
Assignment Part 1

OUA Building IT Systems (CPT111)

SP3, 2022

This project has been done in line with the course work set out in SP3 2022 Building IT Systems CPT111.

As a group we verify the originality of this body of work and all references have been cited where applicable.

Stdout.Systems

by

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WHAT

Project Name: Meta Merge Tasker

Project Description:

The Meta Merge Tasker is a meta organisational app that will allow the user to achieve several tasks that would usually require several different apps and accomplish certain goals all in the one place. The app so will consist of 5 base features though in time this would be expanded to 8 or more. One of the main features of the app will be an expense manager that will allow the user to input the cost of recurring expenses, such as subscriptions, bills, BNPL payments etc and then give a total cost. Other key features of the application will be a list management system, password manager, password generator and an organiser. On top of these features additional features would be a document scanner, voice-to-text notes, as well as a companion web application that would allow the user to sync their information and access the same functions via their computer.

The Team:

Adam Mutimer

Student Email Address: s3875753@student.rmit.edu.au

Your Locale: Horsham, Victoria

Background & Passion in IT:

My interest in IT started when I was a young child, IT has endless possibilities only limited by the imagination and ability of the individual, It provides seamless access to information from around the world and provides the ability to connect with other like-minded individuals not limited by distance or borders.

What are you good at / What you're interested in?

Besides from being obsessed with computers and electronics, I enjoy being outside as much as possible and enjoy visiting new walking and hiking trails as much as possible with my two kids, I try to do this at least once a month when possible.

When I am not out and about, I am always looking for a new project to do at home which can honestly be anything from building a cubbyhouse to upcycling old electronics into something new, normally something for the kids to enjoy.

Failing that, I love sci-fi and fantasy movies and television shows and just relaxing at home.

What are your weak point in the context of the project?

I believe I may be lacking in the experience and possibly the skills with developing mobile applications. So, I do expect a big learning curve.

What role do you see yourself mainly playing in the team?

I am happy to float around working various tasks as a backup to the other team members, I hope to dive into the programming side of the application.

Matthew Wotton

Student Email Address: s3905126@student.rmit.edu.au

Your Locale: Gold Coast, QLD, Australia.

Background & Passion in IT:

I started out wanting to know more about Cyber Security, but I have found and now started to pursue an interest around Project Management and Agile fundamentals.

What are you good at / What you're interested in?

I am good at management roles and organisation. I am interested in building my knowledge around project management within the IT space and learning more around Agile fundamentals.

What is your weak point in the context of the project?

Technical knowledge around tools needed to complete programming and coding as well as being weak in coding.

What role do you see yourself playing in the team?

I see myself as the main organiser of tasks and being the main member who completes reports as well as being the representative of the group.

Zachary Williams

Student Email Address: s3909738@student.rmit.edu.au

Your Locale: Ballarat, VIC, Australia

Background & Passion in IT:

I grew up in a small town in the Wimmera region of Victoria called Murtoa (about 3.25 hours north-west of Melbourne). I was born into a large family of 11 children and did not get to grow up with the luxury of having a personal computer or the internet at home. Even though I was schooled through to 2008, I still had to use 'physical' encyclopaedias and books to research for school projects at home.

I lavished the opportunity when I got to use computers at school and at friends' houses. I was always intrigued and curious to learn how they worked and the magical happenings going on behind the computer screen.

What are you good at / What you're interested in?

Being a creative minded person, I have always been fascinated with how IT applications can be used to customise and personalise interfaces and user experiences, as well as automate and simplify tasks. Most of my IT knowledge and experience comes from my own research, learning projects and hands-on exploration with computers and technology.

I didn't realise I had an interest in programming until I became fascinated with the level building environment featured within the 'LittleBigPlanet' games, which

integrated aspects of object-oriented programming. Through my studies at RMIT, I have become familiar with the Python and Java programming languages.

I look forward to applying my creativity within project challenges and design boundaries.

What are your weak point in the context of the project?

Building a mobile application will be a new experience for me, and as a result, I will need to build my skills and knowledge within this area. This could appear quite overwhelming for some, but I am not afraid to dive in, research, learn and give my best.

In regard to working on a team project, I feel that one of my biggest challenges is speaking up for my ideas. This comes down to my confidence, and I have learned, that I am more confident when I am prepared in knowing what I want to say, and thoroughly understand the information or perspective I wish to share.

However, this means that I tend to stumble when I am caught off guard and/or unprepared.

What role do you see yourself mainly playing in the team?

With my thirst for knowledge, I am happy to dive into research and report on my findings.

I am no programming expert, but I am excited to learn about mobile app development and would value the opportunity to work on aspects of the building process. However, I may need guidance from team members who have more experience in this area.

I am a creative spirit and would be happy to help out anywhere an artistic flair is required.

I am confident with my reading and writing English skills and believe I could be useful in proofreading and editing written artefacts.

Geoffrey Davis

Student Email Address: s3930693@student.rmit.edu.au

Your Locale: Queensland Australia

Background & Passion in IT:

My interest in IT started when I was a young boy, I have been a gamer since I can remember, I think because of that my interest in IT just grew from there.

When I got my first computer, I started doing things like downloading games and movies through torrents as back then my internet was not so great so I could only really play single player games, after a bit I started to mod games and would run into errors with files and system errors, being determined I would scour the web trying to find the solution to the problem, whether it be changing the games settings in notepad or changing Ips. All so I could solve the problem.

While doing so I found myself really enjoying the fault-finding process and the satisfaction achieved when I finally fixed the issue.

What are you good at / What you're interested in?

Being a hospitality worker customer interaction is a big part of the job. One of my biggest strengths is my ability to ensure a customer has the best experience and always has a smile on their face. This is a skill that can transfer into any industry as teamwork and making a great bond with other co-workers can be the difference between a functioning project and a failing one.

My passion is WW2 aircraft; I love the background and history of the aircraft as well as the mechanics behind them.

The mechanics behind dogfighting intrigues me and the skill that was required to fly back in the 1940s. I build model planes when I get time and fly on WW2 flight simulators.

What is your weak point in the context of the project?

Weak points that I can see myself finding is balancing task between my university, work and my family. Managing my time between university, work and having a young family, I can at times get a little complacent with prioritising in the order that is most appropriate, which can sometimes leave me stressed. Also, this is a potential issue for me, as I have been protecting this issue over the last year of study and find myself managing tasks much more appropriately.

What role do you see yourself mainly playing in the team?

Throughout this project I can see myself being a backend supervisor in a way that I like to overview everything and make sure everything is getting done. I would also most likely be trying to pick up if we are lacking somewhere so that we can achieve our goal to a high standard.

Luca Pallas

Student Email Address: S3940012@student.rmit.edu.au

Your Locale: Perth, Western Australia

Background & Passion in IT:

In terms of studies, I have previously done a Cert IV in Programming and came to be interested in IT, specifically programming, when was studying Physics at Murdoch University. I was looking into what skills would be useful to have as a physicist and saw that having basic programming would help in terms of data analysis etc. So I did a unit in C++ and found that I enjoyed it a lot more then physics, and the job market was much more promising, so have been on a journey to get into the field ever since.

What are you good at / What you're interested in?

As you could probably guess from the previous section, my biggest interest and what I am good at is programming, including debugging and creating pseudocode. Also

have interest in database development and query languages such as SQL, though programming is still my main strength/interest.

What are your weak point in the context of the project?

While I can do documentation and technical writing, things like that, especially business analytics kind of stuff doesn't hold my interest as much as the more 'hands-on' stuff like coding and testing, so aspects of that when it comes to this project would not be my strongest part.

What role do you see yourself mainly playing in the team?

Within the team I primarily see myself being very involved with the backend side of things, such as coding, testing and any possible database stuff that may come up. I can also see myself having some input into the prototype and UI development side of things, but if it came down to one area, I definitely see myself being more involved with the back-end side.

Demonstrable Outcomes

Minimum Viable Features:

Expense Manager:

An all-in-one manager for all billing types, subscriptions and recurring payments. Users will be able to input their expense type followed by the amount and frequency of the expense. A total cost will be collated by the app and provided to the user based on their preferences of either being shown a weekly, fortnightly, or monthly breakdown.

Validation Test:

- Positive validation – enter in test values and use the function to find the total. Manually calculate the total and check that function had calculated correctly.
- Negative validation – enter in a negative value and if function is working correctly and error message box should show up informing the user that negative values cannot be entered.

Organiser:

The ability to input and save key dates, tasks, and reminders into a calendar format and enabling the app to provide the user with notifications based on entries and preferences.

Validation Test:

- Positive validation – enter in test dates, tasks and reminder time. Save task reminder, close app then reopens. Successful use of function would have the task showing in organiser with correct date, task, and reminder details.
- Negative validation – enter in a date and/or times for tasks that fall in the past. If function works correctly, on saving the task and error message should pop-up informing the user that the tasks/reminder cannot be in the past

Lists:

Daily to do lists, grocery lists, goal and gratitude lists, self-care lists. Whatever the list, the app will be able to define it, organise it and provide the user a way to check off the items of a list. A grocery list for example will be entered by the user, the app will organise and arrange the list into similar item groups (fruits) and as the user picks an item off the shelf and ticks the item off the list, the item will be moved into a picked status.

Validation Test:

- Positive validation – create test lists of various types and then fill them with test data. Save lists then close and reopen the application. Successful test will have the lists show up with correct format and data points.
- Negative validation – create list but do not enter any values. If function works correctly an error message should pop-up to inform the user that the list is empty and get confirmation whether to still save the empty list or discard it.

Password Manager:

This function itself would be protected by the user's choice of password, passcode, or facial recognition. An all-in-one place to store and manage passwords manually.

Validation Test:

- Positive validation – create test pin code and enter in test passwords. Save, close and reopen app. If function is working correctly the manager will open upon test pin being entered and the test password will be still stored within
- Negative validation – create test pin code and enter in test passwords. Save, close and reopen app. If function is working correctly, upon incorrect pin being entered the app will give an error message informing the user that the pin is incorrect and not open the manager. Also, a password should attempt to be saved with no characters. App should give error message informing that user that an empty password cannot be stored.

Password Generator:

A choice of randomly generated passwords based on the user's requirements, (letter, number, special character, length) as well as being able to predefine certain parameters that the user may want their password to have. For example, a specific phrase, word, or number to be included in the password. (12 characters, 1 special character, and include the word "max")

Validation Test:

- Positive validation – use generator to make full random password. Correct function will generate password and ask user if they want to use it and save it to password manager. Use generator to make password with user input. Correct function will generate random password using input values from user. Will then show password to user and ask if they wish to use the password and save it to manager.

- Negative validation – attempt to create user input password with illegal characters entered (only commonly allowed symbols will be allowed). If function is correct the app will show an error message informing the user that that symbol is not allowed to be used for passwords. Repeat test above but with user attempting to make a password under 8 characters or over 20 characters. If function works correctly an error message will pop-up informing user that the password length must be made longer/shorter depending on version of test.

Extended Features:

Voice to text and audio input:

The ability to convert the users voice into text input for all required entries. And the ability to save audio input that can be used as the app output of a list or task of each function.

Validation Test:

- Positive validation – record test audio clip and then save, close app and reopen. If working correctly the recording should still be saved. Record a second test audio, then convert to text. Save, close app and reopen. If working correctly then audio recording and text will both still be saved, and the text will be ~ >90% accurate
- Negative validation – record test audio clip with no sound and then attempt to save. If working correctly the app should give an error message pop-up informing the user that no audio was recorded and ask them if they still wish to save the recording or discard. Do a second recording with no words spoken and then attempt to convert to text. If function is correctly working an error message will pop-up informing the user that no speech was recorded to convert to text.

Document Scanner:

Scan and save documents or receipts within user defined folders. Receipts could be stored for use in tax filing later for example. Scanned items would be stored away from the phones native folders to keep separate and provide ease of being able to recall rather than entering a phones picture roll.

Validation Test:

- Positive validation – scan a test document. Save image, close and reopen app. If function is working correctly the images will be there on reopening
- Negative validation – attempt to scan a non-document item. If function is working correctly an error message will pop-up informing that no document was found to scan

Parallel web application:

A mirrored version of the app in a web application form. Web app and mobile app would have the ability to synchronise with each other, allowing changes or additions to be shown in real time across multiple platforms.

Validation Test:

- Positive validation – add test data to all functions of application. Save and close app then open web app. Correct function will have the same data show in web app
- Negative validation – n/a

Project Motivation

The motivation for this project overall is to increase our understanding and skill in developing mobile applications for Android using Java and Android Studio. The project itself is motivated by trying to provide organisational and planning functions that usually would require multiple different apps in the one place, without any of the lesser used secondary functions that those apps usually have as filler, essentially creating a meta-app for organisation, hence the name. We feel that by having these features all in one place it would make the tasks of organising and planning much easier and straight forward.

Project Justification

Justified Workload

Workload allocation for individuals and as a team has been divided based off our own capabilities and experience. Furthermore, as individuals we have all identified areas or tasks, we would like to expand our learning in to extend our knowledge base outcomes.

As individuals we all have our strengths and as such, each person will be assigned tasks which will draw upon their strength and will benefit the completion of the project. As the project progresses tasks and workloads may be assigned to other members either as a main point of contact or a secondary contact, this will help to ensure workload is distributed evenly within the group as well as giving other members exposure to workloads and tasks to help build experience.

Matt

Coming from a project management and management background, Matt has taken the lead when it comes to organising the group; team meetings and administrative tasks such as the editing and formatting of reports as well as designing workflow charts and process diagrams via Lucidchart. Further experience and knowledge with basic user interface design will be drawn upon to help bring the project to completion.

Luca

Luca is the main driving force behind Meta Merge Tasker. Luca proposed the initial idea which the group decided to develop. In order to stay true to Luca's vision, Luca will have final say on function implementation and design features. Luca has prior experience in programming, having well rounded experience in Python, Java, C++, and C#. He also brings HTML, XML, JavaScript and CSS knowledge. Due to his

knowledge and experience, Luca has taken on the role of Lead Programmer of Meta Merge Tasker.

Zachary

Zach has a good grounding in programming having experience in Java and Python as well as having a background in gaming development. Zach will work closely with Luca in the backend development of the project. Zach has expressed interest in UI design and as such will be working closely with Matt within this department.

Geoffrey

Geoff is another well experienced programmer with experience in web development, having used HTML, CSS, Java, Python. Geoff will bring experience in frontend development having prior exposure as well as an interest in debugging and error finding. As such, along with Adam, Geoff will be tasked with debugging and error finding during the project.

Adam

Adams substantial experience with fault finding and debugging will be greatly utilised to ensure functions work in the attended way. Adam will be the go-to team member along with Geoff's support when working out issues. Adam will also have input on designing and programming the front end of the project.

Furthermore, to the above, the team will be dedicating time to learn and research tools and resources which we are currently unfamiliar with. One such tool being Android Studio. We foresee Android Studio as being our main development platform but due to the team's overall inexperience, we will be putting aside time to explore it's uses and functions. We are estimating a timeframe of one week to explore Android Studio to a suitable level.

Overall, there are many moving parts to our project, and it is expected that team members will need to step out of their specialised area to help and learn about other facets of the project.

Being able to step across into other areas should only serve our team and the project in a positive way moving forward as it will create greater synergy when dealing with unforeseen issues and the team's ability to handle any such issues.

Beyond Current Capabilities

Adam

Over the years of working in the IT industry in various roles I have had a good exposure to various programming languages and team-based projects including open-source projects with many contributors working together; however, most of my front-end development work has been focused on web applications and none of these projects were not targeting mobile devices in the form of an application.

I also believe that debugging and fault finding a mobile application is outside of my current experience; so, I will need to adapt my existing skill set, whilst also learning new methods of fault finding and debugging on a mobile device, to appropriately

report the issues to the development team with viable solutions to any issues found thought-out the fault-finding and debugging process.

Geoff

Having completed introduction into programming and programming 1 have a basic knowledge of python and java but have also used other languages such as HTML and CSS for web design, I am confident in using these languages but have yet to put them into a real-world scenario such as the design of a functioning android application. Due to this I think this is not completely out of my capabilities but will be a challenge for me to learn how to put what I've learned into a working application. Another challenge I see is getting used to the concept of using Trello although it is rather simple, I feel there is certainly parts of the process that I will have to spend time learning. To get the upper hand I will be spending time researching and learning what I can about application development to help build my confidence and in turn lead to a working application.

Zach

I have been introduced to Python and Java programming through the 'Intro to Programming' and 'Programming 1' units. Building a full Android application appears to be beyond my current capabilities. I will need to familiarise with the Android Studio IDE and learn how Android applications are built. I will also need to further my knowledge on using GitHub to collaboratively build our application. Reading tutorials, watching instructive videos and team discussion will help to prepare me for this project.

Matt

The biggest hurdle I will be facing throughout this study period and project will be my limited knowledge and experience in coding and programming. Thus far, I have only completed and studied programming during my "Introduction to Programming" class in a previous semester. I was exposed to Python during this course and as such, is the only language I have dealt with. I have had greater dealings with HTML and CSS and although they are not recognised as programming languages as such, my experience with them will come in handy for a portion of the project.

My aim for the conclusion of this course is to have a better well-rounded knowledge and experience with not only other programming languages like Java, C#, or C++ but to also have a greater understanding and working knowledge of the tools we will be using like Trello and Android Studio. Another aim I would like to accomplish is, being better at creating more creative UI designs, my limited experience has seen me use templates from Figma however, I would like to get to a point where I can feed off inspiration to design something original.

Luca

While I do have experience creating and debugging mobile applications, I have only ever done so in Visual Studio using C#, so it will be a learning experience both using Android Studio as the design environment and Java as the language (have had experience with Java but only for desktop and console applications, no mobile).

I have also had experience using GitHub for version control but still am learning it and this would be my first time using it for a mobile application, including prototyping etc.

Project Risks

Risk is a part of any group work/project, no matter what industry or field of work you are in risk are always present but can almost always be avoided by following certain guidelines and procedures. The IT industry is full of risk which can lead to major issues regarding a projects progress and can sometimes even lead to a project coming to an end. At the start of every project the team should spend the time and go over all risk that could be present in the upcoming project and discuss for each risk a process that can be put in place to resolve any problems before they can escalate.

Having a risk assessment chart will help the team assess the severity that that risk can pose to the project.

Poor Quality Code:

A lot of IT projects rely heavily on the code functioning correctly, any issues in the code should be highest priority to rectify. Having faulty code can cause errors of all sorts such as SyntaxError, IndentationError so on so forth. Some errors can even stay hidden inside the code and cause issues that aren't initially present when testing.

Defective Hardware:

Hardware failure can significantly impact any project development and hosting. If hardware is to fail mid project like a hard drive failure or a system outage it is imperative that all data is constantly backed up etc. Procedures and guidelines should always be put in place to avoid these circumstances.

Miscommunication of ideas/task:

Great care should be taken to elaborate on tasks and concepts, using oral and written media to make information concise. Failure to do such things can lead to projects falling behind and, in an industry, environment can cause major losses to the company.

Team Members dropping out/leaving with short to no notice:

There is always the risk of team members dropping out or leaving with next to no notice leaving the group in an unwanted situation, this can lead to group members being assigned unexpected workloads and can lead to such things as stress and conflict. There is no way to really avoid these situations taking place but can be handled in a manageable matter by providing solutions as soon as possible.

How

Resources & Tools

To build the Meta Merge Tasker application, we will be utilising the following resources and tools:

Android Studio - <https://developer.android.com/studio>

(Download Android Studio & App Tools - Android Developers, 2022)

Description:

Android Studio is an integrated development environment (IDE) for building applications for Android mobile devices.

Rationale:

- This tool is an official IDE for developing Android applications.
- IDE provides an integrated android emulator to test and run code.
- Ability to easily test application builds on specific android hardware through a USB connection.
- Recommended by a team member who has experience working with this IDE.
- Supports Java, a programming language that a majority of the team are familiar with.
- Cross platform can be used on Windows and Mac operating systems.

Version and Cost:

Android Studio is free to use, and we will be using the latest version which, at time of writing, is Android Studio Dolphin 2021.3.1.

Alternatives:

Visual Studio - <https://visualstudio.microsoft.com/>

Eclipse - <https://www.eclipse.org/ide/>

IntelliJ IDEA - <https://www.jetbrains.com/idea/>

GitHub - <https://github.com/>

(GitHub: Where the world builds software, 2022)

Description:

An online development tool and cloud space that facilitates collaborative IT projects. Git is open-source version control software and GitHub acts as an interface to collaboratively manage Git projects.

Rationale:

- Protects collaborative work using development branches, pull requests and backups.
- Enables team members to comment and discuss their work and progress.
- Records development history by managing commits.
- A more secure and streamlined process compared to editing unmanaged files on a shared server.

Version and Cost:

- GitHub is an online platform that is currently being maintained and receiving updates.

- GitHub provides free personal accounts with access to all their core features, and we will be using free student accounts to access the platform.

Alternatives:

Concurrent Versions System (CVS) - <http://cvs.nongnu.org/>

IBM Rational ClearCase - <https://www.ibm.com/products/rational-clearcase>

Google Drive - https://www.google.com/intl/en_au/drive/

Figma - <https://www.figma.com/>

(Figma, 2022)

Description:

Figma is a web based UI development and prototyping tool, with a focus on team collaboration.

Rationale:

- Being web based, this software works well with most browsers and is easily accessible across multiple platforms.
- Features a community library of assets that can be used to mock up and create UI designs.
- Provides Android code for the visual layout of UI components.

Version and Cost:

Figma is web-based software that is currently actively maintained and updated. Figma provides a limited free subscription and a free student account upgrade to eligible students.

Alternatives:

Sketch - <https://www.sketch.com/>

Mockitt - <https://mockitt.wondershare.com/>

Microsoft Paint -

<https://apps.microsoft.com/store/detail/paint/9PCFS5B6T72H?hl=en-us&gl=us>

Lucidchart - <https://www.lucidchart.com/pages/>

(Intelligent Diagramming | Lucidchart, 2022)

Description:

Lucidchart is a web-based tool for collaborative teams to effectively create and share charts and diagrams.

Rationale:

- Another web-based tool, enabling easy access across different operating systems and devices.
- Integrated with Microsoft Teams.
- Simple, drag and drop chart building mechanics.
- Facilitates real time collaborative development.

Version and Cost:

Lucidchart is also an online tool that is actively maintained and updated. The service provides limited access for free accounts and provides free upgraded access for eligible students.

Alternatives:

Gliffy - <https://www.gliffy.com/>

Visme - <https://www.visme.co/>

Microsoft Excel - <https://www.microsoft.com/en-us/microsoft-365/excel>

Collaborative Workspaces

Microsoft Teams - <https://www.microsoft.com/en-au/microsoft-teams/teams-for-work>

(Microsoft Teams, 2022)

Description:

Microsoft Teams is a collaboration tool that allows teams to organise tasks, share documents, communicate, and host meetings.

Rationale:

- Integrates with the suite of Microsoft office tools, and a plethora of other collaborative applications and tools, including Trello, which makes it easy for the team to access most of the tools we need to collaborate and work on our project.
- Provides a space where the team can work together on writing documents.
- Provides channels that we can use to manage different areas of discussion, ensuring information is easily accessible and manageable for all team members and won't get lost or overlooked.
- The team is familiar with, and has previous experience working with, Microsoft Teams.

Version and Cost:

Microsoft Teams is provided across a number of different operating systems and devices, and we will be using the most up to date versions.

At time of writing, the most recent versions of Microsoft Teams include:

Web version - 1.5.00.21668 - released 30/08/2022

Windows Desktop - 1.5.00.21668 - released 30/08/2022

Mac Desktop - 1.5.00.22362 - released 30/08/2022

(Microsoft, 2022)

Mobile version - 1.0.0.2022372201 - released 30/08/2022

(Source: MS Teams app on Zachary's Android phone)

Microsoft Teams provides a free subscription that includes 5GB of storage space per user. They also provide free student accounts for eligible students.

Alternatives:

Slack - <https://slack.com/intl/en-au/>

Google Meet - <https://apps.google.com/meet/>

WhatsApp - <https://www.whatsapp.com/>

Trello - <https://trello.com/>

(Trello, 2022)

Description:

Trello is a web application that is like a virtual Kanban board and provides a visual interface for teams to manage projects, workflows and organise tasks.

Rationale:

- Required for the study of this Building IT Systems (2277) unit.
- Assists with self-management of team members and provides snapshots into team progress.
- Visual interface is engaging and easy to work with.

Version and Cost:

Trello is web-based software that is actively maintained and updated. They also provide applications for Windows desktop, Mac desktop, IOS and Android. Currently, the latest version of the Mac desktop application is 2.13.6 and the latest version of the Android app is 2022.12.3.1643.

We will mainly be using Trello through their web-based software via MS Teams.

Alternatives:

OnBoard - <https://www.onboardmeetings.com/>

Boardable - <https://boardable.com/>

Simbli - <https://eboardsolutions.com/>

Communication Expectations:

Communication throughout the project will be done mainly through Microsoft teams alongside with Trello. Weekly meetings will be commenced every Thursday at 9pm, all meeting will be recorded, a detailed meeting report will be generated consisting of timestamps and weekly task to be completed. All members of the team will be required to take part in each weekly meeting to ensure that no one falls behind and everyone is on the same page, if a member is unable to attend the weekly meetings due to certain circumstances such as work or other commitments, they are to watch the recording and get in contact with the team leader so they can be caught up on all current progress.

Communication between team members regarding current project task is to be handled in a timely matter, for example in the scenario that a team member is at a standstill and requires another team member to complete a section of work before they can continue, they are required to contact the team member directly, requesting the required task to be completed. If the team member does not reply within a 24-hour period, then the team leader is to be notified so that the task can be either assigned to another member of the group or other efforts are made to contact the required team member.

Decision Making Processes:

Decision making for the group is to be done via a voting system. When a decision needs to be made that affects the group/assignments the vote will be put down and majority rules, if the voting comes to a tie, then the decision will then fall to the team leader to decide. In the scenario that group members are still not happy, and conflict is starting to arise the next process will be to talk to the group mentor to find a route/decision that will ensure all members of the group are happy and progress on the assignment can continue. This method will also be put in place for all other scenarios like group conflict.

When

Title	Planned Start	Planned Due	Lead by
Week 3 - Finalise project idea - https://trello.com/c/3VSjz4Fx			
Finalise Project Idea. Team effort led by Luca. https://trello.com/c/cxDVAcOA	12/09	18/09	Luca Pallas Project Idea Leader
Fill in section 1.3 of project proposal for each team member. Each team member to fill in their part for this section. Team effort led by Matthew. https://trello.com/c/f2awHrj4	12/09	18/09	Matthew Wotton Project Manager
Team Meeting: https://trello.com/c/YZG16NvP	15/09 @ 9pm (AEST)	15/09 @ 10pm (AEST)	Matthew Wotton Team Leader
Week 4 - Complete project proposal report (Assignment 1 part 1) - https://trello.com/c/11GARKnE			
Project proposal (1.1) Define name for project application. Team effort led by Luca. https://trello.com/c/eMELAA2P	19/09	22/09	Luca Pallas Project Idea Leader
Project proposal (1.2) Project description. https://trello.com/c/5DcmEQ9m	19/09	22/09	Matthew Wotton Reporting
Project proposal (1.3) Finalise Team section. https://trello.com/c/0uaV5JyV	19/09	22/09	Matthew Wotton Team Leader
Project proposal (1.4) Complete demonstrable outcomes https://trello.com/c/LMhLsUyQ	19/09	22/09	Matthew Wotton Project Manager Luca Pallas Project Idea Leader

Project proposal (1.5) Complete project motivation https://trello.com/c/ASAsfaHe	19/09	22/09	Luca Pallas Reporting
Project proposal (1.6.1) Complete project justification https://trello.com/c/UFkQ4bBh	19/09	22/09	Matthew Wotton Reporting
Project proposal (1.6.2) Complete beyond current capabilities - All team members to contribute, led by Matthew https://trello.com/c/E1gcN4MV	19/09	22/09	Matthew Wotton Team Leader
Project proposal (1.7) Complete project risks https://trello.com/c/kpHqFHxs	19/09	22/09	Geoffrey Davis Reporting
Project proposal (2.1) Complete resources and tools https://trello.com/c/o2Y95KOJ	19/09	22/09	Zachary Williams Reporting Adam Mutimer Developer
Project proposal (2.2) Complete collaborative workspaces https://trello.com/c/4q26KdN1	19/09	22/09	Zachary Williams Reporting
Project proposal (2.3) Complete communication expectations https://trello.com/c/NmKW2KSz	19/09	22/09	Geoffrey Davis Reporting Matthew Wotton Team Leader
Project proposal (2.4) Complete decision-making processes https://trello.com/c/oqutW1Mh	19/09	22/09	Geoffrey Davis Reporting
Project proposal (3.0) Complete 'When' timeline https://trello.com/c/YXv1NDhl	19/09	22/09	Zachary Williams Research and Reporting
Team meeting: https://trello.com/c/fYQvzz2f	22/09 @ 9pm (AEST)	22/09 @ 10pm (AEST)	Matthew Wotton Team Leader
Finalise and review project proposal – team effort led by Matthew https://trello.com/c/Lh6WPXnq	22/09	25/09	Matthew Wotton Project Manager
Submit project proposal (Assignment 1 – part 1) https://trello.com/c/6tRrtPML	25/09	25/09	Matthew Wotton Team Leader
Week 5 – Set up and familiarise with the tools we will be using for our project and defining the specific functionalities for each MVF that we will build into our app. - https://trello.com/c/WxKnpsEH			

Set up project tools – All team members, led by Matthew https://trello.com/c/Fw5C7cOp	26/09	29/09	Matthew Wotton Team Leader
Familiarise with project tools – All team members, led by Matthew, Adam and Luca https://trello.com/c/UfOoZR3j	26/09	29/09	Matthew Wotton Team Leader Adam Mutimer Android Studio Support Luca Pallas Figma Support
Set up GitHub repository https://trello.com/c/jYFg7ssY	26/09	29/09	Adam Mutimer GitHub Leader
Team meeting: https://trello.com/c/jODND0vW	29/09 @ 9pm (AEST)	29/09 @ 10pm (AEST)	Matthew Wotton Team Leader Adam Mutimer Development Advice
Create 'Feature Functionality and Implementation Research' document in MS Teams https://trello.com/c/QBcM2pRF	29/09	02/10	Zachary Williams Research and Development
WEEK 5 – SUB GROUP 1: Research specific functionalities for MVF 1 and MVF 2 (Breaking down each MVF and identifying the specific functions/fundamentals/tasks that make them work) https://trello.com/c/2BFRYVBS	29/09	02/10	Zachary Williams Research and Development Luca Pallas Research and Development
WEEK 5 – SUB GROUP 2: Research specific functionalities for MVF 3 and MVF 4 (Breaking down each MVF and identifying the specific functions/fundamentals/tasks that make them work) https://trello.com/c/ZQZIB6rK	29/09	02/10	Adam Mutimer Research and Development Geoffrey Davis Research and Development
WEEK 5 – SUB GROUP 3: Research specific functionalities for MVF 5 (Breaking it down and identifying the specific functions/fundamentals/tasks that makes it work) https://trello.com/c/NT06UmTM	29/09	02/10	Zachary Williams Research and Development Matthew Wotton Research and Development

Week 6 – Develop a unified UI design language and commence prototyping the 'Home Menu', Commence reporting on implementing EVFs. - https://trello.com/c/8VblKeC			
Team meeting 1 (a 30min to an hour meeting scheduled between 03/10 to 04/10): https://trello.com/c/5qm8vZDr	03/10 Unspecified time 30 – 60 minutes duration	04/10	Matthew Wotton Team Leader Luca Pallas Figma and UI Advisor
WEEK 6 – SUB GROUP 1 – UI LAYOUT use the online Figma tool to design basic UI layouts for MVF 1 and MVF 2. https://trello.com/c/16eVfPDh	03/10	06/10	Zachary Williams UI Developer Matthew Wotton UI Developer
WEEK 6 – SUB GROUP 2 – UI LAYOUT use the online Figma tool to design basic UI layouts for MVF 3 and MVF 4. https://trello.com/c/XkP50M1r	03/10	06/10	Adam Mutimer UI Developer Luca Pallas UI Developer
WEEK 6 – SUB GROUP 3 – UI LAYOUT use the online Figma tool to design basic UI layouts for MVF 5 and the applications main Home Menu. https://trello.com/c/3pA0eoRz	03/10	06/10	Luca Pallas UI Developer Geoffrey Davis UI Developer
Team meeting 2: https://trello.com/c/Pl8YWG6Q	06/10 @ 9pm (AEST)	06/10 @ 10pm (AEST)	Matthew Wotton Team Leader Luca Pallas Figma and UI Advisor Zachary Williams Creative Design
WEEK 6 SUB GROUP – UI Develop a unified UI language map https://trello.com/c/lwurHklt	06/10	09/10	Matthew Wotton Project Manager Luca Pallas UI advisor Zachary Williams

			Creative design
<p>WEEK 6 SUB GROUP – DEVELOPMENT</p> <p>Set up preliminary project files and develop a front end prototype for the ‘Home Menu’</p> <p>https://trello.com/c/4EWhJqJO</p>	06/10	09/10	<p>Matthew Wotton Project manager</p> <p>Geoffrey Davis Backend supervisor</p> <p>Adam Mutimer Senior Developer</p>
<p>Report on implementing EVF 1</p> <p>https://trello.com/c/EOt8QzNY</p>	06/10	30/10 (4 weeks)	Matthew Wotton Research and Development
<p>Report on implementing EVF 2</p> <p>https://trello.com/c/VlqmNrfu</p>	06/10	30/10 (4 weeks)	Geoffrey Davis Research and Development
<p>Report on implementing EVF 3</p> <p>https://trello.com/c/HPikhGGh</p>	06/10	30/10 (4 weeks)	Zachary Williams Research and Development
<p>Week 7 – Continue building ‘Home Menu’ frontend prototype and commence building frontend prototypes for MVF 1, MVF 2 and MVF 3 -</p> <p>https://trello.com/c/heobwVlp</p>			
<p>Team meeting 1: (a 30min to an hour meeting scheduled between 10/10 to 11/10):</p> <p>https://trello.com/c/nhpLQ45D</p>	10/10 Unspecified time 30 – 60 minutes duration	11/10	<p>Matthew Wotton Team Leader</p> <p>Adam Mutimer Senior Developer</p>
<p>Frontend development help and technical issues log</p> <p>This will be a document on MS Teams that is linked to the Trello card for this task.</p> <p>The team will use this document to report any technical issues they may be having while working on frontend development. All team members will be encouraged to review this log and provide assistance where they can. The senior developer will keep track of this log and provide further assistance when the rest of the team can't.</p> <p>https://trello.com/c/fKlhJ9xc</p>	10/10	24/10 (Start of week 9)	<p>Adam Mutimer Senior Developer</p> <p>Zachary Williams Developer</p>

WEEK 7 – SUB GROUP 1 - 'Home Menu' and MVF 1 front end development Use Android Studio and GitHub to collaboratively work to build working frontend prototypes. https://trello.com/c/ZBvXFD1g	10/10	16/10	Adam Mutimer Senior Developer Zachary Williams Frontend Developer Geoffrey Davis Frontend Developer
WEEK 7 – SUB GROUP 2 - MVF 2 and MVF 3 front end development Use Android Studio and GitHub to collaboratively work to build working frontend prototypes. https://trello.com/c/yuKulsIv	10/10	16/10	Adam Mutimer Senior Developer Matthew Wotton Frontend Developer Luca Pa Frontend Developer
Teem meeting 2: https://trello.com/c/UIAZeHmP	13/10 @ 9pm (AEST)	13/10 @ 10pm (AEST)	Matthew Wotton Team Leader Adam Mutimer Senior Developer
Week 8 – Commence building front end prototypes for MVF 4 and MVF 5, and start testing working frontend prototypes - https://trello.com/c/m1nplHvW			
Team meeting 1: (a 30min to an hour meeting scheduled between 17/10 to 18/10): https://trello.com/c/0Q2wWsyk	17/10 Unspecified time 30 – 60 minutes duration	18/10	Matthew Wotton Team Leader Adam Mutimer Senior Developer
WEEK 8 SUB GROUP 1 – Build frontend for MVF 4 https://trello.com/c/Nmo1VImh	17/10	23/10	Adam Mutimer Frontend Developer Zachary Williams Frontend Developer

WEEK 8 SUB GROUP 2 – Build frontend for MVF 5 https://trello.com/c/0kgkiKGb	17/10	23/10	Adam Mutimer Frontend Developer Geoffrey Davis Frontend Developer
WEEK 8 SUB GROUP 3 – Test working prototypes and report on findings https://trello.com/c/X03kpqvU	17/10	20/10 @ 8pm (AEST)	Matthew Wotton Frontend Tester Luca Pallas Frontend Tester
WEEK 8 SUB GROUP 3 – Plan for testing remaining MVF frontends https://trello.com/c/X03kpqvU	20/10	23/10	Matthew Wotton Frontend Tester / Frontend Developer Luca Pallas Frontend Tester / Frontend Developer
Team meeting 2: https://trello.com/c/d4dS97XD	20/10 @ 9pm (AEST)	20/10 @ 10pm (AEST)	Matthew Wotton Team Leader Adam Mutimer Senior Developer Luca Pallas Lead Tester
WEEK 8 SUB GROUP 3 – Plan for testing remaining MVF frontends https://trello.com/c/Ak3xGjSU	20/10	23/10	Matthew Wotton Frontend Tester / Frontend Developer Luca Pallas

			Frontend Tester / Frontend Developer
Week 9 – Complete frontend prototypes and commence development of backend prototypes for MVF 1 and MVF 2 - https://trello.com/c/CfXCL1BQ			
Team meeting 1: (a 30min to an hour meeting scheduled between 24/10 to 25/10): https://trello.com/c/kSpElqQX	24/10 Unspecified time 30 – 60 minutes duration	25/10	Matthew Wotton Team Leader Adam Mutimer Senior Developer
Backend development help and technical issues log This will be a document on MS Teams that is linked to the Trello card for this task. The team will use this document to report any technical issues they may be having while working on backend development. All team members will be encouraged to review this log and provide assistance where they can. The senior developer and backend supervisor will keep track of this log and provide further assistance when the rest of the team can't. https://trello.com/c/luDPgojU	24/10	10/11	Adam Mutimer Senior Developer Geoffrey Davis Backend Supervisor Zachary Williams Developer
WEEK 9 SUB GROUP 1 – Finalise frontend prototypes https://trello.com/c/GlhFs7dW	24/10	30/10	Adam Mutimer Senior developer Matthew Wotton Frontend developer
WEEK 9 SUB GROUP 2 – Build MVF 1 backend prototype https://trello.com/c/d8l8p1hQ	24/10	30/10	Adam Mutimer Backend Developer Zachary Williams Backend Developer
WEEK 9 SUB GROUP 3 – Build MVF 2 backend prototype https://trello.com/c/L74EW3ya	24/10	30/10	Luca Pallas Backend Developer Geoffrey Davis

			Backend Developer
Team meeting 2: https://trello.com/c/7zMXD9W5	27/10 @ 9pm (AEST)	27/10 @ 10pm (AEST)	Matthew Wotton Team Leader Geoffrey Davis Backend Supervisor
Week 10 – Commence development of backend prototypes for MVF 3, MVF 4 and MVF 5 - https://trello.com/c/lFuaUPaC			
Team meeting 1: (a 30min to an hour meeting scheduled between 31/10 to 01/11): https://trello.com/c/rM0UA5Pz	31/10 Unspecified time 30 – 60 minutes duration	01/11	Matthew Wotton Team Leader Geoffrey Davis Backend Supervisor
WEEK 10 SUB GROUP 1 – Build backend prototype for MVF 3 https://trello.com/c/t8MIZcaj	31/10	06/11	Adam Mutimer Backend Developer Matthew Wotton Backend Developer
WEEK 10 SUB GROUP 2 – Build backend prototype for MVF 4 https://trello.com/c/w5fayVmo	31/10	06/11	Zachary Williams Backend Developer Geoffrey Davis Backend Developer
WEEK 10 SUB GROUP 3 – Build backend prototype for MVF 5 https://trello.com/c/Uhq8RjSP	31/10	06/11	Luca Pallas Backend Developer Adam Mutimer Backend Developer
Team meeting 2: https://trello.com/c/kfWvBLeL	03/11 @ 9pm (AEST)	03/11 @ 10pm (AEST)	Matthew Wotton Team Leader Geoffrey Davis Backend Supervisor
Week 11 – Finalise backend prototypes, initiate testing backend prototypes and commence integrating MVFs into the 'Home Menu' - https://trello.com/c/oZr2Inoc			

<p>Team meeting 1: (a 30min to an hour meeting scheduled between 07/11 to 08/11):</p> <p>https://trello.com/c/3jfYOpVr</p>	<p>07/11 Unspecified time 30 – 60 minutes duration</p>	<p>08/11</p>	<p>Matthew Wotton Team Leader</p> <p>Geoffrey Davis Backend Supervisor</p> <p>Adam Mutimer Senior Developer</p>
<p>Application integration development help and technical issues log</p> <p>This will be a document on MS Teams that is linked to the Trello card for this task.</p> <p>The team will use this document to report any technical issues they may be having while working on integrating MVF prototypes into the 'Home Menu'. All team members will be encouraged to review this log and provide assistance where they can. The senior developer and backend supervisor will keep track of this log and provide further assistance when the rest of the team can't.</p> <p>https://trello.com/c/64Dwzalk</p>	<p>07/11</p>	<p>17/11</p>	<p>Adam Mutimer Senior Developer</p> <p>Geoffrey Davis Backend Supervisor</p> <p>Zachary Williams Developer</p>
<p>WEEK 11 SUB GROUP 1 – Finalise backend prototypes yet to be completed and implement any required improvements</p> <p>https://trello.com/c/PRu34468</p>	<p>07/11</p>	<p>10/11</p>	<p>Adam Mutimer Backend Developer</p> <p>Geoffrey Davis Backend Developer</p>
<p>WEEK 11 SUB GROUP 2 – integrate MVF prototypes into the 'Home Menu' to build the full application</p> <p>https://trello.com/c/JcZTxnui</p>	<p>07/11</p>	<p>13/11</p>	<p>Adam Mutimer Full Stack Developer</p> <p>Luca Pallas Full Stack Developer</p>
<p>WEEK 11 SUB GROUP 3 - Test backend prototypes and report on findings</p> <p>https://trello.com/c/ro1PpwQ4</p>	<p>07/11</p>	<p>13/11</p>	<p>Geoffrey Davis Backend Tester</p> <p>Matthew Wotton Backend Tester</p>

Team meeting 2: https://trello.com/c/BCGWEFI2	10/11 @ 9pm (AEST)	10/11 @ 10pm (AEST)	Matthew Wotton Team Leader Adam Mutimer Senior Developer
Week 12 – Test application navigation and stability, finalise and implement application improvements, prepare for project submission - https://trello.com/c/UW5YrfMV			
Team meeting 1: (a 30min to an hour meeting scheduled between 14/11 to 15/11): https://trello.com/c/JYOYNkOG	14/11 Unspecified time 30 – 60 minutes duration	15/11	Matthew Wotton Team Leader Adam Mutimer Senior Developer
WEEK 12 SUB GROUP 1 – Finalise outstanding work to complete a working application https://trello.com/c/q86kE1KB	14/11	17/11	Adam Mutimer Full Stack Developer Geoffrey Davis Full Stack Developer
WEEK 12 SUB GROUP 2 – Apply required application refinements and improvements as reported by the testing team https://trello.com/c/JdqxUYIW	14/11	19/11	Adam Mutimer Full Stack Developer Zachary Williams Full Stack Developer
WEEK 11 SUB GROUP 3 - Test and report on application navigation, bugs and stability https://trello.com/c/aKeAoXba	14/11	17/11	Matthew Wotton Application Tester and Bug Reporting Luca Pallas Application Tester and Bug Reporting
Team meeting 2: https://trello.com/c/iceXa3jf	17/11 @ 9pm (AEST)	17/11 @ 10pm (AEST)	Matthew Wotton Team Leader Adam Mutimer Senior Developer

			Luca Pallas Lead Bug Tester
Prepare for project submission https://trello.com/c/iDt3VHzZ	17/11	19/11	Matthew Wotton Project Manager Zachary Williams Assistant project manager

References:

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Trello.com. 2022. [online] Available at: <<https://trello.com/w/stdoutsystems/home>> [Accessed 28 September 2022].