2019

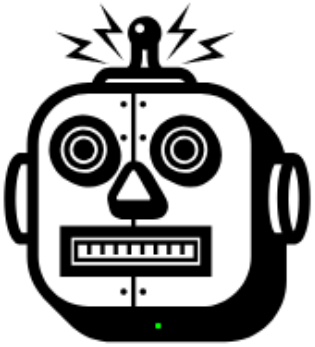
COSC2196 Introduction to Information Technology

ASSESSMENT 3

GROUP NUMBER 17

Section 1 | Team Profiles

Team Name



6TECH INDUSTRIES

Team Members

Lewis Martin | s3775633

After completing a Certificate IV in Programming Lewis set out to challenge himself further by starting his journey studying a Bachelor of Information Technology via RMIT, when he isn't studying he enjoys going for runs, watching rugby league, hanging out with friends and family, playing a round or two of golf and tinkering with computers or playing video games. His interest in the IT industry started at a very young age, being born in the 90's he saw how the industry evolved overtime and knew that when he was older he wanted to be a part of it. He has plenty of experience fixing, setting up and building devices such as computers and has experience creating applications with Java and C#, he is considered as tech guy by his friends and family.

Duy Diep | s3793504

Since completing a Diploma in Information Technology Duy decided to push himself and enrol into a Bachelor of Information Technology, he has a passion for programming and hopes to one day land a career within the discipline. He loves playing video games and building computers in his spare time. Duy's interest in IT began back in elementary school, after learning how to use MS-DOS he was amazed what could be achieved just using a command. Duy currently has no industry experience within the IT sector but does have experience building computers and developing websites.

Joshua Barton | s3793503

Joshua has been living with technology throughout his entire life, his family owned a computer store where he spent much of his childhood. When he grew older he left school and joined the army, after 6 years stint within the army he decided that he needed a change, returning to the family business. Joshua enjoys spending time with his son is his free time. Joshua's interests in IT began at the computer store with his dad, from a young age his dad would give him jobs to do which sparked his curiosity. Joshua's work within the family computer store has given him two years of IT experience.

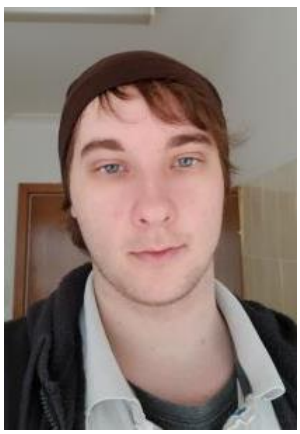
Zac Gearing | s3795070

Zac is an outgoing person with a passion for IT, he currently holds a Certificate II in Information Technology and has since enrolled in a Bachelor of Information Technology through RMIT, he is currently working a government job and hopes that this study will be a stepping stone towards a larger career in IT. When Zac has spare time he enjoys, Binging tv series, Gaming and reading fantasy fiction. Zac's fascination with IT began when he convinced his parents to buy him his first computer, he found his first computer to be an entire new world that he could explore, his Interest in IT grew when he worked for 1-Stop as part of their service desk team, Zac became increasingly curious with all the underlying IT aspects of the job. Since Zac's completion of his Certificate II in Information Technology he has worked several IT related jobs including; computer repair and specialising in the technical division. (Unfortunately, Zac had to pull out of the team for this project due to personal reasons.)

Jeremy Miller | s3791007

Jeremy is a Canberran who like most Canberrans works for the government, he recently enrolled into a Bachelor of Information Technology to pursue his dream of becoming a software developer. Jeremy likes to play footy on weekends when he isn't working or studying. Jeremy's Interest in IT cannot really put it down to one situation or scenario, he has always been fascinated by the rate at which the IT industry has evolved throughout his life and how it always has the ability to remain interesting and relevant regardless of time. Jeremy is considered as the go to 'IT guy' for his family and work which has given him a lot of experience helping others with their tech issues.

Orion Lane | s3775597



Orion Lane or 'Oreo' for short is a half Aussie half Kiwi with a growing interest in IT, he grew up with IT around him, his parents were both tech-savvy so throughout his childhood he learnt much about IT. Oreo hopes to one day become an Indie game developer and already has experience with creating mods and console applications using C++ and the Unreal engine. Oreo's hobbies include playing videogames, emulating videogames, and figuring out how videogames work behind the scenes. Oreo's interest in IT began through gaming and ever since he first got his hands on a PlayStation controller he knew he wanted to create his own videogames. Oreo currently possesses a basic level of IT knowledge and programming which involves making mods in Minecraft as a kid and messing around with his computer from time to time.

Group Processes

Past teamwork process

Overall the group worked harmoniously together with no conflicts with all the team members gelling well together throughout assignment 2. Using communication methods such as discord we found projecting our ideas and visions for the assignment an easy process. We undertook methods of work that allowed us to work on certain aspects of the project independently while at the same time being able to easily share work between each other for feedback purposes.

During the different stages of the project the group was able to share their sections of the assignment via GitHub, this allowed the group to keep track of that tasks that had been completed and to check that every member was following the same scope of work.

The final stages of the project involved compiling everyone's work into the finished project, careful planning in the early stages allowed group members to format their work to match the others within group so combining everything into the final product was a simple process.

Overall during assignment 2 the team worked well together, our planning in the early stages of the project resulted in the group having a clear understanding of what was required for the project and the effort of work that needed to be put forward.

Changes to future teamwork process

Since the team worked so well together during assignment 2 we have only implemented small changes to our work process, since the work in assignment 3 is must larger than that of assignment 2 we will have multiple team members working on the same sections of work, this will involve a lot more collaboration between team members to insure work is not being duplicated or drifting away from the intended scope of the project.

Between the duration of assignment 2 to assignment 3 the group lost a team member, this resulted in each group member taking on a heavier workload than previously expected, we implemented a tool from https://doodle.com which was used in our case for group members to vote on what part of the project they wanted to take, this resulted in a more understandable system of job delegation and a record that the group could look back to too insure every part of the project is being covered.

Since the project was an idea from one individual and not from the team a lot more collaboration with that team member is required for this assignment, this means that messaging services like discord that were previously used in assignment 2 would become even vital for our group process.

After the team reviewed the feedback for assignment 2, we decided to only implement small changes to our way of doing technical work. we decided to implement a larger range

of technical detail to our project based on this feedback and a greater number of visual elements to make the project report less text orientated.

Overall there is only a handful of changes that the group will implement differently compared to assignment 2, this is a result of the group working well together throughout assessment 2 with our group process yielding positive feedback on previous work. In conclusion we decided to take a 'if it isn't broke, don't fix it' mentality and stick with what was so successful and worked for us in the 2nd assignment.

Team member's Ideal Jobs

Lewis Martin – Software Developer.

Lewis hopes to one day land a job that involves some form of software development, he hopes to predominately develop applications, websites and create/manage databases using full stack development tools.

Orion Lane – Indie videogame developer.

Orion hopes to become an indie videogame developer, this involves working either solo or in a small team to develop and produce videogames on PC, console or mobile.

Zac Gearing – Security Engineer.

Zac hopes to become a security engineer in the future, this involves working on the security aspects of systems to be able to deal with disruption from cyber-attacks or natural disasters.

Jeremy Miller – Software Engineer/Developer.

Jeremy plans to one day become a software engineer, this involves designing, testing, maintaining and evaluating computer software.

Duy Diep – Data Analyst.

Duy hopes to one day become a data analyst, this role involves building and maintaining databases for an organisation and extracting and interpreting that data to assist an organisation.

Josh Barton – Migration specialist.

Josh hopes to continue is role within the family business as a migration specialist and one day manage the entire business, a migration specialist's role involves migrating clients onto a certain platform and providing support to clients after migration has occurred.

Changes in Ideal Careers

Throughout the two projects that the group has worked through no group member has changed their career choice preferences.

Ideal Job Comparisons

Half of the team members chose similar career paths within the software development sector of the IT industry which involves creating applications, websites and databases, while the other members have chosen roles within the security sector, the data analysis sector and data migration sector of the IT industry.

While all the software development roles have comparisons such as creating new applications and websites the other job roles have a loose comparison of the rest if none at all.

A security engineer would help to introduce security measures to an application or website that a software developer may make, they would need to have a high level of software development understanding to implement these measures.

A data analyst would be analysing and extracting data for a business, they would be using some sort of database management application such as MySQL or SQL server, a software developer may also need to use these such applications throughout their career.

A data migration specialist transfers data from one system to another, this involves working with both hardware and software. A data migration specialist may have to transfer data within applications such as a database server.

Overall a range of roles where chosen by each team member that touch many different aspects within the IT industry, half of the group chose to pursue a career path within software development while other members decided to choose career paths in other sections of IT, security, data analysis and data migration. While all these careers have small similarities regarding the sorts of tools that may be used and skills required they are also very different and require different fields of knowledge in order to be successful within the role.

Section 2 | Tools

Team website	https://duykhuongdiep.github.io/TeamAssessment3/
GitHub repository	https://github.com/duykhuongdiep/TeamAssessment3
Prototype link	https://xd.adobe.com/view/3f77eb1a-3608-4216-7ff5-f6b555dc7b42-4946/

The team use GitHub as the primary repository for the project and team website. Each team member responsible for their appointed section and expected to update regularly to GitHub. When all the works finished, the final report and group website will be generating base on all information collected. With the experiences carried forward from Assessment2, the team has worked more efficient on GitHub. As a result, the GitHub trail was more accurately reflecting the team activities.

The Prototype of the application also provided for further development. It is accessible by the provided link. Additionally, a copy of the prototype is stored on GitHub repository which requires Adobe XD software to open.

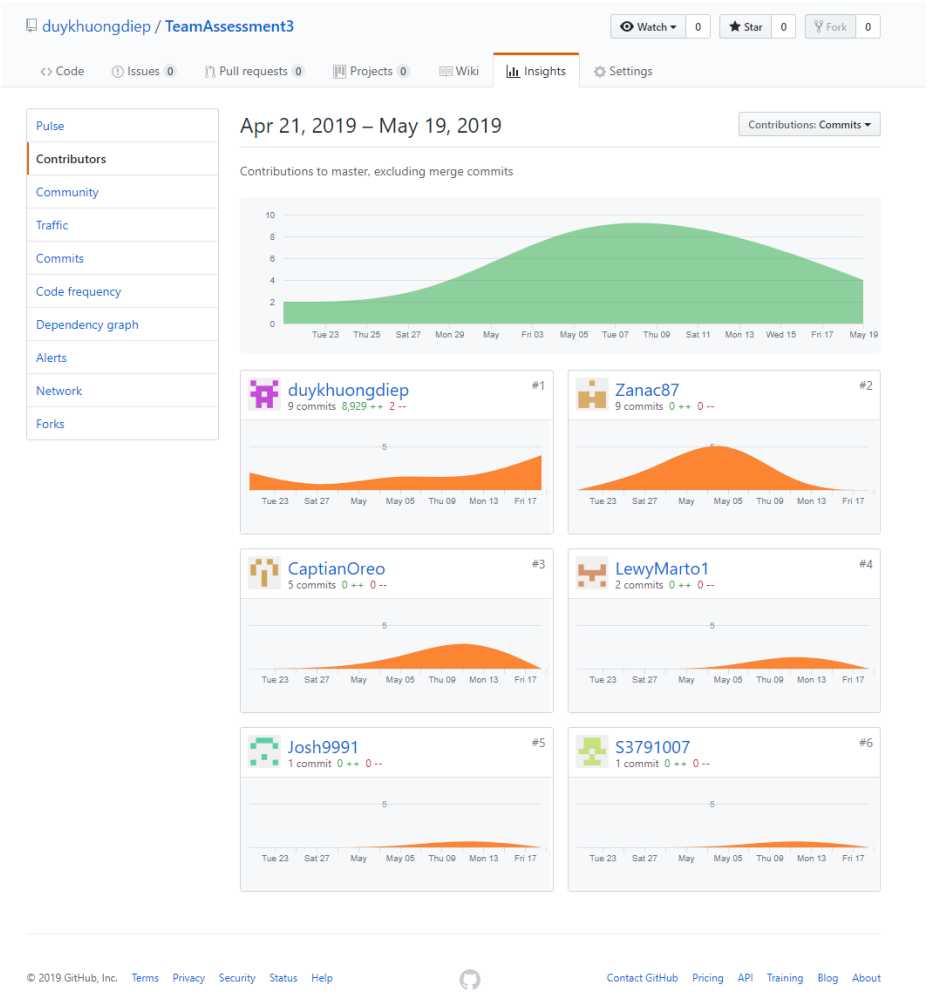


Figure 1 - Commit trail as of 19/05/2019

Section 3| Project Description

HOME HERO
Grocery Listing Application

Overview

Topic

The project scope includes designing and developing software that keeps track of grocery items currently being kept in the household. Consequently, using such data to assist in ordering consumed items, finding coupons to items, and notify when items are on a discount.

For additional developments, the software could be implemented to various platforms and hardware such as mobile apps, web interfaces for remote control and Raspberry Pi for local control. Statistical features such as graphs and charts may be generated to inform users of habits of consuming thus giving appropriate health recommendations.

The project when developed will considerably assist users in everyday routine by automation the process. More importantly, it will present more alternatives to managing grocery stocks. By simplify the process and provide statistical information, it will reduce meal preparation time, promote a healthy selection of grocery, which can lead to more home cooking meals ratio than fast food. Overall, the project if successful may provide a positive impact on user's diet and lifestyle.

Motivation

The project considered useful as it assists in making daily routine automatically, therefore users can spend more time more on food preparation and cooking which lead to better diet quality and health, according to Pablo Monsivais, Anju Aggarwal, Adam Drewnowski (2014).

Landscape

There are many grocery listing apps and software on the market currently, such as Grocery Pal, Out of Milk, Grocery iQ ..., but their main features often are focusing on generating portable shopping lists. Consequently, existing a large market gap for grocery list tracking software which integrates itself into the smart home or IoT environment.

Detailed Description

Aim

The aim of Home Hero will be to provide the user with information about their groceries currently being held within the household, it will provide users with information about each item that they currently have stocked including a general description of the item and the item's expiry date. We aim to give users options when their household items run out or expire with features included that can provide the user with coupons for the item or notify the user when the item is on special at their local store.

We hope that in achieving this aim we will save the user time and money whilst shopping and reduce any food waste within the household while at the same time improving the user's overall health.

Goals

To achieve the above aim, we have developed a few goals that we will need to work towards during the project's lifecycle.

1) **Produce and distribute surveys quizzing the public about their current household item management.**

Finding problems with a person's current way of stocking via surveys will help to decide which features to add to the application and which to leave out, this will involve creating the surveys ourselves and distributing them to a wide audience. The distribution of the surveys could be done in a few ways, depending on the reach we are trying to achieve some methods include; social media, through a website via a link or pop-up or by email/SMS. This is a important goal to achieve as Identifying the need for an application such as this is vital as it will give the application usability and result in a pleasing experience for the user whilst using the application.

2) **Using data from the surveys to brainstorm ideas/features for the application.**

Once the surveys are collected and evaluated, it is then up to the 6Tech Industries to decide which features to incorporate and which to leave out, which features get incorporated or not depends on limiting factors such as time frame and cost. After the most required features have been selected it would then be time to discuss how to best implement them. Identifying the appropriate features to add and how to best add them will form the basis of the application, this is a vital step as incorrect implementation could result in failure of the entire application.

3) Design and Develop the application.

Creating the application itself will be a vital step in achieving the desired aims, our goal will be to create the application with all the desired features while as the same time being aesthetically pleasing for the user. The application's design and style will be what separates our application from other competitors. careful planning will be required to implement the desired features and designs. This step will be essential to broadcast our vision to the user in a way that will result in a pleasing experience.

4) Incorporate current IT technologies

We plan to establish internet connectivity within the application to allow the application to send and receive data. The application will use IoT (Internet of things) technology to receive data from supermarket chains regarding specials relating to current items the user has within the application and coupons that the user can use when purchasing more items. Data about user purchases will also be sent to supermarket chains to help them better improve their services to our users. This feature is vital as it is what differentiates our application from all the other item management applications.

5) Incorporate effective security

The user may need to input basic personal information to use the application, therefore an effective security system will need to be put in place to stop any potential threats, if no current staff can incorporate these security measures than hiring of employees to manage the security of the application is the appropriate option. This step is vital as if the security of the application was breached and the personal information of our users was used for alternative uses then 6Tech Industries could face legal action.

6) Form Effective advertising.

To reach a wider audience, the group will need to decide on an appropriate way to showcase the new application. There are a range of methods that could be used to inform the public of our application, these include; Using social media outlets, creating a video explaining the purpose and feature of the application, start a blog about the application or public speaking to showcase the application. If ineffective or no advertising is used it will result in a lesser usage of the application which would result in the application underperforming or becoming a failure.

The important of each goal	
Description of goal	**Importance Rating**
1) Surveys for data.	Low
2) Brainstorming application ideas/features.	High
3) Design and develop application.	High
4) Incorporate current IT technologies.	Medium
5) Incorporate effective security measures.	High
6) Form Effective advertising.	Medium

Figure 2 - The importance of each goal previously mentioned

Low – Goals that aren't necessary but can be included to increase application quality.

Medium – Goals that are important to complete but could potentially be cut if time or budget factors are an issue.

High – Goals that must be completed to ensure that main aim is satisfied.

Goals with a high rating such as '**brainstorming application ideas/features**', '**designing and developing application**' and '**Incorporate effective security measures**', are goals that have the highest priority over others and if the group is pressured by budget or timeframe issues other goals could be cut and those goals will be our main priority.

Detailed Plan

The project has been planned in many states, each of which is an improvement of the former. The initial intention of the team is to make a working beta version ready to deploy. Subsequently, using it as a core platform, the team can improve the project continuously by adding more features, making it a full system as set out in the plan.

After considerations and agreed upon by the majority of 6Tech team members, the name "Home Hero" was chosen to be the official name of the project, credited to Zac Gearing. Also, 6Tech has set out a detailed plan for the whole project, covering most of the steps needed from start to finish, and should budget allowed, plans for project expansion.

Initially, 6Tech will generate a prototype of the applications needed for the project. The prototype's scope is limit at basic user interfaces, functionality demonstration, as well as their relation to each other. 6Tech will then use it to test on user experiences and accessibility. Further adjustments could be applied based on feedback from testers. This prototype can also be used to demonstrate the project to investors and other parties of interest to acquire extra investment if the team decided to pursue project expansion.

After the prototype approved by the team and project direction finalised, 6Tech will begin developing the core application to handle grocery listing, with primary features including but not limited to:

- Grocery items list managing.
- Reordering system.
- Discount and coupons finding.
- Barcode scanning.

On a user's aspect, the process started with a list of user created grocery items which can be created manually or scanned from barcodes (barcode scanning feature will be available after the next stage finalised). When an item is out of stock, users will mark that off the system. From there, a range of options will be provided, whether take that item off the listing, or reorder using automatic reordering system. The ordering process could be made more efficient by including online discount code and price comparison.

After core features are established and operational, the second stage of software development will initiate. Additional components will be included to further enhance software capability and better integration into smart home ecosystems. Integration of smartphone components can add more interaction to the software such as barcode

scanning, remote controlling. The system program and database will subsequently transfer to a Raspberry Pi with touchscreen included providing users with a single physical device without the need of a computer. More importantly, this device can operate around the clock and continuously inform users of health advises and statistical information based on consuming habit.

Progress

The original plan for the project was using Java to develop a simple program complete core functions to test out the viability of the project. After realising the scope was too extended for the constricted time given, 6Tech has decided to focus on a prototype of the required program which both served as a user interface preview and functional demonstration.

Roles

To be able to develop the project, developers must have experiences in Java programming language and skills in program integration to multiple platforms. Basic knowledge with different hardware components such as smartphones and Raspberry Pi is also a requirement. The project considered feasible as required skills are at an immediate level, therefore it should not be a difficulty getting developers with appropriate knowledge.

Scope and Limits

Based on the constricted timeframe, the scope of the project is narrowed down to developing a prototype of computer application. Using it as a core to expand more functionalities should time and budget allowed.

Features to be developed:

- Prototype of core program.
- Function demonstration.

Features pending:

- Grocery list making.
- Inventory handling (add, delete, get item prices etc.)
- Online ordering.
- Integrate into IoT system.
- Develop a mobile app.
- Integrate into Raspberry Pi

Tools and Technology

A mixture of software and hardware are needed to develop this system includes:

Software:

- Java SDK 11 on Eclipse 4.11 IDE
- Free GitHub repository for collaboration and version control
- Adobe XD (Free licence) to create the UI for the prototype
- Microsoft 365 subscription licence (Free when using student email) including:
- Microsoft Word for Documentation
- Microsoft PowerPoint for Presentation
- Microsoft Access for database creation and handling

Hardware:

- RaspberryPi3 board
    - With a touchscreen attached by GPIO ports
    - Held inside an enclosure to protect the unit from external damage
    - Installed with a lightweight OS like Raspbian Stretch Lite or RISC OS to operate

Testing

There are three main stages of testing during and after the development of the project: The Prototyping Stage, Development Stage, and Post-Development Stage.

Prototyping:

During the early development of the project, a small controlled group provides feedback to ensure consistent user experiences. The group is recommended to consist of users from various professional backgrounds related to the development of the project, in order to deliver fast and effective feedback to help progress development. When the primary function of the project is completed, the development process can move to the next stage.

Development:

When each function in the project is complete functional testing is performed in order to clear out as many conflicts and bugs as possible. Developers will generate a detailed list of procedures for testers to follow. Testers should not be the ones who developed the functions, however cross-checking and communication between testers and developers is recommended. Once all major functions are fully developed and sufficiently tested, the project can be released, and testing can progress to the next stage.

Post-Development:

After delivery, continuously receive feedback from users in order to fix any remaining bugs or conflicts, as well as improve on user experiences. Updates to the project may be necessary in order to stay functional with constantly improving hardware.

Timeframe

Week 1		
Group Member	**Tasks required to complete**	**Approximate time required (hours)**
Joshua Barton	• As a group decide who will do what tasks. • Josh is to put tasks into a timeline	8
Duy Diep	• Create GitHub repository for collaboration. • Start designing application.	10
Orion Lane	• Create policies for group process and communications.	8
Lewis Martin	• Develop Team Profile.	8
Jeremy Miller	• Asses possible risks for the application.	8
Zac Gearing	• Develop presentation structure.	8

Week 2		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Develop basic timeline to follow. • Share timeline with group.	8
Duy Diep	• Design style of application.	10
Orion Lane	• Implement policies within the group.	6
Lewis Martin	• Develop project overview.	8
Jeremy Miller	• Write a report on possible risks for the application.	8
Zac Gearing	• Develop presentation script. • Submit script.	12

Week 3		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. Assist in unplanned tasks.	8
Duy Diep	• Design layout of application pages i.e. sign in page, sign up page.	10
Orion Lane	• Identify what tools and technologies are required. • Produce report for tools and technologies.	10
Lewis Martin	• Develop Aims.	8
Jeremy Miller	• Take over for Zac on presentation. • Develop presentation scenes.	12
Zac Gearing	• On leave.	0

Week 4		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks.	10
Duy Diep	• Produce prototype of application.	12
Orion Lane	• Develop testing plans and procedures. • Share testing plans and procedures with group prior to testing of application.	10
Lewis Martin	• Proof and improve team profile, project overview and aims.	8
Jeremy Miller	• Voice over for presentation	8
Zac Gearing	• On leave.	0

Week 5		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks. • Proof the presentation. • Test Beta application and identify issues/improvements.	10
Duy Diep	• Produce Beta application. • Test beta version of the application. • Proof the presentation. • Test Beta application and identify issues/improvements.	12
Orion Lane	• Proof the presentation. • Test Beta application and identify issues/improvements.	10
Lewis Martin	• Draft presentation copy of team profile, project overview and aims. • Proof the presentation. • Test Beta application and identify issues/improvements.	10
Jeremy Miller	• Presentation draft complete and improve. • When presentation draft is complete upload to YouTube and get members to proof the presentation. • Test Beta application and identify issues/improvements.	10
Zac Gearing	• On leave.	0

Week 6		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Test fixed application. • Assess progress and revise timeline. Assist in unplanned tasks.	10
Duy Diep	• Fix issues found in application.	12
Orion Lane	• Test fixed application.	10
Lewis Martin	• Test fixed application.	10
Jeremy Miller	• Identify marketing campaign ideas. • Test fixed application.	10
Zac Gearing	• On leave.	0

Week 7		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. Assist in unplanned tasks.	10
Duy Diep	• Release first version of application. • Start development of improvements to application.	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Organise marketing campaign.	10
Zac Gearing	• On leave.	0

Week 8		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. Assess progress and revise timeline. • Assist in unplanned tasks.	10
Duy Diep	• Identify issues from first release and produce an update to fix.	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Review marketing campaign success and alter if required.	10
Zac Gearing	• On leave.	0

Week 9		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. Assess progress and revise timeline. • Assist in unplanned tasks.	10
Duy Diep	• Release application update.	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Review marketing campaign success and alter if required.	10
Zac Gearing	• On leave.	0

Week 10		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks.	10
Duy Diep	• Start development of additional features for application. • Identify what additional features could be most used. • Identify how new features will integrate with current features	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Review marketing campaign success and alter if required.	10
Zac Gearing	• On leave.	0

Week 11		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks. • Test beta version of application with new features. • Report findings to Duy.	10
Duy Diep	• Develop updated application with new features.	10
Orion Lane	• Handle reviews, complements and complaints with application. • Test beta version of application with new features. • Report findings to Duy.	10
Lewis Martin	• Test beta version of application with new features. • Report findings to Duy. • Identify solutions to complaints and review issues.	10
Jeremy Miller	• Test beta version of application with new features. • Report findings to Duy.	10
Zac Gearing	• On leave.	0

Week 12		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. Assist in unplanned tasks.	10
Duy Diep	• Test and improve beta version of application with new features.	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Review marketing campaign success and alter if required.	10
Zac Gearing	• On leave.	0

Week 13		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks. • Test updated application. • Report findings to Duy.	10
Duy Diep	• Fix issues found in beta application.	10
Orion Lane	• Handle reviews, complements and complaints with application. • Test updated application. • Report findings to Duy.	10
Lewis Martin	• Identify solutions to complaints and review issues. • Test updated application. • Report findings to Duy.	10
Jeremy Miller	• Review marketing campaign success and alter if required. • Test updated application. • Report findings to Duy.	10
Zac Gearing	• On leave.	0

Week 14		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks. • Test updated application. • Report findings to Duy.	10
Duy Diep	• Release updated application with additional features.	10
Orion Lane	• Handle reviews, complements and complaints with application. • Test updated application. • Report findings to Duy.	10
Lewis Martin	• Identify solutions to complaints and review issues. • Test updated application. • Report findings to Duy.	10
Jeremy Miller	• Review marketing campaign success and alter if required. • Test updated application. Report findings to Duy.	10
Zac Gearing	• On leave.	0

Week 15		
Group Member	**Tasks required to complete**	**Approximate time required**
Joshua Barton	• Update and modify timeline/schedule as required. • Assess progress and revise timeline. • Assist in unplanned tasks.	10
Duy Diep	• Finalise application documentation.	10
Orion Lane	• Handle reviews, complements and complaints with application.	10
Lewis Martin	• Identify solutions to complaints and review issues.	10
Jeremy Miller	• Make plans for further future marketing.	10
Zac Gearing	• On leave.	0

Risks

Overview

	Risk Statement There is a risk that/of…	**Risk Owner** Name and position	**Current Risk Level**
1	**Inexperience** - There is a risk that the project does not have adequately experienced staff to develop the software or run a project effectively.	6Tech executives	Medium
2	**Procurement** – There is a risk that the contract is inadequate or ambiguous and the statement of requirements doesn't reflect the actual requirement	6Tech executives	Low
3	**Staff turnover** – There is a risk that implementation will be delayed due to Telstra and Supplier infrastructure constraints	6Tech executives	High
4	**Estimation and scheduling** – There is a risk that estimating and scheduling development time may be inaccurate	6Tech executives	Medium
5	**Design compromise** – There is a risk that due to quick turnaround the project could be rushed with compromises made in the design phase	6Tech executives	Low

Detailed Risk Management Plan

Risk 1	**Inexperience** - There is a risk that the project does not have adequately experienced staff to develop the software or run a project effectively.		
This risk is a/an	Threat	**This risk is**	Open
Risk category (primary)	Reputation: 6Tech	**Risk Owner**	6Tech executive
Risk category (secondary)	Reputation: Staff		
Causes of risk – How could this happen?		**Risk consequences – What are the consequences if the risk is realised?**	
A1. Inexperience in programming with Java A2. Inexperience with delivering a project		B1. Implementation of the initiative is delayed B2. Key deliverables not achieved	
Is the current risk level accepted?	Yes	**Risk Owner comments**	Risk accepted by risk owner with outlined controls and treatments.

Proposed Treatments – What could be introduced to better manage this risk?

Treatments include activities/processes/procedures which may be introduced to impact either the likelihood or consequence of the risk being realised. You should be able to link each treatment to a cause or consequence as identified in the 'Causes of risk' and/or 'Risk consequences' sections above.

No.	Treatment Outline: • what the treatment aims to achieve • the linkage to risk causes (A) and/or risk consequences (B) (e.g. A1, A2, B1, B2)	Treatment Owner Name and position	Treatment due date	Estimated cost	Stage and comments
T1.1	Ensure team have adequate skills and training materials	6Tech executive	15/05/2019	NA	Ongoing

Residual likelihood rating	Possible	**Residual consequence rating**	Moderate	**Residual risk level**	Medium

Risk 2	**PROCUREMENT –** There is a risk that the contract is inadequate or ambiguous and the statement of requirements doesn't reflect the actual requirement		
This risk is a/an	Threat	**This risk is**	Open
Risk category (primary)	Contracts and Procurement	**Risk Owner**	6Tech executive
Risk category (secondary)	Reputation: Public		

Causes of risk – How could this happen?	**Risk consequences – What are the consequences if the risk is realised?**
A1. Difficulty identifying requirements A2. Requirements are not clearly expressed or understood by suppliers A3. Time pressures A4. Resourcing and expertise A5. Suppliers do not offer value for money A6. Needs are not clearly defined A7. Flexibility and processes not reflected accurately in contract A8. Performance not as expected from suppliers	B1. Disputes with suppliers B2. Scope creep — need to vary contracts B3. End up with inadequate product/services B4. Reputation B5. Increased cost and delays B6. Can't deliver expected outcomes B7. Delays to implementation B8. Won't be value for money—higher costs B9. Supplier performance negatively impacts projects

Existing Controls – What is in place now to control this risk?

Controls include activities/processes/procedures which are in place and have an impact on either the causes or consequences of this risk being realised. You should be able to link each control to a cause or consequence as identified in the 'Causes of risk' and/or 'Risk consequences' sections above.

No.	**Control** Outline: • what the control aims to achieve • the linkage to risk causes (A) and/or risk consequences (B) (e.g. A1, A2, B1, B2)	**Control Owner** Name and position	**Control effectiveness**	**Next review date**
C2.1	Engage relevant stakeholders regarding statement of requirements	6Tech executive	This control is effective	30/05/2019
C2.2	Internal consultation to inform requirements	6Tech executive	This control is effective	30/05/2019
C2.3	Engage consultant expertise to inform and support requirements development	6Tech executive	This control is effective	30/05/2019

Current likelihood rating	Unlikely	**Current risk rating**	Minor	**Current risk level**	Low

Risk 3	**Team turnover –** There is a risk that a team member may leave during the project's implementation				
This risk is a/an	Threat		**This risk is**	Open	
Risk category (primary)	Staff		**Risk Owner**	6Tech executive	
Risk category (secondary)	6Tech				
Causes of risk – How could this happen?			**Risk consequences – What are the consequences if the risk is realised?**		
A1. Team member leaves due to circumstance			B1. Delay in project delivery B2. Knowledge departs with team member		

Existing Controls – What is in place now to control this risk?

Controls include activities/processes/procedures which are in place and have an impact on either the causes or consequences of this risk being realised. You should be able to link each control to a cause or consequence as identified in the 'Causes of risk' and/or 'Risk consequences' sections above.

No.	**Control** Outline: • what the control aims to achieve • the linkage to risk causes (A) and/or risk consequences (B) (e.g. A1, A2, B1, B2)	**Control Owner** Name and position	**Control effectiveness**	**Next review date**
C 3. 1	Ensure you have resources where team members can collaborate and share knowledge.	6Tech executive	This control is effective	30/05/2019

Current likelihood rating	Almost Certain	**Current risk rating**	Moderate	**Current risk level**	High

Risk 4	**Estimation and scheduling –** There is a risk that estimating and scheduling development time may be inaccurate				
This risk is a/an	Threat		**This risk is**	Open	
Risk category (primary)	Staff		**Risk Owner**	6Tech executive	
Risk category (secondary)	6Tech				
Causes of risk – How could this happen?			**Risk consequences – What are the consequences if the risk is realised?**		
A1. Due to being the team's first project or anything of this nature			B1. Research similar projects B2. Reach out to the software developing community | consultants		
Existing Controls – What is in place now to control this risk? Controls include activities/processes/procedures which are in place and have an impact on either the causes or consequences of this risk being realised. You should be able to link each control to a cause or consequence as identified in the 'Causes of risk' and/or 'Risk consequences' sections above.					
No.	**Control** Outline: • what the control aims to achieve • the linkage to risk causes (A) and/or risk consequences (B) (e.g. A1, A2, B1, B2)		**Control Owner** Name and position	**Control effectiveness**	**Next review date**
C 6. 1	Researching of similar projects		6Tech executive	This control is effective	30/05/2019
Current likelihood rating	Unlikely	**Current risk rating**	Moderate	**Current risk level**	Medium

Risk 5	**Design compromise** – There is a risk that due to quick turnaround the project could be rushed with compromises made in the design phase				
This risk is a/an	Threat		**This risk is**	Open	
Risk category (primary)	Staff		**Risk Owner**	6Tech executive	
Risk category (secondary)	6Tech				
Causes of risk – How could this happen?			**Risk consequences – What are the consequences if the risk is realised?**		
A1. Due to short turnaround for project delivery			B1. Research similar projects B2. Plan accordingly		
Existing Controls – What is in place now to control this risk? Controls include activities/processes/procedures which are in place and have an impact on either the causes or consequences of this risk being realised. You should be able to link each control to a cause or consequence as identified in the 'Causes of risk' and/or 'Risk consequences' sections above.					
No.	**Control** Outline: • what the control aims to achieve • the linkage to risk causes (A) and/or risk consequences (B) (e.g. A1, A2, B1, B2)		**Control Owner** Name and position	**Control effectiveness**	**Next review date**
C 6. 1	Researching of similar projects		6Tech executive	This control is effective	30/05/2019
Current likelihood rating	Unlikely	**Current risk rating**	Moderate	**Current risk level**	Medium

Group processes and communications

Throughout the project the group's main form of communication will be through online text chat via Discord. This communication platform will be the most used by the group because of features such as instant messaging and file transferring, we expect to be using the messaging service daily to share our plans and ideas. Due to the distance between group members and the schedules of each group member not corresponding we are unable to perform any group meetings during this project. If communication breaks down between an individual or multiple group members we will implement strategies to insure the group can stay on track, these strategies include messaging the unresponsive members periodically to try to establish a connection again and having plans in place to manage and complete the work of the unresponsive member if they remain mute.

Section 4| Skills and Jobs

Job Title	Lead Programmer
Duties/Responsibilities /Goals	Complete all programming goals outlined by Project Manager before the supplied deadline. Collaborate with Graphic Designer to design and develop the program as assigned by Project Manager. Participate in strategic planning for program development. Collaborate with Community Feedback Analyst and Tester to debug/fix issues.
Skills/Requirements	Strong Programming Skills Java Programming Software Design Software Debugging Software Documentation Problem Solving Skills Teamwork & leadership Experience

Job Title	Graphic Designer
Duties/Responsibilities /Goals	Complete all design goals outlined by Project Manager and Lead Programmer before the supplied deadline. Collaborate with Lead Programmer to design and develop the program as assigned by Project Manager. Participate in strategic planning for program development. Collaborate with Community Feedback Analyst and Tester to debug/fix issues.
Skills/Requirements	Graphic Design & Layout Skills Customer Focus Creativity & Flexibility Attention to Detail Experience with Adobe creative programs Teamwork experience

Job Title	Community Feedback Analyst
Duties/Responsibilities /Goals	Analyze community feedback and discover issues within the program. Perform data validation checks. Participate in strategic planning for program development. Collaborate with Lead Programmer and Graphic Designer to help debug the program. Collaborate with Tester to discover bugs / issues.
Skills/Requirements	Strong Analyst Skills Problem Solving Skills Experience with Analytics Programs (e.g. Microsoft Excel) Teamwork experience

Job Title	Tester
Duties/Responsibilities /Goals	Ensure little to no issues / bugs remain in the program by the specified deadline Participate in strategic planning for program development. Collaborate with Lead Programmer, Graphic Designer and Community Feedback Analyst in order to eliminate any bugs discovered.
Skills/Requirements	General Programming Skills General Graphic Design Skills General Analyst Skills Software Debugging Software Documentation Attention to Detail Problem Solving Skills Experience with Analytics Programs (e.g. Microsoft Excel) Teamwork Experience

Section 5 | Group Reflection

Orion Lane

Our group had a slow start on this assessment, but after we really got into it, and everyone was putting in their fair share of effort it didn't take too long to complete, although we did hit some bumps along the way.
We didn't have any specific times for group meetings due to the varying times that we were available, however we could still communicate well enough through discord to keep our work flow going.
We all chose our own sections of the assessment to work on, at first there was a little bit of confusion, but we ended up using a page on doodle.com to keep track of who was working on what sections.

Lewis Martin

Throughout the group's work of assignment 3 a lot went well, with the group working together previously it allowed for less time with no introductions required and less time organising tools for communication and file transfer purposes and more time working on the actual assignment. The group's improved knowledge of tools such as GitHub and Discord this time around allowed for very efficient work to be produced.

During the job delegation process the group encountered a bit of a hiccup, there was a large period initially where many group members did not know what tasks they were doing, this resulted in a delayed start to the project, this was an area that could be improved in future group experiences.

What surprised me this time around what the group's ability to use tools such as GitHub without any issues, individual's previous experience with the tool resulted in far less issues this time compared to assignment 2.

While working in this group I have learnt that in the initial phases of forming a group or starting a new project can be a slow process, effective communication during these phases can help speed up these initial phases and start the flow of work within the group.

Jeremy Miller

As with assignment two, the group continued to use discord for all communications. As a group we again broke the assignment up into sections, with each member nominating for tasks using a poll set up in doodle.com. We used this structure previously and it worked well, as each member of the group got the choice to target their strengths.

We again had issues with intermittent updates in the discord chat, there were periods where no activity. However, for this assignment we better utilised GitHub, which allowed us to better track each other's work. With the better use of GitHub, the activity log will be more reflective of everyone's output.

Duy Diep

After the team went through Assignment2, lots of teamwork issues were ironed out, less confusion on work distribution and the team performs better as a whole. Although with various personal commitments, the team showed great effort in keeping the Discord communication channel going, although not regularly. The Discord channel still plays a vital role in getting the messages around and team coordinating.

The GitHub activities have also become more active as team members gain more experience working with the platform. The audit trail reflected more accurately on team effort on Assessment 3.

Even though with the withdrawing of one team member at the end of the project, the team still operate in an organised way and redistribute the workload to fit with unexpected changes.

Overall, after some time working together, the team has become more organised, working toward the project at better coordination, thanks to extra effort from all team members.

Josh Barton

Our group has worked well to complete the third assignment. We continued to use discord to collaborate which has worked well considering all group members seem to work at different times of the day/week. We used doodle.com to delegate who was doing which tasks which led to some confusion on who was doing which task but was quickly solved with communication on discord.

GitHub is a great tool for collaboration however I feel like I did not use it as much as I should have. A possibility to fix this is to use one drive so multiple users could work on the same document at the same time.

I have found the group to have knowledge and ideas from many different areas which has helped cover each other's weaknesses and come up with a greater area of ideas. I would be happy to work with this team again.

Group Reflection

What went well?

Overall the group's work during assessment 3 was well done, all work was completed on time and completed to a quality standard. Compared to assignment 2 we had an advantage, we had already set up communications between each other and made our introductions which resulted in a head start with assessment 3 due to us being able to skip the formalities from the get go.

The groups experiences with tools such as Discord and GitHub meant that the efficiency of using the tools increased from assignment 2 resulting in no stoppage of work due to technical difficulties, this meant that the entire team what able to produce a higher quality standard of work at a quicker pace.

What could be improved?

The entire group was slower in starting assessment 3, the slow start was due to team members not being too sure what tasks they wanted to attempt, a lack of communication between group members was the main contributor to this issue with a lack of motivation also being a factor.

Throughout the duration of the project the group's only form of communication was via text chat, this resulted in very limited expression of ideas between the group members. The group was unable to verbally talk face to face or online via Discord or Skype due to distance and only being available at differing times. We believe that this factor effected our quality of work and in future group scenarios we would make an effect to communicate verbally more often.

What surprised us?

As work began to be produced by the group a clear trend could be seen from assignment 2 to assignment 3, the quality of work between the to assignments increased and it could be seen that a lot more effect was being put in by each group member, this increase of work quality was a welcomed surprise to the group.

The group's overall improvement whilst using tools such as GitHub from assessment 2 to assessment 3 was also a pleasant surprise with time being saved due to not having to troubleshoot any potential problems that many of previously occurred.

What did we learn?

Throughout assessment 3 the group learnt that communication is key when taking on a project such as this, establishing communication early to define scope and a plan of attack is vital for the future success of the project.

The group learnt that in an assessment such as this it is important to utilize tools at our disposal to overcome any potential obstacles. For example https://doodle.com/ was used to set tasks for team members which helped us to start our project, GitHub was used as a hub for all of our work so we could submit and share work that we had completed and Discord was used as a link to connect us all together.

References

- Pablo Monsivais, Anju Aggarwal, Adam Drewnowski (2014), 'Time Spent on Home Food Preparation and Indicators of Healthy Eating', *American Journal of Preventive Medicine*, Volume 47, Issue 6, December 2014, Pages 796-802, viewed 17 Mar 2019, Available at https://www.sciencedirect.com/science/article/pii/S0749379714004000