9).

4. Project Experience

4.1 Website Survey

To better improve the website functions and meet the expectation of users and the client, at week 2 client meeting, the client suggested us to conduct a web satisfaction surveys to identify the advantages and disadvantages of the website. However, in the process of promoting the survey, some unexpected problems were raised. In the first survey, most of the questions are related to general satisfaction of the website and the answers are too simple to analyze the usability of each page. Moreover, the scope of participants in the first survey is small and limited to students and friends, which reduced the accuracy of the results, like the introduction page had a very high vote in two opposite questions: which page is your best favorite and which page is your least favorite.

Therefore, after a team internal discussion, all team member agree that it is necessary for our team to redesign and improve the survey to achieve a better outcome. Furthermore, dialectical analysis is also been considered and used in this step to extract useful information that can be used to compare with the second survey. Our team researched sufficient similar website survey and identified the similarities and merit among these surveys to generate ideas of improvements. In this way, at the second version of the survey, more specific questions were added to the form and more participants include university staffs and researchers were invited to participate in this survey, which support the team to receive valuable feedbacks from the survey.

Consequently, our team summarized the result, listed the issues like the confused layout regard to text and picture and collect useful advice proposed by participants after analyzing and comparing information from two surveys (refer to Fig 4.1-1). After discussing the result with the client and confirming the details of improvements, our team firstly decided to create two different profile pages: one includes the introduction of the actual website development team, another one contains the contact information of the AR project team and industry partner. Secondly, images include banners, and pictures on each page were changed to other suitable images related to AR. Finally, the navigating bar was improved to better meet users' demand.

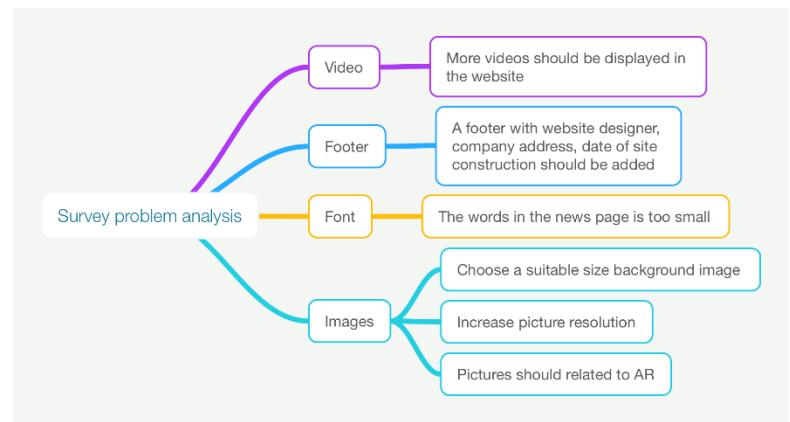


Fig 4.1-1

Through this process, our team gained valuable experience on how to improve a software project based on user experience survey, which is beneficial to our future career. Moreover, we had a better understand on how to practice team management and project management related skills.

4.2 Team Communication

As a team consists of international student with different culture background, misunderstandings easily happen especially when we need to communicate with English in the online chat room because of the impact of COVID-19 pandemic. Although we faced similar challenge in last semester and had experience on how to deal with it, the communication problem still exists and once upgraded into a conflict inside the team. In week 8, the CS team implemented a large number of updates to the website and informed other team members about the update. However, the IS team found the website was presented in a strange way like just

only half of the work had been done when they checked the website. In this way, the IS team asked the CS team about why the display of website is so strange, and because of the difference in the way of how the team member explain their thoughts, the team member misunderstood each other and think that the other were accusing them not doing a good job. Students felt that the other cannot understand them very well and were disappointed about the communication until one student found that the problem was caused by not clearing the cache of browser. After this, every team member clarified the meaning of their words and found all of these were just caused by misunderstand.

This accident re-reminds the team about the importance of trying to understand and clarify the real meaning of others' words instead of blaming the mistake on others. To achieve a successful outcome of teamwork, the team decided to use more sentences to explain thoughts clearly and welcome to answer questions caused by the misunderstanding of languages. Although, misunderstanding still exists from time to time, the team learned how to wait and ask for other to clarify about the meaning of their words, and a reliable relationship was developed during this process.

5. Artefact Description

5.1 Structure

To satisfy the diverse requirements of different potential users, we developed several pages to host different functions in phase one process. Firstly, to provide a quick start for users, we decided to create a direct and clear landing page. Secondly, the introduction of AR and AS is also necessary for users and should be divided into a single page. Thirdly, as the video demonstrations and other information of QUT AR research team project need to be presented to the user, another single page should be created. Furthermore, a news page that can display the global news related to the AR industry is also a necessary part of the website. Finally, to provide users with our contact information and a platform to give feedback, we decided to develop a contact page. In phase two, our team focused on improving visual elements and user interactions of the website based on phase one. Our team summarized the disadvantages and issues after analyzing the website surveys and created two profile pages based on the request of the client to introduce our team and industry partner which can help users better understand each team member's information and their role in the project.

The Project Reference refers to [Appendix 5](#)

5.2 Technical Description and Process

Landing page

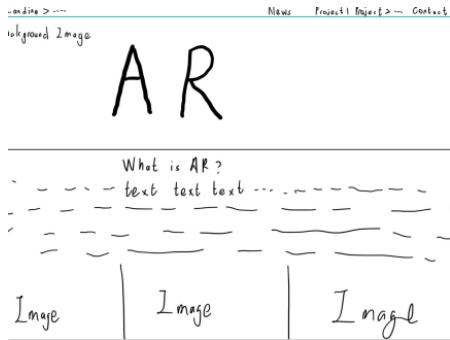


Fig 5.2-1

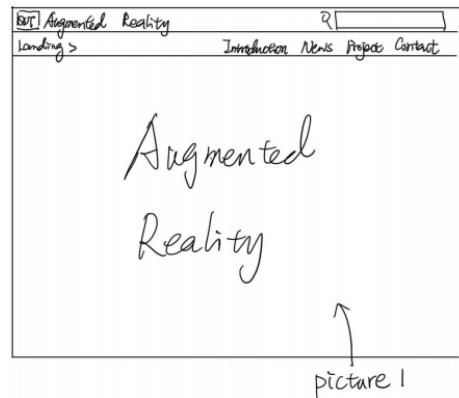


Fig 5.2-2

To design the landing page, we researched and compared different websites such as the research project website of USYD and SAS artificial intelligence website. This provided us ideas on how to design the initial layout of the Landing page, and the first draft was created based on this (Fig 5.2-1). A background image and some pictures about AR in the real world will be provided on the landing page which can attract users. In the process of improving this page, we discussed and shared ideas with team members to come up with more ideas like how to provide a clear interface with a navigation bar on the top. The final draft page of phase one contains a full-screen background image related to augmented reality, with the project name and a start button in the middle (Fig 5.2-2). However, after considering the practicality and value of this page, our team realized that this page is useless and the participants in the surveys also mentioned that the landing page is not well. Therefore, we decided to delete this page after discussing with the client.

Introduction Page

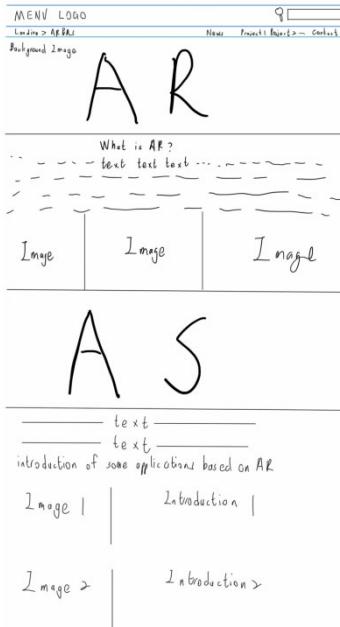


Fig 5.2-4

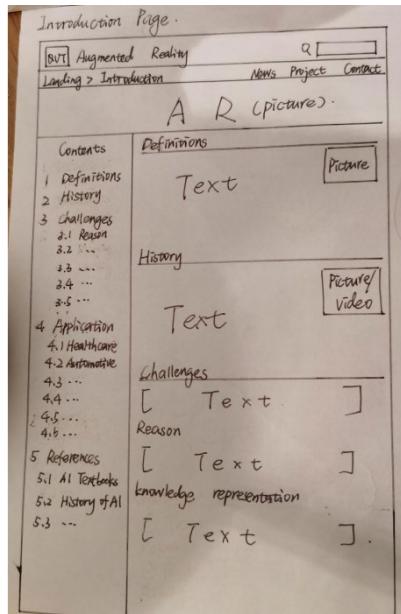


Fig 5.2-5

Based on the feedback from the client, our team created an introduction page draft which includes the introduction part and information of AR in the real-life moved from Landing page. We designed two different layouts after discussion and comparison with team members (Fig 5.2-4 and Fig 5.2-5). The first layout can introduce the information of AR and AS and explain the differences between AR and AS in real life more clearly with

concise words. The second one is a regular introduction page like Wikipedia that includes definition, history, and application of AR. Furthermore, a menu was provided on the left side of the page, and users can quickly reach the part they want to browse through the menu.

News page

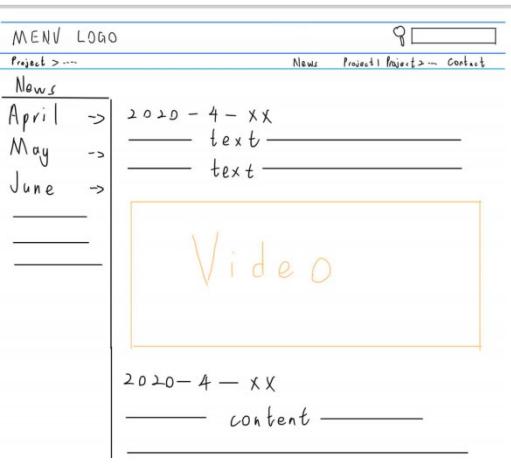


Fig 5.2-6

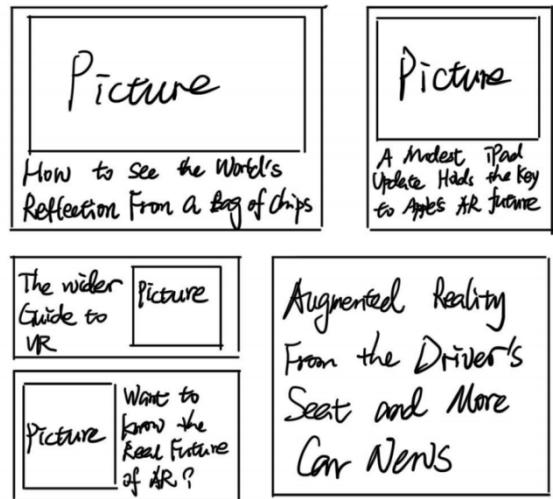


Fig 5.2-7

A news page is also necessary to be provided on the website as news is essential for users who want to learn about the latest research results of AR. In the news page, we firstly decided to divided news by date and create a menu which users can select the date to directly view the news of the corresponding date (Fig 5.2-6). After comparing with other websites like Science website, we designed a new layout that can make the page clearer and more attractive to the user, which would combine the pictures and titles in a square and

then combine the squares in different sizes (Fig 5.2-7). Therefore, we made the second sketch after querying AR related news.

Project page

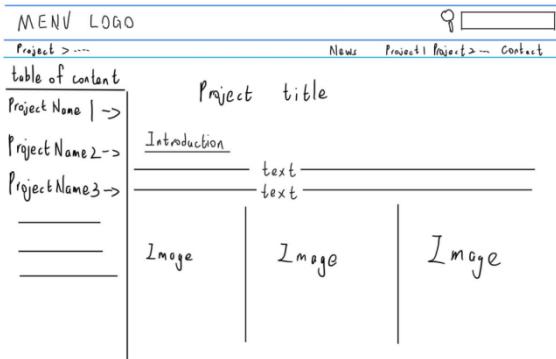


Fig 5.2-8

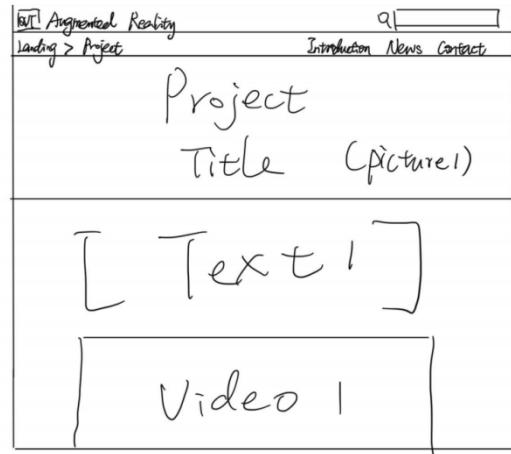


Fig 5.2-9

In the project page, we also designed two different drafts to display prototypes and information provided by QUT AR research group. The first one used the same design as the first News page which has a menu on the left to distinguish different project by project name. In this way, the demo detailed information of project will be displayed on the right (Fig 5.2-8). The second draft used a simpler way to show prototypes. A background picture with the title will be provided on the top of the website and the detailed content will be shown below (Fig 5.2-9).

Contact page

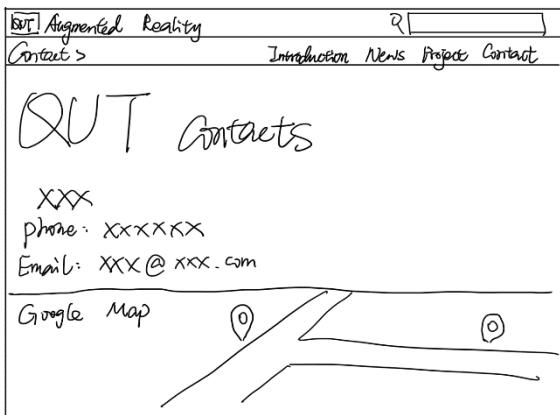


Fig 5.2-10

Fig 5.2-11

To provide users with our contact information and ways to provide feedback, we created two contact page drafts, both have our contact information and address. The first draft used the functions of Google Maps. Users can find the location of QUT more conveniently through this function and can search the route on the

map to choose the most suitable mode of transportation (Fig 5.2-10). However, our team members designed the second solution as they thought users would prefer direct feedback on the contact page (Fig 5.2-11). When users encounter any problems or want to contact us, they can fill out the form directly on the contact page and submit it. Our team will contact the user as soon as we receive the feedback.

5.3 Preferred Approach



Fig 5.3-1



Fig 5.3-2

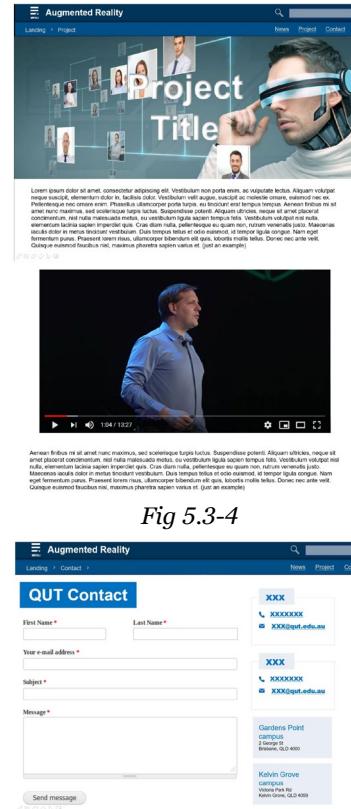


Fig 5.3-4

After confirming our final draft, we used Photoshop to create webpage templates. On the introduction page, we chose the first introduction draft finally. On the one hand, users will feel boring if there are too many texts without pictures and videos. On the other hand, our client who wants the website display in a concise way also suggested we use the first design (Fig 5.3-1). After comparing the usability of different kinds of news pages, we chose the second draft of the News page which combines pictures and titles, increasing users' interests in the AR news and supporting them to find the content they want to read more quickly (Fig 5.3-2). Furthermore, resources that need to be demonstrated in the project page has not been provided, so we negotiated with the client and decided to build a template that can easily fill with videos and text in further (Fig 5.3-4). On the contact page, we chose the second design according to the requirements of our client that the website should include a contact form for users to contact with the team, which also increase the usability and reduce the difficulty of development, supporting our team to complete the project in time.(Fig

5.3-5). It is noticeable that our team created profile pages on phase two which used a clear and distinct design to demonstrate team members and industry partners. Several cubes were developed to display personal photos and information and each cube can be clicked to read more details. (Fig 5.3-3)

5.4 Quality and Metrics



What is AR?

The Real World "Virtual Image" Behavior, "That Thing" to the real world is the four keywords, "real-time" is important. The reason is that the concept or real-time is reflected, the reaction of the real world is reflected.

Augmented reality is a technology that adds to the appearance of the real world. In general, augmented reality takes the form of a screen that merges the real world and the real time, so that we can see the real world and the real time at the same time.



What is AR Society?

In recent years, we emphasize social relationships, and now we have more, more interaction, we also emphasize improving people's social skills, developing socializing and making relationships by improving people's social skills. Technology that can handle social relationships and promote people's social culture.



"We found that using augmented reality technologies can change the way you walk, how you turn your head, how you do your job well, and how you interact with people in your room."

"For example, in one study, researchers asked people to sit in a chair and watch a video of a person sitting in a chair. Instead of the chair sat on, 77 percent chose the air instead of the chair while watching. This suggests that in the real world, people's interactions with a virtual person in augmented reality AR influence their behavior as if it was the physical world."

Credit: iStock/Dejan Stevanovic

Fig 5.4-1

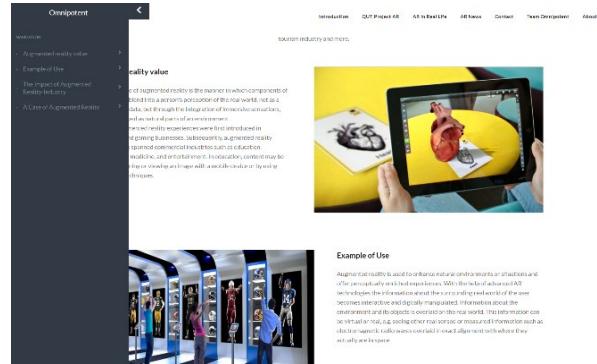
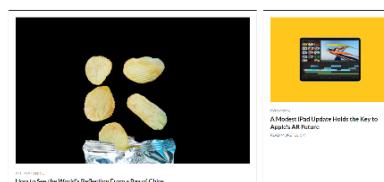


Fig 5.4-2



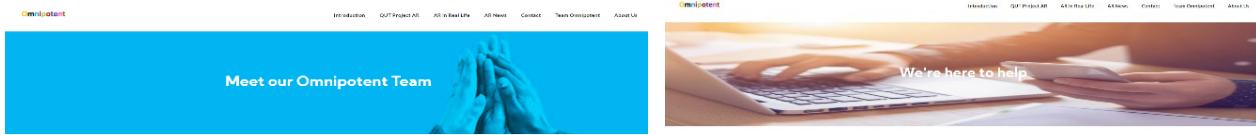
A Model iPhone Holds the Key to Apple's AR Future



Fig 5.4-3

Our team takes the following steps to improve our project from low-fidelity prototype to high-fidelity prototype and ensure the quality of the project:

1. Weekly team meeting for brainstorming new ideas and discussing possible changes that can make to improve the website and brainstorming.
2. Receiving feedbacks from client weekly and making necessary improvements to user stories and design to better meet the requirements.
3. Generating further possible updates of the website from comparing with similar websites and analysing advantages and disadvantages.
4. Using Trello to share files and manage the progress of our project.



Who we are?

We are omnipotent team. We join QUT's (Barber) of Information Technology major in order to inspired by information technology project with its application of social media and business project in a transition from study to professional practice and gives us the opportunity to apply the knowledge and skills gained during the course to date.

Title of the Project: Augmented Sociality

Thesis: Computer Project #1948 (IE3999) Term/Start Date: 2020, End Date: 2020
Project Area: Information Technology
Project Description: We have a clear goal to develop a tool which is looking at how social uses the augmented reality to create new businesses and related services. We will use the augmented reality to help people to learn more about the world around them. We will also use the augmented reality to help people to learn more about the environment. We will also use the augmented reality to help people to learn more about different industry projects for us to develop more. There are many ways to use the augmented reality to help people to learn more about the environment and better our society, supporting the better of our society to achieve their goal.

Team work (IS team, CS team)

(IS team) [Information System], Management (Report and Plan creation process, Research, Analysis, Report, CS team) [Computer Science] (Development (Backend) (Project Assistant), Creation of website design, meeting, communication, Photo, Music, CS, Project)

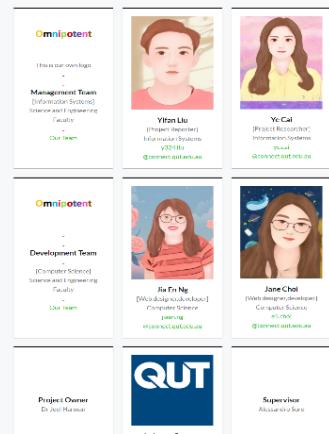


Fig 5.4-4

Fig 5.4-5



Organisation Name: QUT School of Computer Science

Address: 22 St. George's Terrace, Perth, WA 6000
Phone: +61 8 6488 1777



Fig 5.4-6

Example:

1. The advantage of the News page is combining pictures and titles which can make the website more convenience for users to find news they interested in (refer to user story 2).
2. Our introduction page which uses a concise style can make users understand the Augmented Reality and Sociality more deeply through showing pictures and videos (refer to user story 3).

Complete User story refer to appendix

Our website Link: <http://blue7067.cafe24.com/>

Reference List:

Schmalstieg, D., & Höllerer, T. (2016). Augmented Reality: Principles and Practice (1st edition). Addison-Wesley Professional.

Appendix 1

Release Plan & Sprint Plan

Release Plan

1. Semester 1 IFB398

Release 1 2020/05/04

Landing and Introduction page

Functions of Landing and Introduction page

Story ID	Story Title	Story Points
S 01	Find information	3
S 03	Find introduction	2
Story Point Sub-Total:		5

Release 2 2020/05/11

News and Project page

Functions of News and Project page

Story ID	Story Title	Story Points
S 02	Find news	3
S 01	Find information	2
S 04	Online tutorials	1
S 05	Research project	2
Story Point Sub-Total		8

Release 3 2020/05/18

Contact Page

Functions of Contact page

Story ID	Story Title	Story Points
S 06	Join project team	2
S 07	Feedback	2
Story Point Sub-Total		4

2. Semester 2 IFB399

Release 4

Visual Elements

Create and improve the visual style of current websites

Story ID	Story Title	Story Points
S 08	Visual Style	8
Story Point Sub-Total		8

Release 5

Test and Maintenance

Test the links and content of each page on different devices and browsers

Story ID	Story Title	Story Points
S 09	Test	4
S 10	Maintenance	2
Story Point Sub-Total		6

Sprint Plan

Sprint 1

So1: Find information

Task ID	Task Description	Estimate	Taken
T01	Search for appropriate pictures and text for the Landing and introduction page	2	
T02	Organize collected information and document the information	1	
T03	Design the layout of Landing and introduction page	2	
T04	Draw the draft of pages	2	
T04	Design the navigation bar for all the pages	2	
T05	Create the basic structure of pages based on drafts	2	
T06	Upload pictures, texts, and videos to pages	1	
T07	Modify the layout of the pages to fit the content	2	
T08	Beautify the interface in detail	3	
T09	Verify story is completed (acceptance test)	1	
Story Points: 4		Total Hours: 18	

Sprint 2

So2: Find news

Task ID	Task Description	Estimate	Taken
T01	Search for appropriate pictures, articles, videos, and news reports in the AR industry for the News page	3	
T02	Organize collected information and document the information	1	
T02	Design the layout of the News page	2	
T03	Draw the draft of the News page	1	
T03	Create the basic structure of the News page based on the draft	2	
T04	Upload pictures, texts, and videos to the pages	1	
T05	Modify the layout of website to fit the content	2	

T06	Beautify the News page in detail	2
T09	Design the layout of the Project page	2
T10	Draw the draft of the Project page	1
T11	Create the basic structure of the Project page based on the draft	2
T12	Upload pictures, texts, and videos provided by the client to the Project page	1
T13	Modify the layout of website to fit the content	2
T14	Beautify the Project page in detail	2
T05	Verify story is completed (acceptance test)	2
Story Points: 4		Total Hours: 26

Sprint 3

So7: Feedback

Task ID	Task Description	Estimate	Taken
T01	Search for appropriate pictures for the Contact page	1	
T02	Organize collected information and document the information	1	
T03	Design the layout of the Contact page	2	
T04	Draw the draft of the Contact page	1	
T05	Create the basic structure of the Contact pages	2	
T06	Upload pictures to pages	1	
T07	Create a contact form on the left side of the Contact	1	
T07	Modify the layout of the pages to fit the content	2	
T08	Beautify the interface in detail	2	
T09	Verify story is completed (acceptance test)	1	
Story Points: 4		Total Hours: 14	

Sprint 4

So8: Visual Style

Task ID	Task Description	Estimate	Taken
T01	Browse online for professional designs and style of websites	2	
T02	Design feedback form and send survey to potential users	3	
T03	Receive feedback and generate ideas on improvements of survey	3	
T04	Re-design and improve the web satisfaction survey	3	
T05	Summarize feedback of survey.	3	
T06	Design and draw the draft of changes	3	
T07	Discuss with team and client to confirm changes	2	
T08	Update webpages based on drafts	3	
T09	Communicate with the client on implementations of website and receive further feedback	3	
T10	Modify the visual elements of pages	3	
T11	Verify story is completed (acceptance test)	2	
Story Points: 8		Total Hours: 30	

Sprint 5

So9: Test

Task ID	Task Description	Estimate	Taken
T01	Test the contents of pages	2	
T02	Test the links between pages	1	
T03	Test the functions of contact form	2	
T04	Deploy usability test for the website	3	
T05	Modify and update the website based on errors found	3	
T06	Verify story is completed (acceptance test)	1	
Story Points: 4		Total Hours: 12	

S10: Maintenance

Task ID	Task Description	Estimate	Taken
T01	Discuss with client to confirm the template page	2	
T02	Create a template page with appropriate elements	2	
T03	Communication with client and improve the template	2	
T04	Release the template page	1	
T06	Verify story is completed (acceptance test)	1	
Story Points: 4		Total Hours: 8	

Appendix 2

Web Satisfaction Survey

<http://blue7067.cafe24.com/>

Thank you for your valuable feedback

1. Are you satisfied with your experience using our website? (1-dissatisfied, 5-satisfied) *

1 2 3 4 5

2. In the web, which page do you like best? *

- Landing page
- Introduction page
- News page
- Project page
- Contact page

3. In the web, which page is your least favorite page? *

- Landing page
- Introduction page
- News page
- Project page
- Contact page

4. Please write the reason why you don't like this page *

Enter your answer

5. Would you recommend this website to your friends? (1-no, 5-of course)

1 2 3 4 5

6. Do you think there are any problems with the website?

Enter your answer

1. Are you satisfied with your experience using our website? (1-dissatisfied, 5-satisfied)

[More Details](#)

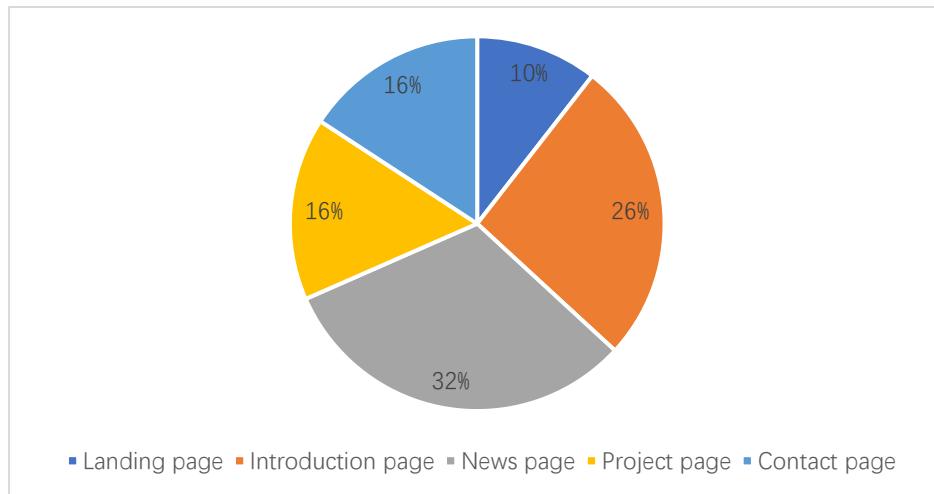
19

Responses

4.37

Average Number

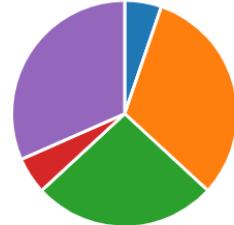
2. In the web, which page do you like best?



3. In the web, which page is your least favorite page?

[More Details](#)

● Landing page	1
● Introduction page	6
● News page	5
● Project page	1
● Contact page	6



4. Please write the reason why you don't like this page

19 Responses

ID ↑	Name	Language	Responses
1	anonymous		Lack of content .
2	anonymous		There are too many texts, and the characters are too small.
3	anonymous		Because it is a little hard for me to understand.
4	anonymous		not detailed
5	anonymous		no reason
6	anonymous		Too simple
7	anonymous		Actually, I like all pages but last question ask me to choose one.
8	anonymous		just soso
9	anonymous		no reason.
10	anonymous		to many words
11	anonymous		I hope can contact directly
12	anonymous		No
13	anonymous		没有理由
14	anonymous		(ಠ• . •ಠ)
15	anonymous		It's not suitable for phone
16	anonymous		Too many contents inside
17	anonymous	中文 (简体)	Too simple for this
18	anonymous	中文 (简体)	just dont like
19	anonymous	中文 (简体)	I can't send the messages

5. Would you recommend this website to your friends? (1-no, 5-of course)

[More Details](#)

19

Responses

4.05

Average Number

6. Do you think there are any problems with the website?

10 Responses

ID ↑	Name	Language	Responses
1	anonymous		Need more context
2	anonymous		No, I think this website is good.
3	anonymous		I think this website shows enough information I needed, if more video can be shown on the website that will be better.
4	anonymous		no
5	anonymous		NO,i am ok
6	anonymous		no
7	anonymous		no.
8	anonymous		The whole site is excellent
9	anonymous		(◐◑ . •◑)
10	anonymous	中文 (简体)	No

Website Satisfaction Survey

This website is used for hosting information related to AR technology and providing an online platform where prototypes can be demonstrated and explore the influence of AR on the social skill and beliefs of users, supporting the QUT School of Computer Science to create new prototypes and raise awareness of new ways to use AR.

Website link: <http://blue7067.cafe24.com/>
Thank you for your valuable feedback

1. Are you satisfied with your experience using our website? (1-dissatisfied, 5-satisfied) *



2. What is your role? *

- University Staff
- Researcher
- Student
- General user
- Other

3. What are you hoping to accomplish by visiting our website? *

4. How well do our website meet your needs? *

- Extremely well
- Very well
- Somewhat well
- Not so well
- Not at all well

5. Are you having trouble finding anything? *

6. Compared to other websites about AR, does our website looks better, worse, or about the same? *

Better

Worse

Same

7. If review each page with a score out of 5, what score would you give us? *

	1	2	3	4	5
Landing page	<input type="radio"/>				
Introduction page	<input type="radio"/>				
News page	<input type="radio"/>				
Project page	<input type="radio"/>				
Contact page	<input type="radio"/>				

8. What do you like the most about our website? *

Enter your answer

9. What do you like the least about our website? *

Enter your answer

10. Are there any features that you don't find helpful? *

Enter your answer

11. Do you have any thoughts on how to improve this website? *

Enter your answer

12. How likely are you to recommend us to a friend or colleague? *

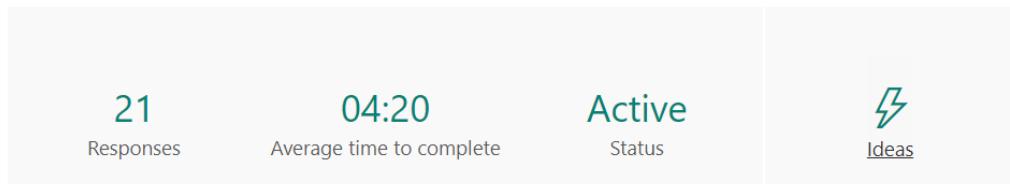
0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Not at all likely

Extremely likely

 Add new

Website Satisfaction Survey

[View results](#) [Open in Excel](#)

1. Are you satisfied with your experience using our website? (1-dissatisfied, 5-satisfied)

[More Details](#)

21
Responses



4.29 Average Rating

2. What is your role?

[More Details](#)

University Staff	4
Researcher	1
Student	16
General user	0
Other	0



3. What are you hoping to accomplish by visiting our website?

[More Details](#)

21
Responses

Latest Responses

*"nothing"**"To learn how AR be applied to the real life"**"To know more about AR technology"*

4. How well do our website meet your needs?

[More Details](#)

Extremely well	6
Very well	9
Somewhat well	6
Not so well	0
Not at all well	0



5. Are you having trouble finding anything?

[More Details](#)

21
Responses

Latest Responses

*"no"**"not yet"**"Not really"*

6. Compared to other websites about AR, does our website looks better, worse, or about the same?

[More Details](#)

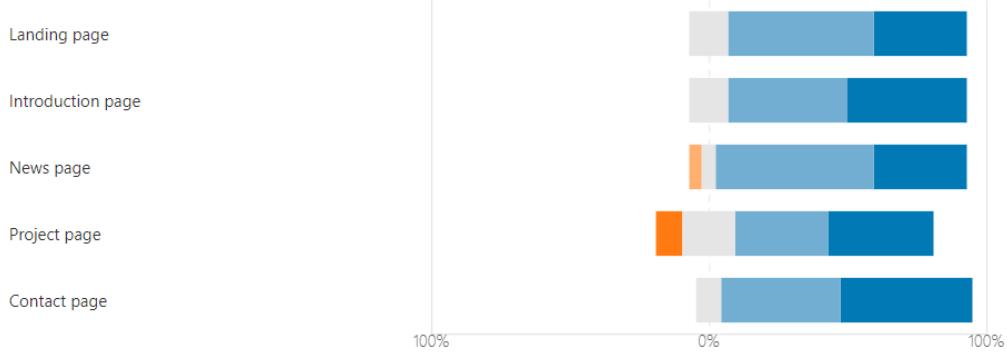
● Better	13
● Worse	0
● Same	8



7. If review each page with a score out of 5, what score would you give us?

[More Details](#)

■ 1 ■ 2 ■ 3 ■ 4 ■ 5



8. What do you like the most about our website?

[More Details](#)

21
Responses

Latest Responses
"n"
"the section of AR in our real life"
"The format is clear."

9. What do you like the least about our website?

[More Details](#)

21
Responses

Latest Responses
"m"
"contact page, because just a simple contact section, no other special ..."
"null."

10. Are there any features that you don't find helpful?

[More Details](#)

21
Responses

Latest Responses
"m"
"all good"
"null."

11. Do you have any thoughts on how to improve this website?

[More Details](#)

21
Responses

Latest Responses

"m"

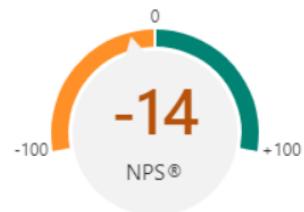
"I think it's good!"

"It would be nice if all pages contain a Omnipotent tab."

12. How likely are you to recommend us to a friend or colleague?

[More Details](#)

Promoters	4
Passives	10
Detractors	7



3. What are you hoping to accomplish by visiting our website?

21 Responses

ID ↑	Name	Responses
1	anonymous	Find out more about Augmented Reality
2	anonymous	Learn more about you and your team and what you are doing in the AR space.
3	anonymous	find some information about AS
4	anonymous	learn more about Augmented Reality in the real life
5	anonymous	Read some news about Augment Reality
6	anonymous	Do some research ahout AR and AS
7	anonymous	Take a brief look at AR and AS
8	anonymous	Get information
9	anonymous	Add some knowledge about AR and AS
10	anonymous	Understand the information on AR technology
11	anonymous	Nothing
12	anonymous	knowing more about AR
13	anonymous	Video
14	anonymous	Learn more about augmented reality and its uses.
15	anonymous	the introduction of AR
16	anonymous	To find out what is AR
17	anonymous	Everything is fine
18	anonymous	more ways of AR
19	anonymous	To know more about AR technology
20	anonymous	To learn how AR be applied to the real life
21	anonymous	nothing

8. What do you like the most about our website?

21 Responses

ID ↑	Name	Responses
1	anonymous	Layout, Images, Speed
2	anonymous	Appears to be quick.
3	anonymous	In the news page, each article displayed in a block
4	anonymous	the speed and the typesetting
5	anonymous	news page
6	anonymous	In each page, the content are combined with images
7	anonymous	The images and speed
8	anonymous	Style
9	anonymous	The news page
10	anonymous	The interaction between human and AR
11	anonymous	Ummmmmm, the homepage.
12	anonymous	Delivering information
13	anonymous	AR news
14	anonymous	The multiple examples of AR usage, as well as the news section which sums up important articles
15	anonymous	landing page
16	anonymous	Easy to understand
17	anonymous	Function
18	anonymous	information
19	anonymous	The format is clear.
20	anonymous	the section of AR in our real life
~1		

9. What do you like the least about our website?

21 Responses

ID ↑	Name	Responses
1	anonymous	No Footer
2	anonymous	Lack of videos about the team or what they are working on.
3	anonymous	In the project page, the left menu should be hidden if I did not click it.
4	anonymous	I cannot find any videos in the website
5	anonymous	the word is too small
6	anonymous	The word is too small in the news page
7	anonymous	No link to the articles in the news page
8	anonymous	Nothing
9	anonymous	The background images, especially the picture in the landing page
10	anonymous	Nothing
11	anonymous	Background is too simple.
12	anonymous	Too much words
13	anonymous	The intro
14	anonymous	The news section could do with links to point to further research.
15	anonymous	introduction page
16	anonymous	Everything is great
17	anonymous	No
18	anonymous	form of website page
19	anonymous	null.
20	anonymous	contact page, because just a simple contact section, no other special design

11. Do you have any thoughts on how to improve this website?

21 Responses

ID ↑	Name	Responses
1	anonymous	You could add a Footer with company address, date of site construction, website designer, link to contact page etc.
2	anonymous	Add videos, especially of the team. Audience will get a better connection when they get to know the people behind something.
3	anonymous	Maybe the background image should be changed
4	anonymous	More videos should be displayed in the website
5	anonymous	More videos should be provided in the project page
6	anonymous	Maybe enlarge the font
7	anonymous	I think designers should add a link under each articles
8	anonymous	No idea
9	anonymous	Choose a suitable size background image
10	anonymous	A video would be helpful
11	anonymous	Improve the background
12	anonymous	Less words
13	anonymous	Intro. video
14	anonymous	A 'narrative' so to speak, which links all the pages together and implies or explains the purpose of the site, as it currently feels like individual pieces of information. Needs to focus on QUT and how students and staff can benefit and develop AR if this is the intended demographic, as currently the site does not seem obviously related or part of QUT's infrastructure or web presence.
15	anonymous	no
16	anonymous	No
17	anonymous	So far so good
18	anonymous	no any ideas so far
19	anonymous	It would be nice if all pages contain a Omnipotent tab.
20	anonymous	I think it's good!
21	anonymous	m

Appendix 3

Client meeting

Meeting Agenda

040820 / 2:00 ~ 2:30pm /

1. Joel Harman ja.harman@qut.edu.au
2. Jia En Ng jiaen.ng@connect.qut.edu.au
3. Jane Choi e5.choi@connect.qut.edu.au
4. Yifan Liu y324.liu@connect.qut.edu.au
5. Ye Cai ye.cai@connect.qut.edu.au

Topic : Website change plan

1. Trello: <https://trello.com/b/AAo9Kfnz/omnipotent-ifb398>
2. File Share :
https://blackboard.qut.edu.au/webapps/blackboard/execute/groupFileExchange?course_id=150848_1&action=LIST&group_id=419118_1
3. Google word : https://docs.google.com/document/d/1Ik7E92Dzye6lfqVP-ifyTO_Pe2Sx6HRbPw5tcn8Bago/edit

1. Product & Progression

What should be changed?

What more should we add?

How will we create the login section design?

How do we create the code for login section using mysql ?

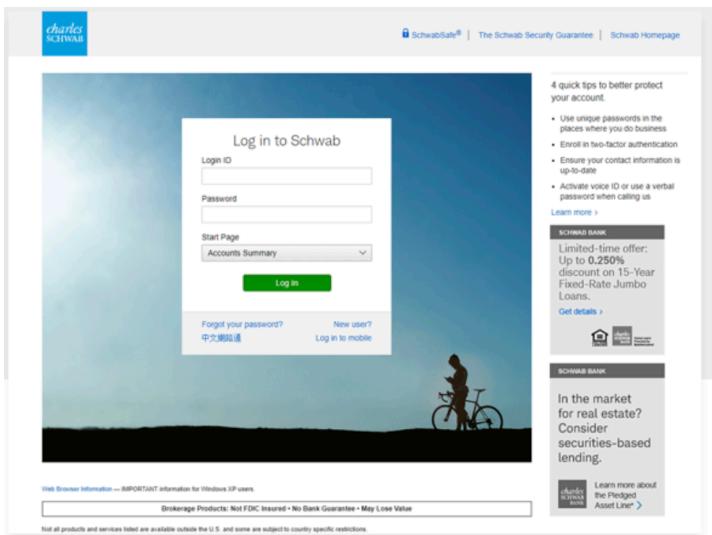
2. Process : Technical part

Web page address : <http://blue7067.cafe24.com/>

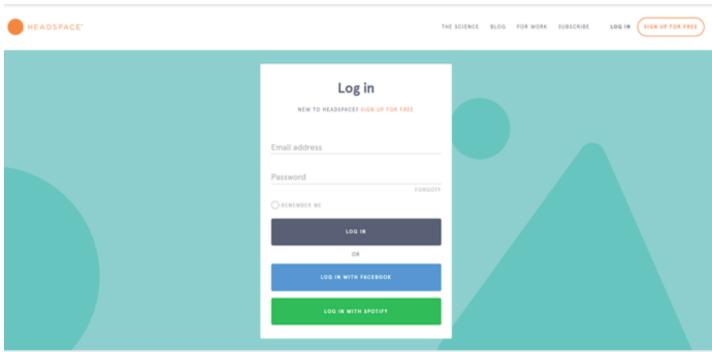
Client requirements	Our work	Check
Develop Log in section	How do we create the code for login section using mysql?	Researching for mysql
Design of Log in page	Research of log in page	

- Html, CSS / frame work : php, bootstrap
- Data sharing : blackboard => My Groups=>File Exchange

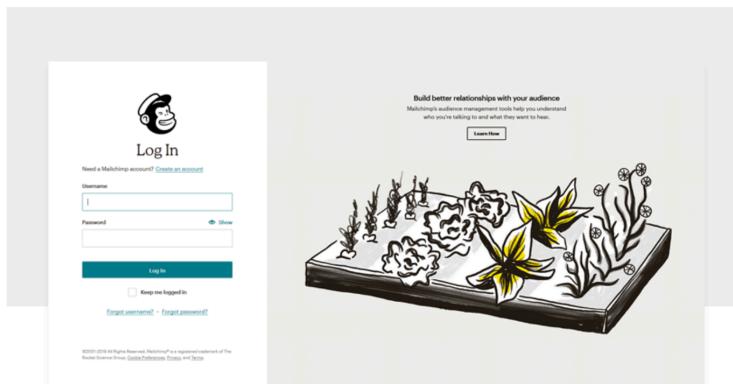
Example Log in page design



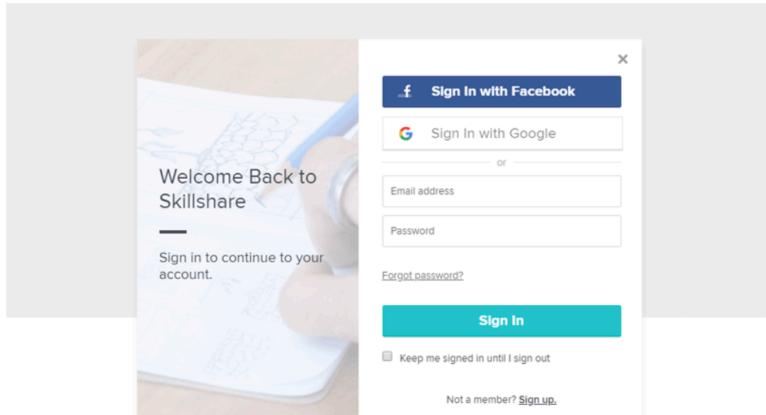
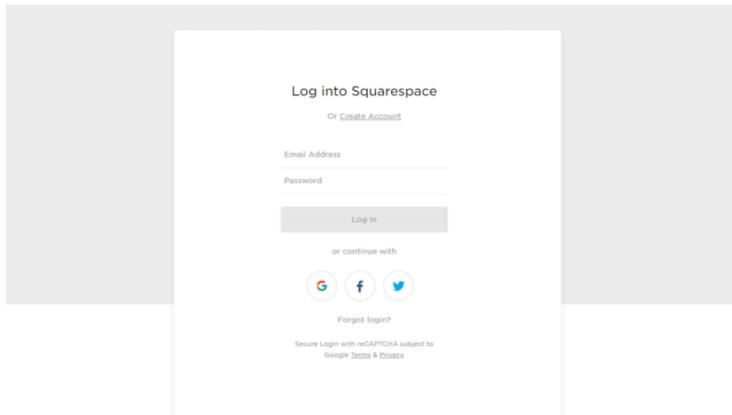
The Charles Schwab login page features a dark blue background with a silhouette of a person riding a bicycle. On the left, there's a white login form with fields for 'Login ID' and 'Password', and a dropdown menu for 'Start Page' set to 'Accounts Summary'. Below the form are links for 'Forgot your password?', 'New user?', and 'Log in to mobile'. On the right, there's a sidebar with '4 quick tips to better protect your account' and sections for 'SCHWAB BANK' (with a 'Limited-time offer: Up to 0.250% discount on 15-Year Fixed-Rate Jumbo Loans.'), 'SCHWAB BANK' (with 'In the market for real estate? Consider securities-based lending.'), and a 'Learn more about the Pledged Asset Line' link.



The Headspace login page has a teal background with abstract shapes. It features a central white login form with fields for 'Email address' and 'Password', and a 'LOG IN' button. Below the form are 'LOG IN WITH FACEBOOK' and 'LOG IN WITH SPOTIFY' buttons. At the top, there are navigation links for 'THE SCIENCE', 'BLOG', 'FOR WORK', 'SUBSCRIBE', 'LOG IN', and 'SIGN UP FOR FREE'.



The Matchbox login page has a light gray background. It includes a 'Log In' form with fields for 'Username' and 'Password', and a 'LOG IN' button. To the right, there's a section titled 'Build better relationships with your audience' featuring a drawing of a book with flowers growing out of it. Below this is a 'Learn More' button.



Research for mysql

PHP MYSQL LOGIN SYSTEM (CREATING THE DATABASE TABLE)

https://www.tutorialspoint.com/php/php_mysql_login.htm

CONFIG AND LOGIN. PHP

<https://www.tutorialrepublic.com/php-tutorial/php-mysql-login-system.php>

IFB399 IT Capstone Phase 2

Week 6 Tutorial Meeting

Project status checklist

Below is a checklist for your project status in week 6. We assume that your team plans to (almost) finalize the main artefact in week 10. See this list as a way to start a conversation with your team and tutor.



Your team is on track with your **main artefact**. You have roughly half of the work done and have realistic sprint (development) plans in place to target a week 10 or 11 (almost) finalization.

We are changing to suit the client's requirements and it is the current layout and design phase. After final confirmation with the client next week, we will begin the full-fledged development phase of code.



Your team has regular interactions with the **product owner**. You have shown the product owner what you are working on and received useful feedback so far. You regularly (preferably weekly) *update your owner* on progress and planning.

We have a meeting with the client every Tuesday, prepare ppts for the meeting in advance, process the client's requirements, get final confirmation, and receive another requirement and prepare them according to the requirements by the next meeting.



Your team has discussed your **handover** with your product owner. You have a shared agreement *what you will deliver and when and how* at the end of semester.

We are improving the site to meet client requirements every week and will deliver all files to clients through cloud sharing for completed products at the end of the semester.



Your team has started appropriately and sufficiently **testing** your artefacts as per development timelines. You have documented our test cases.

Testing the Artefact

Purpose: to prove the artefact is working correctly. Therefore, producing accurate data for the critical evaluation

1. Design & Layout testing
2. Content testing
3. Code testing
4. Through data testing



Your team knows what is expected for the **artefact and report assessments** (see the specifications and CRAs). Each team member has read the assessment documents. You have a good idea about your *project type*.

We are always trying to come up with our ideas, and whenever we have ideas, we reflect them in our meeting document and ask for client opinions at every client meeting



Your team has a **draft artefact agreement**. This specifies *all* deliverables, including a user guide and technical documentation for development projects or equivalents for other project types.

After the layout & design confirmation, we will make a user guide and technical documents after the final confirmation with the client after the code development stage.



Your team has **regular meetings***. You know what each one is working on and everyone is contributing. You support each other with larger tasks or difficult problems.

We are talking and discussing with each other through a messenger called Wechat, and we are planning and sharing files with our team through the Trello.

Trello	Wechat

* Aim to at least have (bi) weekly working sessions where you are together as a group (synchronous, face-to-face). This can greatly improve your collaboration. The principles behind the Agile Manifesto state that "*The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.*" (see: <https://agilemanifesto.org/principles.html>)

Progress report

13082020 / 1:30 ~ 2:00pm / Week 4

1. Trello: <https://trello.com/b/AAo9Kfnz/omnipotent-ifb398>
2. File Share :
https://blackboard.qut.edu.au/webapps/blackboard/execute/groupFileExchange?course_id=150848_1&action=LIST&group_id=419118_1
3. Google word : https://docs.google.com/document/d/1Ik7E92Dzye6IfqVP-ifyTO_Pe2Sx6HRbPw5tcn8Bago/edit
4. Web page address : <http://blue7067.cafe24.com/>

1. Product & Progression

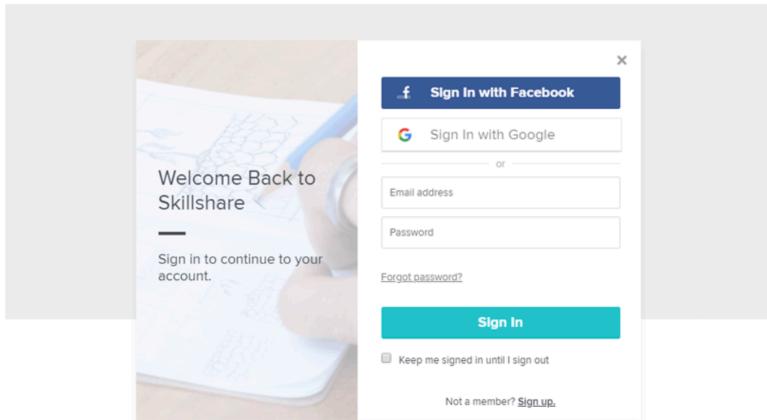
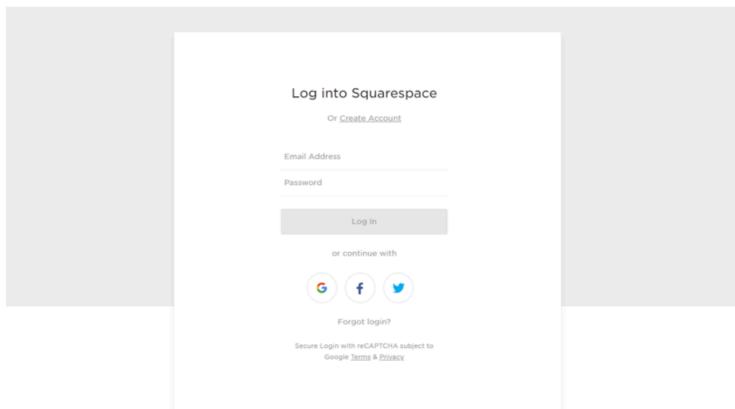
Web site change plan

2. Process : Technical part

	Client requirements	Our work	Check/ Complete
Week1: no meeting			
Week2	Get feedback from user	How do we create the code for login section using mysql? Research of log in page	
Week3	1. Review banner changes (may ask the user for feedback) 2. Start to hide the "AR in Real Life" menu and choose to allow the user to open the menu. 3. Update AR news page to include article links to AR Remove Header	Banner sample screening (from user for feedback)	Client Selected image for banner(No 4)
Week4	1. menu bar: add colour 2. Main page: A single color overall (e.g. an Apple site) 3. Replace Augmented Reality text (in menu bar) to Logo or Image	Choose the color to match the menu bar to the customer's request, Select a color or picture to match the main page, Create for our logo	Check with Client in Week5

Week2

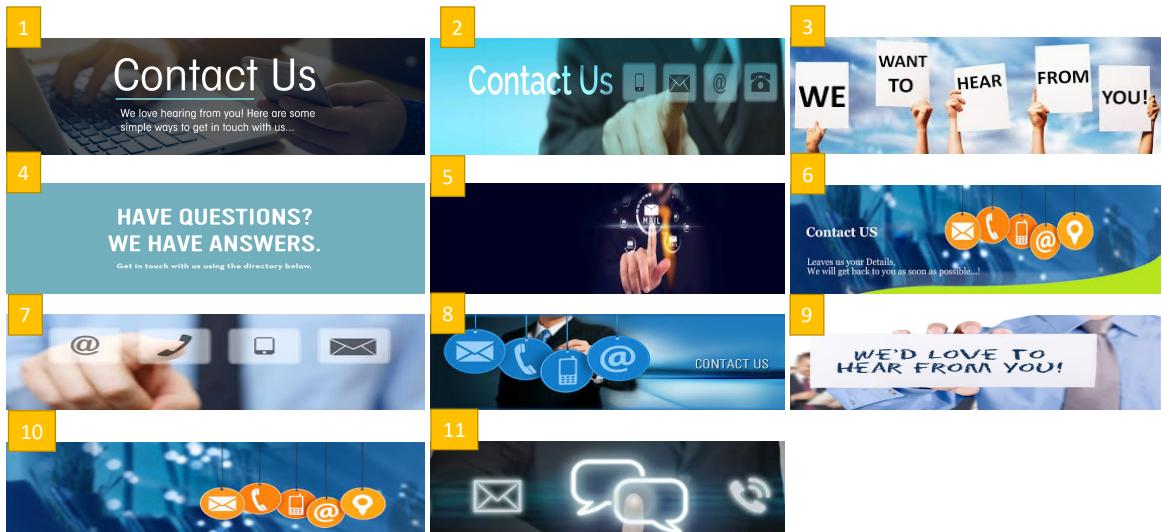
Example Log in page design



Week3

1. Contact banner
- 1) Design
- 2) Position

1. Contact banner – 1) Design(sample)



1.

Augmented

Reality Introduction AR in Real Life. AR News. Contact

**HAVE QUESTIONS?
WE HAVE ANSWERS.**

Get in touch with us using the directory below.

2.

Augmented

Reality Introduction AR in Real Life. AR News. Contact

HAVE QUESTIONS? WE HAVE ANSWERS.

Get in touch with us using the directory below.

3.

Augmented

Reality Introduction AR in Real Life. AR News. Contact

**HAVE QUESTIONS?
WE HAVE ANSWERS.**

Get in touch with us using the directory below.

4.

**HAVE QUESTIONS?
WE HAVE ANSWERS.**

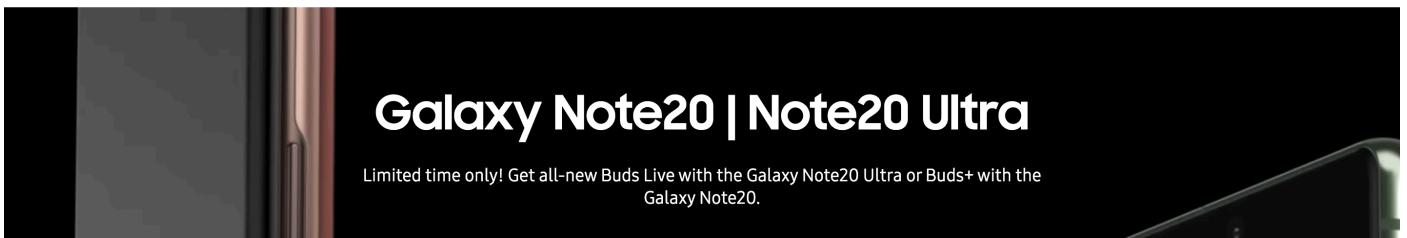
Get in touch with us using the directory below.

Augmented.

Reality Introduction AR in Real Life. AR News. Contact

Week4

The screenshot shows the official Apple website. At the top, there's a navigation bar with links for Mac, iPad, iPhone, Watch, TV, Music, Support, a search icon, and a shopping cart icon. Below the navigation is a blue banner with white text: "Evaluate COVID-19 symptoms and understand next steps >" and "Shop online and get free, no-contact delivery, Specialist help, and more." The main content area features a large black background with white text for the iPhone SE: "iPhone SE", "Lots to love. Less to spend.", "Starting at \$399.", "From \$9.54/mo. or \$229 with trade-in.¹", "Learn more > Buy >".



QUT the university for the real world

i COVID-19 - latest advice - updated Friday 17 July, 2pm (AEST)

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Search 

Research for content

PHP MYSQL LOGIN SYSTEM (CREATING THE DATABASE TABLE)

https://www.tutorialspoint.com/php/php_mysql_login.htm

CONFIG AND LOGIN. PHP

<https://www.tutorialrepublic.com/php-tutorial/php-mysql-login-system.php>

<https://www.ssorchestra.org/outside-background/>

<https://www.apple.com/au/>

<https://www.samsung.com/au/smartphones/galaxy-note20/?page=home>

<https://www.lg.com/au>

<https://www.bmw.com.au/en/index.html?bmw=grp:BMWcom:header:nsc-flyout>

Appendix 4



Joel Harman

周三 2020/10/28 18:16

收件人: Jane Choi; Ye Cai
抄送: Yifan Liu; Jia En Ng

↶ ↷ ↸ ↹ ⋮

Hi Jane,

Sorry about that, I forgot to add the updated meeting time to my calendar and I completely forgot about it until you sent me the email.

If you could send me the website files via email that would be great. I'll then try and do the supervisor form before tomorrow morning.

Best regards,
Joel

...

[答复](#) | [全部答复](#) | [转发](#)



将消息翻译为 简体中文 | 始终不翻译 英语



Jane Choi

周三 2020/10/28 14:30

收件人: Joel Harman; Ye Cai
抄送: Yifan Liu; Jia En Ng

↶ ↷ ↸ ↹ ⋮

Dear Dr Joel Harman,

My name is Jane(Eunhye) Choi / Student number - N10297545 and our team is Omnipotent.

We have waited our meeting since 2pm, however we still have not heard anything from you . We are wondering if we could send a project file to you by email?

Please let us know what exactly we need to do .

Kind regards
Jane(Eunhye) Choi

...



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Ye Cai

周四 2020/10/22 17:34

收件人: Joel Harman

↶ ↷ ↸ ↹ ⋮

Hi Joel,

Our team is ok with the time.

Best regards,
Ye Cai

...



Joel Harman

周四 2020/10/22 16:40

收件人: Ye Cai
抄送: Yifan Liu; Jane Choi; Jia En Ng

↶ ↷ ↸ ↹ ⋮

Hi Everyone,

I am available for a meeting next Wednesday. Would 2pm be a suitable time for you all?

Best regards,
Joel

...



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Ye Cai

周四 2020/10/22 14:03

收件人: Joel Harman
抄送: Yifan Liu; Jane Choi; Jia En Ng

↶ ↷ ↸ ↹ ⋮

Hi Joel,

I am writing on behalf of Team Omnipotent to rearrange a meeting with you as we knew from other teams that you were busy yesterday. Since the due of all assignments was delayed to next week, we can have a meeting next Wednesday and handover the project to you if you are busy this week. Please email us about the meeting time you prefer.

Thank you for your help.

Best regards,
Ye Cai

Completion of Web site - Omnipotent

Jane Choi <e5.choi@connect.qut.edu.au>

周四 2020/9/10 9:48

收件人: Joel Harman <ja.harman@qut.edu.au>

抄送: Jia En Ng <jiae.ng@connect.qut.edu.au>; Yifan Liu <y324.liu@connect.qut.edu.au>; Ye Cai <ye.cai@connect.qut.edu.au>

Dear Dr Joel Harman,

My name is Jane(Eunhye) Choi / Student number - N10297545

My team is Omnipotent.

I would like you to check the our web site (<http://blue7067.cafe24.com/>)

This is what I've changed so far

1. The whole of page:

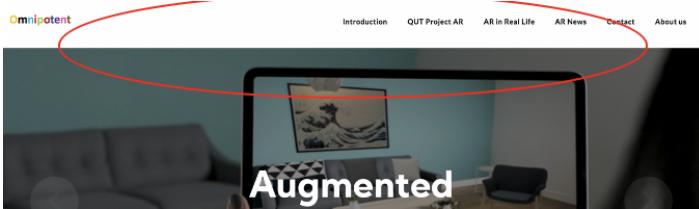
1) Made a our Logo : 

2) Change Augmented Reality(connected to the main page) to Logo Image



3)Menu bar: changed the color

4) Separated the menu bar from the project part



5) Insert phrase at bottom of page: "Copyright © 2020 Omnipotent All right reserved. Australia"

Copyright © 2020 Omnipotent All rights reserved.

Australia

2. Added page: 1)QUT Project AR 2)About us

3. Main page: 1)Slide image 2)Image changes automatically (interval:5 seconds) 3)It can be moved by clicking the button.

4. Introduction: 1)Menu bar and Before Project Part:Inserted image 2)Reduced height than before

5. QUR Project AR: Made a project lorem ipsum version.

6. AR in Real Life: 1)Default setting of Navigation bar:Hidden 2)Click the button to open the navigation bar 3)Menubar and Before Project Part: (1)Slide image (2)Image changes automatically (interval:5 seconds) (3)It can be moved by clicking the button (4)Reduced height than before

7.AR News: Menu bar and Before Project Part: 1)Inserted image 2)Reduced height than before

8. Contact:Menu bar and Before Project Part: 1)Inserted image 2)Reduced height than before

9. About us:

1) Layout, design completion phase

2) Forward:We will include all project stakeholder's data (clients and group members and project stakeholder)

Thanks

Kind regards

Jane(Eunhye) Choi

Appendix 5

Project Reference

Appendix 1 – Release Plan & Sprint Plan -> Docs/Plan

Appendix 2 – Website Satisfaction Survey -> Docs/Survey

Appendix 3 – Client Meeting & Tutor Meeting Documents ->

1. Trello/ Client Meeting Board & Tutor Meeting Board
2. Docs/ Tutor Meeting

Appendix 4 – Email Record with Client

Appendix 5 – Project Reference -> Docs/ Project Reference.pdf

Appendix 6 – Trello Board Link: <https://trello.com/b/AAo9Kfnz/omnipotent-ifb399>

Appendix 7 – Feasibility Analysis -> Docs/ Feasibility Analysis

Appendix 8 – User Story -> Docs/Appendix 8 User Story.pdf

Appendix 9 – Functionality Test -> Data/Functionality Test.pdf