Summary of work completed for Assignment 3 Introduction to IT, Class A Group 8

"The Transistor Team"

Team members: Daniel Mammone, Harley Tuleja, Liam Hackett, Mary Jane Amos, Steven Flanigan.

Introduction.

Contained within this report is the required information for assignment 3 with external links to our group website(https://harleytee.github.io/IIT-Group-8-A3/) which contains links to our personal websites.

The report will be set out in sections each addressing the following criteria:

- Team Profile which includes Team name and summarised personal information, a more in depth look into individual team members profiles can be found through our personal pages on our team website.
- Links to our group website, our Github Repository and a link to our Audit trail through GitHub
- A detailed rundown of our team project, with detailed explanations of our project, the motivation behind it, what similar applications are out there. We will explain a road map of what we have done and how we would progress into the future. We will explain what tools and technologies we used through out the project.
- A summary of hypothetical job positions within our future "company".
- A reflection of how well our group worked together, including what could be improved and what we did well along side individual reflections.

The report will be set out in this PDF document along with a video submission of our project any supporting documents can be found within out GitHub repository alongside what is contained within this report.

Team Profile

Our team of 5 comes from varied backgrounds with varied experience in Information Technology (IT) you can find our profile here. We decided on the name "The Transistor Team" as transistors are the building blocks of microchips. This is relevant to the industry and to the content in this course. All the visuals for our tests are included in our personal websites attached to our profiles.

<u>Daniel Mammone - S3817613</u> S3817613@student.rmit.edu.au

I live in Melbourne with my partner. I work full time in truck parts sales but hoping to change that it an IT role soon. I've always liked technology and what it is capable of. I love playing video games and watching movies and TV series. I like seeing live bands either at concerts or festivals and I love my cars.

Preferred learning style-Tactile/Kinaesthetic

Myers-Briggs - INTJ

Big Five-personality test: https://daniel2693.github.io/big_five.html

Harley Tuleja – S3812513 S3812513@student.rmit.edu.au

I am a new father with a keen interest in IT while having no formal experience I have been involved with computers and the industry second hand my whole life. In my spare time I try to get into mountain sports and computer games. I live in Launceston Tasmania and have travelled the world, my personal profile is here and within that website you will find out more about me.

Myers-Briggs – INFP-T The Mediator

Learning Style Audio:35% Visual:35% Tactile:30% Learning Style(Creativity) – 59.96(average = 63.3)

Liam Hackett - S3574031 S3574031@student.rmit.edu.au

Currently living in Sydney in the Northern Beaches with my partner and my dog. I'm working full-time managing a Gym and studying on the side. My current degree is a Bachelor of Business (Logistics and Supply Chain Management. I was working in the Supply Chain/Logistics field, focusing on Purchasing and Procurement before I took my newest role. My partner is from Brazil so I am learning Portuguese on the side when I find the time. The following link is where you can find more information on me https://liamblair87.github.io/

Myers-Briggs - ISFP Introvert (3%) Sensing (9%) Feeling (19%) Perceiving (25%)

Creativity Test - Learning Style (Creativity) – 57.38 (Typical = 63.3)

Learning Style Test - Mind - 43%/57% Extroverted/Introverted.

Energy - 67%/33% Intuitive/Observant

Nature - 39%/61% Thinking/Feeling

Tactics - 43%/57% Judging/Prospecting

Identity - 29%/71% Assertive/Turbulent

Mary-Jane Amos - S3817195 S3817195@student.rmit.edu.au

I'm a 22-year-old girl with an interest in all things pertaining to science from biological to technological! I love to learn and I love to help people with what I've learn! Through these web pages I hope you are able to learn more about myself here and this team.

Myers-Briggs – INFJ-T

71% introverted, 62% Intuitive, 53% feeling, 75% Judging 57% Turbulent

Learning Style: Auditory 35%, Visual 35% Tactile 30%

Steven Flanigan - S3819610 S3819610@student.rmit.edu.au

I am from Wagga Wagga NSW with a keen interest in programming as it is one of my hobbies. My other hobbies in reading, listening to music and playing games. I have very little experience in IT as I just build myself and family members computers and fix them when there are problems. My personal profile can be found here.

Myers-Briggs ESTJ
Learning Style: Auditory 40%, Visual 40%, and Tactile 20%
Personality Traits (OCEAN TEST): Openness 100%,
Conscientiousness 87.5%,
Extroversion 31%,
Agreeableness 87.5%

Group Processes

How well did your group work together in Assignment 2?

We worked well for A2 but will be trying harder to stick to a dead line as we had a bit of crunch toward the end of the A2 assessment period. We all worked hard to complete the tasks we had chosen.

Will you be introducing any changes in process for Assignment 3?

Less of a chaotic approach breaking up the assignment into small parts that can be divided between members of the group. We have created a flow chart that we will keep on top of our 'tasks'. If we stick to it we will have no stress or problems knocking this report out of the park. We are still using discord as our main method of communication as this is working well for us.

What common elements are there, if any?

Neuroticism 6%

Software Development is the most common element, the majority of us have chosen different industries to work in but for the most part we all want to have a hands on programming career. We hope to get more of an in depth understanding of our respective industries as we progress through the bachelor.

What differentiates each position from the others, if anything?

The differences between our career choices vary in the industry not particularly the skills, We have Harley wanting to develop software within a big entertainment company like Blizzard or Mary Jane wanting to develop programs related to the medical science career leaning upon her Bachelor of Biomedical science. Liam wants to develop mobile apps leaning towards developing apps for government agencies where he can improve the lives of Australians. Steven wants to be a software engineer (programmer) working in the Cyber security industry, he would prefer to work in with C++ as his main programming language. Daniel's career plan is the most different from the rest of us, as he would like to be a network engineer. Preferring to set up complex networks for businesses and companies.

How similar or different are your career plans across the group?

Our groups career plans are very diverse, all within the IT industry but with wildly different disciplines if you will. The most popular career path we have decided upon is a software developer in some part as 4 out of 5 of us want to specialise in that industry.

TOOLS

For this assessment we have tried and used a number of different tools, the main tools we used have been Github for our collaboration and website editing/design.

In terms of text editors for the web design we have used Atom, NotePad++ Microsoft Visual Studio. All of these text editors are great as they are easy to use and have plenty of resources online re learning, we found that Atom in particular stands out as it links directly into Github and makes tracking and editing our files easy.

For the Presentation we have used DaVinci Resolve 16.0.0060 as our video editing software as it is free and very well designed and versatile. To record our video we used various mobile phones for our video and inbuilt microphones for recording audio. Mary-Jane has done an outstanding advertisement using powtoons, a powerful application with many uses in the IT industry such as creating powerful presentations.

GitHub has been very useful for keeping all of our project files up to date with each other in real time, although it has been a learning process for all of us; we have found that with repetition we have got the hang of it. You can see out Github repository here with our contributions here. These logs are very misleading, as it doesn't account for the work that is completed offline and out of the GitHub environment. This also doesn't account for the work that is carried over from A2 to A3. In the future to maintain accuracy of project input we would just keep our Git log updated so it is current at all times, making sure that we don't do our work offline.

'iPlantified' - Our Project

Overview

Our project idea is a smartphone-based application that reminds the user to water/fertilise you house/indoor plants. We plan to notify the user with push notifications that are non-invasive and can be customised to the users preferences. Our application will have a large database of common houseplant with plans to continually add more plants and care guidelines in the future.

We plan to have a user specific list/library of their houseplants that includes watering guidelines, sunlight preferences and fertiliser requirements. Our app will be visually appealing and user friendly with plans forever growing expansion and features.

By the end of the 12-week of this course we hope to have a fully fleshed out plan of how we would proceed to create this app, this will include concept sketches or mock-ups of how our app will look, logos, information on the most common house plants. As we have minimal collective experience in coding or designing applications it would be unrealistic to believe that we can have a fully finished product, but we will have fleshed out a plan moving forward from the 12 week period to create this app.

Motivation

Our motivation for this idea comes from a few places; firstly, it's the only one of its kind. At time of writing (8-11-19) there are no other dedicated plant watering applications on androids "Google Play Store" and Apple's "App Store". We feel that our app will be able to capture a niche in the app market at this time.

We have all had experience in losing multiple plants due to forgetfulness or not providing the correct growing conditions for a plant to flourish. Our app will make caring for your indoor plants easier and eliminate any elements of human error such as over watering, under watering, or placing plants into incorrect areas of your home.

Finally houseplants can be expensive! Some plants cost in excess of \$2000! So these are not just plants, they are investments. Like all investments you want to be able to protect them, our app will give you the tools required to make your investments flourish and last for years to come.

<u>Aims</u>

This application will have a list of the most common household houseplants along with some rare and exotic ones too. They will all be in a list format with the ability to search for them either by their common name, scientific name or scroll through our library of images. Once the plant has been chosen the application will then open a new screen a show a picture of the plant as well as brief run down. The run down will include information such as; care level (low, medium or high), the amount of sunlight it requires, how often (if ever) you are required to fertilise, the type and density of the soil it likes, the plants average size, the amount of water it needs to survive and ideal humidity. Once the user scrolls past the run down it will give the user a detailed description of the plant and further care information for the plant. After the user has selected a plant they will be asked if they know when the plant was last watered as this will help the algorithm decide the next day to water (if unknown it will assume it needs to be watered on that day.). It will then be added to their "library" where all the plants they have in their collection will be available to see. If a user cannot find a plant that is listed they can add it to their collection via an add button located next to the search bar. The user will have to fill as much information as they know from the above description to conform to the structure of the application. The added plant will only be available to that user's device only.

There will be an option to request for their plant to be professionally identified at which point it will be added to our application's database. The identification request will then go through to an expert who will assess and decide if it is a legitimate request and then add or change information as required and it will then be added to our database in the next application update. Once the user has completed their library of plants the application will then begin to send push notifications to the users phone at a pre-determined time, (because there is no point getting notified while you are at work.) The push notifications will have a sound, which will be changeable if the user wants a distinct sound that will be more effective in triggering their memory. The notifications will also make the phone buzz for a second to help just in case the user as a hearing impairment, of course you can turn the sound and vibration on or off to whatever suits the user. Once the notification has gone off the countdown for the next watering cycle begins again.

As our application's algorithm learns the habits of it's user it will adjust the watering schedule to group plants together. This is to prevent excessive notifications from users with multiple plants and to make the process more efficient.

Current Progress.

So far we have managed to experiment with using the MIT application inventor, which was part of the original plan to develop the application. But we soon discovered that the MIT application inventor was too difficult to use and wouldn't have given us all the features that we would have needed to use to create the application to exactly how the original idea was planned out.

Mary-Jane found another web program called UX PIN that allowed us to easily design our application and gives us the features that we require to make this application a reality. With our new web program found we went ahead and created a few "dummy" screens that have no functionality but we feel transmit the idea of our application quite nicely.

Harley has also produced a storyboard and a script for a video advertisement for our application which we will most likely use for our up coming presentation. The advertisement aims to be a cheesy short video quite similar to daytime TV advertisements along side a product pitch similar to what you would see when pitching a product to investors.

Future progress. (What needs to be done)

There is still a lot of work that needs to be done to be able to get our application off the ground. For starters, we need to create a database of the most common indoor plants, which according to www.houseplantsexpert.com is over eighty. So that will take some time.

To get to the quality our group expects from our work we expect that to be over our allocated time for this assignment. Plus we also have to factor in that none of us have made an application before and have never used UX PIN, so again we will need time learning that program app development in itself.

If we assume that we had the skills to be able to develop this application what will need to be done once we hand this over to the next team once our semester is over is. Creating the remaining plant pages. That includes an image of the plant, the title, a brief description of the plant, what soil it likes, the amount of water it requires, the size the plant can grow to, the best way to prune (if applicable), what fruit they produce (if applicable) and what climate suits them best. There also needs to be a button somewhere that allows the user to add the plant to their library.

We then need to create the users library where all the selected plants will stay. This screen will also have the functionality to remove plants if the user no longer has at home or the office. Finally all the behind the scenes programming needs to be done. That entails getting all the pages to actually work and communicate with each other. Running algorithms that send push notifications to the users phone getting the application to access the users GPS to be able to find the climate the plants are in, plus getting it patented and on the app store.

Roles

As we don't have the technical skills required to design and implement an app yet our roles are more speculative. We know what needs to be done and are working as a team to figure out the best course of action. This has worked very well for us, and in the context of learning in the university environment is beneficial to all of us. With our limited skill set we have worked together on the aspects of this project that require attention, with content and being created by most of us. If we were to break down roles it might go like this.

Mary-Jane Amos – creative director, as she has been responsible for a lot of the visual and creative aspects of our project such as Logo design, many of the mock-ups and our powtoons advertisement.

Harley Tuleja – project manager Harley has been in a leadership role throughout this process continually pushing to keep communication and progress moving forward, he set up our discord and GitHub pages and has been helpful in teaching how to use those apps.

Daniel Mammone – Content creator/application design, as Daniel's project idea from A1 was the project we decided to follow up on he could be seen as the application creator. We have all contributed to Daniels original idea but he has by far done the most work on fleshing out this project idea.

Liam Hackett – tech help/ consultant -Liam's connections to the tech world through his partner he has been very useful in providing insight as to what happens in the real work of IT.

Steven Flannigan – collaborator, Steven has been helpful in providing ideas and is happy to do work/ tasks that arise through out this project.

Scope and Limits

As we don't have experience in creating applications for smartphones the scope of our project is to flesh out as much of a plan moving forward from the end of this course until development. By the end of this course we would like to have a clear design of how our application will look and function with sketches and mock ups such as a home screen concepts, or how the individual plant pages will look.

As this project relies heavily upon accurate information about plants, a large part of our time will be spent gathering information on the initial list of houseplants that we include. While this is not particularly hard work it does take a lot of time to find accurate information and write up short informative descriptions.

The most import aspects of our project at this stage include concepts for our app such as logos, application design, content (plant requirements) and the most important being a pathway of how we plan to take this project into the app market in the future. These should be attainable goals in the time we have for this project.

Future ideas that we have is essentially scale of development, we plan to take this app globally and that will require a gargantuan amount of research as there are many more houseplants to consider all of which require fact checked growing guides. If our app is successful in the home market we have also thought of going towards a commercial growers, this will require a higher degree of accuracy as if people are relying on our product to provide an income it needs to be perfect.

We feel we will be happy with our progress if we can get our concept fleshed out and a decent start at plant research.

Tools and Technologies.

- Internet browser (Chrome, Firefox, Edge, Explorer, Safari)
- MIT APP INVENTOR (online app creator)
- UX PIN (online development tool)
- Word processor
- PC's or Laptops
- Windows 7/10 or MAC OS
- Discord
- Google Docs.
- Github
- DaVinci Resolve

Our group has a pretty good understanding of the basic technologies listed such as, the operating systems our computers use, the word processing programs and the internet browsers we prefer.

We utilised Discord as our main method of communication, while Discord is a chat/VoIP and file sharing service directed mainly at PC Gamers it is an intuitive and easy to learn application. Discord has the ability to link into Github giving notifications when someone makes progress. The tools our group have struggled with is the MIT App Inventor and UX PIN, both are new programs to us and they are a really steep learning curve for us. After some consideration and trial and error with both of these programs we have determined that moving forward they will not be appropriate to the full development of our app.

DaVinci Resolve is a video editing application that is used by many professionals, we decided on DaVinci as it is power fill

Some tools that we will need for the future are:

- An Android Development Kit such as Android Studio ide 191.5900203. This would do the bulk of the work in development and to supplement this we would need to learn how to code in the appropriate languages necessary in designing and coding an application
- Solid programming skills such as C++,C#, Java, PHP, Python. These would be required to physically write the code required top build our application. These skills will need to be acquired through personal development or formal training such as this degree.

Testing

To test our product we would have a testing team (which would consist of the five of us and any friends we could convince to help). This team would be responsible for testing every aspect of the application and would hopefully be testing the application on various devices.

Each member of the team is vetting our mock-ups, getting feedback from each of us ensures that we have a good product when it goes to market. Once our app is on the market we will be closely monitoring Google play comments and through our app there will be an avenue to contact us with suggestions.

We will know we are successful in testing when we have positive feedback from either clients through the app store or our group of testers.

Time-frame

You can see our time frame here, as it was a very long table it was impractical to include in this report.

We spent a lot of time trying to figure out how much we could feasibly achieve and we believe that our spreadsheet linked above explains what we could do given time.

Risks

Risks: The risks for our project are fairly low, as we are only putting our time into it that is all we have to lose.

We won't be forking out money for advertising companies, employees or researchers. The biggest risk is that we get to a point that we have a product and it is a flop, making the time we spent on it a bit of a waste. If we are to follow our plan of development then we should be able to mitigate any serious risk before it becomes an issue. It would be a shame to lose all of that time. In terms of risk to apps we would have poor app design being a major risk as none of us at this stage have any experience writing code or developing applications. We have already come across a few time wasting risks such as the MIT app inventor, this was a dead end program that we all gave a go at but the design was convoluted and impossible to learn in the six weeks we had to work on this project.

Another risk that I can see being directly related to our project is provide false or unknowingly information to our clients as especially in the beginning we will be doing all the research on plants and their growing requirements ourselves there is an element of human error that you would not get with a professional botanist.

Group Processes and Communications

Our method of communication was primarily through Discord, Discord has been very useful in splitting up tasks, sharing ideas, keeping up to date with what is happening in our Github repository (as you can create web-hooks directly related to our repository). On the whole we have found the process quite straightforward, in the outset especially with A2 there were some teething issues as we were learning how these programs work in this environment. Through repetition and group learning we have become great communicators. In terms of frequency we have had regular almost daily contact with each other through out the A3 period and have managed our time accordingly.

As all of us are studying online for various reasons we have not had the time to have regular voice chats, but the times we did have proven to be very useful, taking minutes has helped us get an idea of what happened in the chat. The text based nature of discord has been great in keeping everyone informed of progress, as some of us are not available 24/7 due to work/personal commitments Discord allows us to track and store what has been discussed through our own private channel.

Our files have been managed in Github through our team repository, this has been useful as it provides a cloud based system of informal file storage, while Github is perfect for collaborating on projects like this it is a confusing concept to learn for someone who has never had experience with this technology. We have managed to keep our files in order and not have any overwriting of content due to incorrect branching.

Skills and Jobs

Software Developer.

The role will see you designing a large part of our app functionality through the use of multiple coding languages, you will work along side the other team members to create a user friendly, functional and safe application that looks great and is easy to use.

You will be expected to work 4-6 hours a day and will have generous lunch breaks provided as within our company we believe that a relaxed worker works better than a stressed one.

We are based out of Melbourne Australia and would prefer the applicant to be based in this area but if the right person is found we can have flexibility in that area.

Required Skills/Traits:

- Minimum 4 years experience developing applications.
- Wide range of coding languages with the desire to learn more as required.
- Ability to take directions and work in autonomy.
- Creative approach to common coding problems.
- Can write clean and understandable code with easy to understand instructions of how to edit code.

Desired Skills/Traits

- Love for plants and botany.
- Diverse knowledge of current trends in the app world
- Fun personality and ability to work within a small team.
- Ability to keep your cool in high-pressure situations.

Marketing Manager.

The role will have you overseeing our marketing both digital and print for our application You will be required to work within a small team based in Melbourne. A successful applicant will have a customer-focused approach to marketing as we don't believe in forcing our product down peoples throats. This will require you to be creative and entrepreneurial in your marketing strategy. Your main role will be to make people realise that 'iPlantified' is the only that app that people require to maintain their house plants, with strategies to expand the applications.

Required Skills/Traits

- Minimum of a bachelors degree in marketing and advertising
- Solid creative design skills.
- Creative approach to marketing.
- Provable portfolio of positive work.
- In depth knowledge of botany and how to care for house plants

Desired Skills/Traits

- Love for plants and botany
- Thriving house plants
- Up to date knowledge of current trends with a 'finger on the pulse' within the marketing industry.
- Fun and easy going personality able to work in small teams.

Botanical Researcher.

This role will have a competent applicant with experience in botany and plant identification. You will be required to provide information on various common house plants.

Your role will encompass all the collection and assembly of data relating to the house plants within our app, the collection and suggestion of new plants that can be included within the app.

You will work along side our marketing manager and software developer to create accurate and location based plant care.

Required Skills/Traits

- Formal education in botany or plant care, or equivalent experience in a similar role.
- Deep knowledge of plants and botany and the required care to keep house plants thriving.
- Great written skills with a proven ability to write engaging and informative reports on plants.

Desired Skills/Traits

- Love of plants and botany.
- Ability to work within a team.
- High attention to detail

Cyber Security Expert.

In your role you will be in charge of the companies security interests, as more and more threats are arising every day you must be continually expanding your knowledge of the cyber security industry while actively implementing security fixes. You will be working alongside our software developer to create a safe and secure system that prevents the data of our customers from ever being compromised.

Required Skills/Traits

- Minimum 4 years experience in the Cyber security industry
- Bachelor of computer science with a major in security systems administration
- ISC^2 Certified Information Systems Security Professional (CISSP)
- ISACA Certified Risk and Information Systems Controls (CRISC)
- SANS GIAC Security Expert (GSE)
- Forward thinking in terms of security, we would rather spend more time on solutions that may not come to be compromised than cut corners and risk exposure.

Desired Skills/Traits

- Love of botany and plants.
- Keen to work in a team environment
- Fun attitude.

Group Reflection

This has been a learning experience for all of us, with varied skills and abilities; it has not been immensely difficult to get this project finished. We worked well together consistently getting together in the group chat and planning what needs to be done and how we would achieve our goals. Some of our members are more productive than others but this is very common in both the workplace and study environment and you can't control what happens in people personal lives out side of your group. This is something that can be frustrating at times but is easily managed if others are compassionate and willing to put in the extra effort.

In terms of what could be improved upon we feel that our use of Github could be more efficient as we haven't made great use of the branching and forking aspects of Github, but even so we have done very well in maintaining a neat and clean repository. We found it surprising how quickly a project can get too large for a time frame, Feature-creep is a real thing and left unchecked can set you up for failure. We were surprised at how collaborating in this environment leads to very creative out comes. Having not had a lot of positive experience in group work in the past we all were happy with how efficient and smooth the process was.

We learned that with groups it is important to keep lines of communication open, if there are members of your group not communicating then it is important to maintain that line of communication, there limits to this however, as personal issues such as travel or lack of reception(yes it's still a thing in Australia unfortunately) can impact how we communicate. We learned that to be an effective group it helps to have a scope of the work that needs to be completed and split up tasks to people strengths not just amount of work. As someone who is a great artist might not be so great at writing hours of code..

To summarise, for an introductory course where all of us have had no to very little experience in the IT industry we have managed to keep on top of the technical skills required to learn and create a project, manage a project and work together effectively as a team. There will always be issues when working in teams as everyone is different and this is what makes teams so effective. Finding those differences and highlighting the positives.

Daniel Mammone

In my opinion we meshed well as a team, there were no arguments, everyone planned out what they were going to do and no one fought over what they wanted to do. I feel our website is nice and simple, but quite effective. Our group IT technologies are really well done and Mary Jane did an amazing job video advertisement! Harley did an amazing job of being the group leader and getting everything together. The only thing I think could have been improved was our choice in-group communication. Discord is good for a gaming chat service but it doesn't notify the user when a new message is written, so sometimes we went days without getting a response. Which I feel slowed us down a little. Which also brings me to what I was surprised about, I was worried people would forget to check on the chat group and the work would get left behind. But it didn't happen and mostly everyone chipped in. I learnt that I should have more faith in group work, I've been burnt before but this time was a very pleasant experience. Now when it comes to the Github log, I don't think its a tool you should use to solely judge someone's contributions, because one person might do all their work offline and then submit it in one big upload and someone else might do a bunch of tiny uploads. So it all comes down to what was uploaded not how many times they uploaded.

Harley Tuleja

I feel we worked very well as a group again in this assignment, we kept the momentum up from Assignment 2 and have managed to create what I feel is a great project and a well written report. The process was fairly similar to A2 with our communication being a bit better in this assignment, we decided to stay with GitHub and Discord as our methods of file sharing and communication. Being new to Github has had its challenges and I'm sure that we are not utilising Github to its peak efficiency, this can only be improved with time and repetition. I found discord to be a great way to communicate for group work, although I haven't had much experience with other programs. Discord has the functionality that we required for this project, which was, a method of text and voice based communication, the ability to share files, and the ability to link into GitHub to keep track of our progress.

Moving forward in the future I feel we would have been a lot more organised if we had have outlined a plan for this unit from when we first formed the group and I will be doing this in all future groups.

Mary-Jane Amos

The group worked really well together, everyone contributed in their own unique ways and brought the ideas into fruition. There were some people who were more active on the team and there were others who excelled within the team. We all worked with our strengths and made up for those who weren't as active. The tools were used were easier to use this time around. GitHub was easier to use as we'd used it in A2, we used UX Pin which was beginner friendly and a host of editing apps that made our designs look nicer. Discord was also easier for us to use as we were familiar with how to use it therefore there was less of a hurdle there. Discord was better this time around for communication as we manage to have several communication sessions were most of the team was online and could interact with each other. Tasks became easier to complete with this process. There was also a general sense of team work this time. For nest time, I think it'd be best to have clearly outline tasks and mini completion dates for each person to complete that way the stronger people in the team won't be burdened with the bulk of the assignment.

Liam Hackett

A3 had a lot more information to cover and the time really crept up on me personally. I would have liked to contribute more to the group but for personal issues I didn't. Everyone involved had good communication and were really good to work with. GitHub has a bit of a steep learning curve and I believe with ample time and opportunity it would be a useful tool to use for similar projects to these or even for something individually done. This is the first time I have used Discord and as others have mentioned it is more of a gaming channel to discuss things over, however, I found it easy to navigate and very user-friendly.

The one thing that both GitHub and Discord didn't have that I think they could improve upon is push notifications. You can be on and then go offline and miss several message chains or updates because of the notification system. In saying that though, they are both great for utilising file uploads, group chatting and communication, so if these applications can integrate a generous push notification it would be my go-to every time.

I feel like the idea for the project itself is quite savvy and the execution by the group was great. If this idea was to be pursued I genuinely believe that it would be successful under the right circumstances. Maybe that could be a real-life project for somebody!

Steven Flannigan

Assignment 3 was similar to assignment 2 just more fleshed out and a little more involved. I think everyone worked well and I wish I could have contributed a bit more to the project but I had personal stuff creep up on me that I was unprepared for and so I contributed very little to this project. The depth of the information about our app project was very well researched and worded well.

There has to be more convenient ways to communicate with the group as Discord on my computer would not alert me of any new messages that were posted to the group chat, it would only alert when I was tagged in the message. As a whole I don't think it slowed us down any as we still got the job done.

Github is a great way to share stuff involved in the project but the audit system can be a little misleading as someone can upload a large amount of work as one file and it will only show that one file uploaded to the repository. It took a bit to get used to using Github but I think I am a little more confident with it now.