Header Page

Title: **Assignment 3 (Group23.PDF)**

Group Name: **Quik Biz Travel**

Group Members: **Lewis Dean (s3666676)**

(Alphabetical Order)   **Zac Foulds (s3904350)**

                                     Peter Hodgkinson (s3608939)

                                     Mark Parisotto (s3910961)

                                     Lucky Rubenecia (s3540134)

                                     Maxwell(Max) Trounce (s3909581)

Group Web Page:

                    https://swindon011.github.io/Group23-Assignment3/

Group GitHub Repository:

                    Swindon011 / **Group23-Assignment3**

Assignment 3 - Our IT Project

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Introduction.

Remember the days before Covid, when we all had the freedom to freely travel interstate and overseas for a holiday or a business trip. Whilst travel was exciting for most people, booking the flights etc. was not. Make a mistake and it would cost you time and money. You could use a travel agent but this is still time consuming and obviously more expensive because of their commissions. So increasingly more and more travellers are booking flights themselves.

Here are some statistics for 2018:
- ✔ There were over 148 million travel bookings made annually.
- ✔ 82% of all travel bookings took place without human interaction.
- ✔ 90% of travellers will do their research online, 70% do their research will be on a smartphone (Deane)

How many App sites did you visit? All that confusion. Different airlines, different take off times, different currencies, code-sharing confusion, differing cancellation policies etc. If that wasn't bad enough, if you wanted a stop-over the frustration multiplied exponentially. Then you finally settled on a flight and booked it not knowing if it was the cheapest. Then the airline would allocate your seats automatically. Always giving you the middle seat of a row of four. Not even enough room to 'pick your nose'.

Then you went through a similar process to book your accomodation, different locations, different star ratings etc. When you finally booked the accommodation, was it the best price? Then there was the car hire, tours, meals etc. etc. etc. The whole booking process for your holiday was a real "pain in the…".

Well, we here at "Quik Biz Travel" think we have the answer.

In the following account we will introduce you to the "Quik Biz Travel App" which will take all the stress out of booking your next holiday (very soon we hope). You can book all aspects of your holiday all in one place, all in one easy to use App. Flights, accomodation, car hire, shows etc., etc., etc. And best of all at no cost to you.

We will begin our exposition by telling you some facts about our Quik Biz Team, followed by the process we are using to build our App. Then the cruz of the report, the detailed description of our "Quik Biz Travel App". We will conclude with reflections by our Quik Biz team on the process of bringing the App to fruition.

We here at Quik Biz are excited, we hope you will be too.

Chapter One – Team Profile.

Team Name:

We have decided to change our team name to be more in keeping with the project we are proposing.

In Assignment 2 we were "PROOFREAD". We have now re-branded. Our new team name is:

"Quik Biz Travel"

and we will be producing the:

"Quik Biz Travel App"

Who are "Quik Biz Travel"?:

Member Name	Student No.	RMIT eMail Address / Web Page
Lewis Dean	s3666676	s3666676@student.rmit.edu.au https://swindon011.github.io/LewisDeans3666676Assignment1/
Zac Foulds	s3904350	s3904350@student.rmit.edu.au https://zacfoulds.github.io/Assignment1/
Peter Hodgkinson	s3608939	s3608939@student.rmit.edu.au https://peterh1967.github.io/MyProfile/
Mark Parisotto	s3910961	s3910961@student.rmit.edu.au https://markp43.github.io/
Lucky Rubenecia	s3540134	s3540134@student.rmit.edu.au https://rmiteduau.sharepoint.com/sites/Assignment2-Group13/ Shared%20Documents/General/assignment1IT.pdf
Maxwell(Max) Trounce	s3909581	s3909581@student.rmit.edu.au https://max8823.github.io/Assignment1/index.html

Table 1: Who are Quik Biz Travel?

Team Member Profiles:

Lewis Dean:

Figure 1: Lewis Dean

Lewis was born in England and emigrated to Australia at age 11. At High School he shone in science subjects especially Mathematics, whilst outside the classroom he represented the school in soccer and chess.

Studying accountancy at night, in 1979 he became a member of what is now known as the Institute of Public Accountants. The following year he started an undergraduate Mathematics degree at Flinders University.

Whilst working as an accountant, Lewis was exposed to computer programming and from then on programming became somewhat of a passion. This passion became the driver to enrol in the RMIT IT Degree.

Asked what it is about computer programming he likes, he stated:

> '… personal satisfaction. It gives me immense joy when presented with a programming problem and I 'nut' it out, and make things work.'
> (Dean 2021, Assignment 1, Personal Data)

Other than family, his biggest love is his home town football club: Swindon Town Football Club (Nicknamed 'The Robins' because of their red shirts).

Lewis has been married for over 40 years and has one child.

Lucky Rubenecia

Figure 2: Lucky Rubencia

Besides English, Lucky is fluent in Cebuano and Tagalog (both languages from the Philippines).

Ever since Lucky was young he's had a passion for helping people in need. This is exemplified by his choice of Nursing as a career, which he studied at RMIT.

He also has a liking for IT Technologies. These two can be married together.

As Lucky said:

> "I have seen and used a variety of technology that assist humans [making] manual task[s]   easier" (Rubenecia 2021, Assignment 1, Personal Data)

His hobbies include playing computer games particularly: RPG, MMORPG, FPS games

Zac Foulds

Figure 3: Zac Foulds

Zac is Australian who completed his VCE in 2018. He then commenced an electrical apprenticeship. This was not to his liking so now he is pursuing a career in IT.

Zac is very sports minded playing AFL, cricket and basketball. Highlights include playing basketball in America against high schools, and playing AFL at the MCG and Marvel stadium. He also enjoys video games with friends.

Zac's interest in IT started in primary school when he received a DS console. Since then he has kept up to date with the latest gaming technology.

His interest in IT today is very broad. Besides gaming, he likes learning about automation, especially home networks. He also enjoys watching various "you-tubers" talk about technology. But his biggest interest is centred on Tesla and Elon Musk. The technology side of car automation and renewable energy.

One day Zac hopes to start his own business with the knowledge he gains from the RMIT IT course. As Zac has said he specifically wishes to:

> "...teach the fundamentals and basics that I have learnt to another person to make their life easier with technology." (Foulds 2021, Assignment 1, Personal Data

Peter Hodgkinson

Figure 4: Peter Hodgkinson

Peter is an Australian Citizen, born and raised in Brisbane, Qld, in a family of ten children. His grandparents came from Wales, England & Ireland. He completed Secondary School in Brisbane, but has not as yet completed any tertiary studies.

Peter leaned to fly light aircraft many years ago and had dreams of becoming a Qantas 747 Pilot like his Brother, however his life took a different path and he spent many years working in Sales/Account Management & Marketing for various industries, including Hospitality, Building & Construction and Information Technology.

Peter has been interested in IT ever since he was young boy, watching cartoons, such as "The Jetsons" and "Dick Tracy", which forecast technology (ie Dick Tracy's watch – video calls).

Peter was involved in the Marketing of Cable TV, Chromecast and encryption Services etc. But in 2019 he decided to become more involved in the technical aspects of the products. This lead to study of IT at RMIT. He also believes these studies:

> "...will be able to further enhance my skills in Time Management, Problem Solving, Teamwork and Conflict Resolution." (Hodgkinson 2021, Assignment 1, Personal Data)

Peter's main hobbies are keeping fit and Singing in a band, which he enjoys immensely.

Mark Parisotto

Figure 5: Mark Parisotto

Mark was born in Sydney of Italian background. He completed his HSC in Griffith in 2015 and is currently employed as a Health Information Officer at a private hospital in Melbourne.

Mark has always enjoyed IT. From playing computer games on his parents TV, to selecting as many IT electives at High School. Being from a fairly tech-savvy family also contributed to this interest. After High School Mark began a Diploma of IT. Asked what was his main area of IT interest, he said:

> "...network security and programming AI, especially for robots." (Parisotto 2021, Assignment 1, Personal Data)

Mark further added that these are the main areas he wishes to concentrate during his studies:

> "...careers in these fields are what I aspire to achieve." (ibid)

His hobbies include gaming, ball sports (particularly Rugby and Soccer), Music (Rock and Metal) and fixing cars.

Max Trounce

Figure 6: Max Trounce

Max, who lives in Cairns North Queensland, is a 25 year old student of RMIT who has previously studied a diploma at CQU and worked in the ADF.

His interest in IT started because of his father, who was an IT consultant working from home. Hence Max was always surrounded by computers and servers. Knowledge and interest in IT was accelerated during work in the ADF.

> "… every second week there was something new;... radios, GPS, commanders tablets, tracking and positioning gadgets, bore-sight tools were becoming more common place, everything was starting to become more 'digital.'" (Trounce 2021, Assignment 1, Personal Data)

After the Army, Max decided to study IT. He was drawn towards Information security and started some online courses, such as Comtia Network and linux+ which were offered at sites such as CYBRARY.IT, EdX and UDEMY. With these courses Max started to become more interested in programming, and started taking some courses in learning how to code using CODEACADEMY. But Max added:

> "RMIT has a lot more programming on offer. In particular linux and C++ … [and these] were good selling points… but I also hope to improve my GUI and graphical design…" (ibid).

Teams Test Results:

Lewis's Test Results:

Lewis is an Adventurer and a Tactile learner. The explorer personality trait is indicative of those who are Observant, feeling and Prospective in nature, they are true artists at their core but generally in an unconventional way they gain pleasure in pushing the limits of social norms and conventions. Adventurers live in a world inspired by connections with people and take joy in reinterpreting these connections by experimenting with them and considering new perspective, this combines with their natural spontaneity, often makes them seem unpredictable even to those who have close personal relationships with them.

As another tactile learner of the group Lewis learns best by taking a practical and methodological approach to learning, the need to go through the motions, make errors and then learn from them is an integral part of learning for the tactile learner. Lewis finds that in long lectures and reading material he can "switch" off and is more of less watching rather than doing anything stating he "learns best by doing".

Lewis's Reflection:

Lewis believes that the results of his tests are somewhat accurate, he agrees he has an adventurous nature and is observant and prospective, and in his younger years he was quite outgoing, contradicting one of the perceptions from the Briggs-Myers test stating that adventures are introverted people. However this appears to be the only discrepancy with the tests Lewis took, he also completed an IQ test and received a score of 105-120 putting him above the national average of 99.2.

Lewis states that his test results state or indicate that he should not be a leader however he states that his most enjoyable and productive time when employed was when he was managing the Finance IT team. Sometimes the test results miss certain things and others a person who undertakes the test may have results that are very close to putting them within a different classification and this may be the case for Lewis.

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Lucky's Test Results:

Lucky is a Logistician and a Visual Learner, which is common amongst Logisticians. They are highly logical and practical people combining this with their tireless dedication to their work and personal lives make them a great addition to any group setting. Generally, people with this trait do not make assumptions, they prefer to analyse the information and data presented and arrive at what they perceive to be the most logical and practical solution. Once a solution has been reached, they can often be uncompromising in their views especially if the task at hand relies upon a timeline or a schedule. Logisticians are curious people who strive to learn everything they can about their area of interest, their sharp minds prefer autonomy instead of relying on others.

As a Visual learner Lucky is more likely to learn through reading and watching. Lucky has stated he prefers to watch Instructional type videos on how to do something for him to properly understand what exactly is being talked about. As a visual learner he should strive to study in an area free of visual distractions and should attempt to use different colours and pictures when taking notes if possible.

Lucky's Reflection:

Lucky believes that the results for his tests are quite accurate, they are indicative of his personality and this can somewhat be reflected in his prior career choices. His high level of empathy and compassion allows him to consider and sympathise with the arguments and concerns of others in a group setting clearly. As lucky is a Logistician a personality type that is often diligent and dedicated to their work he is capable of performing tasks either by himself or as a team in a collaborative effort. Overall Lucky believes that the traits he has would be a positive addition to the group and that the results of his testing is accurate.

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Zac's Test Results:

Zacs Personality type from the 16 PERSONALITIES TEST <A> is a "Consul". Consuls are highly sociable people with large and vibrant social lives, they enjoy supporting their loved ones and organising and attending various social gatherings. Consuls are altruistic in nature, they take their obligations and responsibilities to do the right thing very seriously, often their moral compass is based heavily of authority, established laws and traditions instead of mysticism or philosophy, because of this consuls can sometimes forget that people come from different backgrounds and that their perception of right and wrong may differ from others.

As a tactile learner Zac prefers to learn in a hands-on and practical manner this is likely due to his highly active lifestyle and hobbies. Zac enjoys experimenting with things and will go through the motions of a task learning from his failures along the way.

Zac's Reflection:

The results of Zacs test are indicative of his extroverted and highly active lifestyle, he admits he is a "talkative and engaging" person. Zac believes that the test results indicate he would work well in a team, his personality allowing him to be assertive in his views whilst also allowing to take other ideas and views into consideration. Zacs agreeableness, positivity and planning capabilities are 9 highly sought after skills to have in any group, allowing him to encourage others to work to the best of their ability whilst ensuring that tasks are being organised and allocated in a fair manner.

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Peter's Test Result:

As a protagonist Peter is naturally a charismatic leader this is evident in the fact that he has held very senior positions at large companies for many years, often protagonists are politicians, coaches or teachers they take pride in their work and their confidence assists in inspiring those around them to achieve their own goals. Naturally they find it easy to communicate in an articulate manner ensuring everybody can fully comprehend what they are saying, protagonists have an uncanny ability to be able to understand the emotions and motivating factors of others this combined with their altruism and authenticity make them an excellent coordinator and manager of projects they are highly valued in any group setting. Peter is also a tactile learner and learns in a hands on approach he prefers to and enjoys trying new things and attempting to find his own way of discovering how things work, through trial and error. However Peter states he also doesn't mind simply reading instructions or watching instructional videos on how to perform a task.

Peter's Reflection:

Peter believes that the results of his tests do accurately reflect his personality, as he is driven and focused on getting results, his communication skills and empathy towards others combined with his leadership experience and his natural ability to gain other people confidence quickly are invaluable skills for any member of the group to have. Peters ability to lead, accept responsibility and motivate others are highlighted in the results of his tests. Peter did note that he should specifically search for group members with certain different personality types and traits that would compliment his own, this did occur to some degree. Overall Peters leadership experience combined with his intuition and optimism are sure to greatly benefit the group

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Mark's Test Result:

Mark is a Mediator and a tactile learner, the mediator personality is indicative of people who may seem quiet or unassuming at first although they often have vibrant private and social lives. Idealistic and their natural care for others leads them to pursue deep meaningful relationships and they are always happy to help others in need. Mediators can often feel as if their lives are lacking in direction and purpose, for many this purpose lies within the realm of assisting others while they are aware that the world will never be perfect, they still care in assisting to make it a little better.

As a tactile learner Mark learns in a "hands on" way, preferring to touch, build, draw or otherwise act out what the skills are he is attempting to learn. It is recommended that he is active and take frequent breaks, tactile learners are more likely to use their hands and make gestures when speaking and can have difficulty in remaining seated for extended periods of time, hence why it is recommended for them to take regular breaks.

Mark's Reflection:

The results of the tests mean a fair bit to mark, he states that they are always a good indicator of what your true personality is. In particular the Myers-Briggs test really goes into detail about how

your personality affects your day to day life and gives a good insight into personality traits which he did not know he had. Because of this reason, mark believes that everyone can benefit by taking one or more of these tests in order to potentially learn something new about themselves as long as they are honest about their answers to the questions on the test.

Mark believes that the personality traits he posses and the traits that have been reflected in his test results allow him to work well within a team, the personality type: Mediator, is an integral part of any team as they are able to assist in peacefully and fairly resolving conflicts when they arise. As a Mediator mark believes that he is capable of forming and taking opinions from both sides and will be able to effectively keep everybody on track with their tasks.

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Max's Test Results:

Max is a Logician and a visual learner. Logicians are people who love patterns and technology. Often they have abstract ideas, which can seem counter-intuitive at first glance however generally these ideas prove to be remarkable innovations, Logicians can often become so caught up in their own train of thought that they can forget to consider the emotional side of things, this is often perceived as a lack of sympathy and is often attributed to them being considered inconsiderate by their peers. Max agrees that often he can become caught up in his own thoughts so much that he over analyses the problem and can miss the point entirely.

As a visual learner Max is more prone to learning quicker if the information or tasks required are presented in a written or picture form, instead of verbal, or hands on. Visual learners learn quicker when they create their own diagrams and pictures to explain or represent the information. They should try to study or learn in an environment that is free from visual distractions and should use different fonts, styles and colours for different meanings when studying and taking notes.

Max's Reflection:

Max agrees with the results of his tests for the most part, however he has stated that he is unaware of any other personality types. After reviewing his results from the tests max believes that his traits are not Ideal for working in a team his introverted personality and constant overthinking are likely to hinder his performance and make him unlikely to present his ideas to the group. Max states he has difficulty explaining and articulating his ideas and opinions and can become easily frustrated when others do not understand his ideas. Max disagreed with some of the personality traits he was given with his results, in his opinion he is not necessarily very creative, and says he has difficulty in coming up with ideas for stories and has terrible graphical skills (such as drawing). Max also considers himself more of a practical learner instead of a visual, believing he will only ever truly learn how to do something once he has gone through the motions many times.

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The tests conducted produced different results for each team member, however the team's strengths and weaknesses where always clearly identified.

According to the various learning tests, 32% fell under the "visual learner" classification, while the remaining 68% where "tactile learners". This proved to be highly beneficial to the group as large parts of the project required things to be tested and experimented with. Additionally, most of the teamwork was conducted and coordinated through messaging and through Microsoft teams.

The results of the Briggs Myers – 16 personalities tests where useful to the success of our team with no two members sharing the same exact personality type and most where in different categories of personalities, allowing for a full range of input from across the spectrum to be considered. The individual style of our team was one each of the following types:

- ➜ Mediator(Mark Parisotto)
- ➜ Logician(Max Trounce)
- ➜ Consul(Zac Foulds)
- ➜ Logistician(Lucky Rubenecia)
- ➜ Adventurer(Lewis Dean)
- ➜ Protagonist(Peter Hodgkinson)

The range of personalities had an overall positive number of beneficial traits to the group ranging from leadership skills, entrepreneurial, creativity and mediation. This caused members to kind of 'fall' into their own positions within the group, members were encouraged to work on tasks they had knowledge about or that suited their strengths, allowing members to work unsupervised and to their full potential.

Our weaknesses did not seem to have any immediate or noticeable effect upon the assignment as a whole. Overall the project allowed us to see how valuable it is having different personalities working together in a team, it showed us that having different personalities can positively impact performance and can create a balance that can assist in increasing the efficiency and quality of work.

Group Processes:

Team "Quik Biz" has kept the same communication process going for Assignment 3 as we did for Assignment 2. We believe this to be the most efficiency process. Our groups primary technique for communicating was our scheduled biweekly meetings hosted in Microsoft Teams (MT).

During the first meeting of our group back in Assignment 2, all the team members agreed we would have at least two meetings per week, usually on a Monday and Thursday. Of all the meetings in both Assignment 2 and 3 there have only been 2 apologies, which is a sign of our positive commitment to the project and our processes. Whilst there have been informal communication between team members this has always been conducted within MT, and this correspondence is freely viewable to all team members. MT streamlined the communication process.

Written work was also shared within the MT platform. This work was then uploaded into GitHub or incorporated into the PDF file(s) in the appropriate format. Assembling the teams written work into this one central location allowed all team members to communicate their concerns/comments.

The above processes also allowed our group leader, Lewis, to more easily delegate tasks between the group. This made his leadership role much more time efficient. We discussed our strengths and weaknesses in our meetings and made sure everyone was comfortable with the tasks they were asked to do.

Chapter Two - Tools

Links:

GitHub Links:

"Quik Biz Travel's" Website can be found at:

https://swindon011.github.io/Group23-Assignment3/

"Quik Biz Travel's" GitHub Repository can be found at:

Swindon011 / Group23-Assignment3

Agenda Notes Links:

The link to the Agenda Notes is:
MS Teams / Assignment 3 – Group 23 / Agenda / Files

The specific file names for each meeting are as follows:

Meeting Date	File Name
27th April 2021	20210427 Agenda.docx
3rd May 2021	20210503 Agenda.docx
5th May 2021	20210505 Agenda.docx
10th May 2021	20210510 Agenda.docx
13th May 2021	20210513 Agenda.docx
17th May 2021	20210517 Agenda.docx
20th May 2021	20210520 Agenda.docx
24th May 2021	20210524 Agenda.docx
27th May 2021	20210527 Agenda.docx

Table 2: Agenda Notes Links

Meeting Notes Links:

The link to the Meeting Minutes is:
MS Teams / Assignment 3 – Group 23 / Minutes / Files

The specific file names for each meeting are as follows:

Meeting Date	File Name
27th April 2021	20210427 Minutes.docx
3rd May 2021	20210503 Minutes.docx
5th May 2021	20210505 Minutes.docx
10th May 2021	20210510 Minutes.docx
13th May 2021	20210513 Minutes.docx
17th May 2021	20210517 Minutes.docx
20th May 2021	20210520 Minutes.docx
24th May 2021	20210524 Minutes.docx
27th May 2021	20210527 Minutes.docx

Table 3: Meeting Notes Links

Meeting Recording Notes:

All links to meeting recordings are contained in one file. Namely:
MS Teams / Assignment 3 – Group 23 / Recordings / Recordings.docx

The specific links to each meeting are as follows:

Meeting Date	Link Name
27th April 2021	https://web.microsoftstream.com/video/ 29650d66-5f94-41a3-a691-787836975f4f
3rd May 2021	https://web.microsoftstream.com/video/ b9d3895c-fc77-4bc3-ae1d-587c927a5f95
5th May 2021	https://web.microsoftstream.com/video/ fe599a7e-e1da-407f-868a-9560d3c316e2
10th May 2021	https://web.microsoftstream.com/video/ 19af07cf-e978-4a9a-912e-22165d7abaca
13th May 2021	https://web.microsoftstream.com/video/ 6cceff2f-d886-40d9-ac5b-2dd0f9c5178b
17th May 2021	https://web.microsoftstream.com/video/ 187b1f42-4a6b-4fae-8290-2ed6da2f3f54
20th May 2021	https://web.microsoftstream.com/video/ 17f94bff-58d3-41b1-810e-249a65691dce
24th May 2021	https://web.microsoftstream.com/video/ 32fa686f-577c-49d1-ba14-f2f8d287c856
27th May 2021	https://web.microsoftstream.com/video/ d3408e25-192f-4db2-b02e-e4e88f08cd54

Table 4: Meeting Recordings Links

Github log of activity

The Github log of activity does <u>not</u> actively reflect groups work in our assignment(s)!

Some members are very new to using GitHub and are unable to work out how to properly utilize the site, and as such they submitted their work through the Microsoft Teams meetings, and/or into the file storage contained within the group.

After branching the repository there was little activity in GitHub. The updating of the index and CSS files were done outside of GitHub using Atom. The team avoided the temptation of multiple commits and then only allowed one person to do this. However, one member of our team has specific skills with CSS. Only when we needed a programming change that required CSS skills, were the appropriate files were committed to GitHub. When the team were sure the index and CSS files in Atom were finished and 100% correct, then was one final "commit".

When project work was written it was all downloaded to Microsoft Teams. This allowed all team members the ability to pass comment on the work, and make suggestions. Whilst one individual initially wrote a segment of the work, this process allowed all members to pass comment. We all can say to have authored the report.

Once the team was happy with the submissions it was uploaded (cut/paste) into the PDF file(s). This was done by <u>one</u> member of the team, because Word files can only handle one user at a time.

We also decided to do the PDF write up outside of the MS Word in Microsoft Teams because that version of Word does not seem to have all the available icons and menu items that MS Word in Office does.

Another advantage of allowing just one person to update the PDF(s) file is that the same person can check for consistency of expression etc., which is essential for a good report.

A copy of the GitHub Log of Activity can be found in the Appendix.

Other tools, platforms, services used:

Software	Version	Description
Gimp	2.10	Modifying the Quik Biz Emblem
Libre Office	7.0.4.2	Writing Report(2) and designing Gantt Chart
Atom	1.57.0	Writing HTML/CSS code
MS Teams	1.4.00.11161	Team communication and Organisation Platform
Gantt Project	2.8.11	Evaluated for the Gantt Chart
Android Studio	4.3.1	App Development
Visual Studio Code	15.1 / 15.2	App Development
Visual Studio	16.9.4	App Development
Eclipse	4.19	App Development

Table 5: Software used in Project

Chapter Three - "Quik Biz Travel" Project

Overview:

Introduction:

The overall goal of Quik Biz travel App is to create a single all in one travel booking application. This Application would allow users to fully customize their travel experience from their mobile phone. The application would allow users to enter their desired travel dates, for single, multi-leg, and return trips their desired mode of travel (sea, air, bus, train) the app would allow for the booking of hotels, rental cars and would provide information on local attractions, events, tourism spots, and restaurants within the general vicinity of their desired destination.

Using sites such as WebJet, Expedia, Travelocity, Hotel.com, and Booking.com and their mobile applications (if applicable) as the basis and inspiration for Quik Biz travel. Ideally the App would be simple, and easy to use through the utilization of APIs all the user would need to enter would be their desired travel dates, destination/s and the number of passengers, the app would take this information and provide the applicable results which the user could then select (allowing users to select flights that would let them utilize their frequent flyer or other benefits schemes).

Motivation:

The motivation for Quik Biz travel is to provide a quick and easy way to use Mobile booking application. Many people who travel the world for business and/or leisure can often find themselves with very little time to book hotels, rental cars, train tickets, etc. While some people might consider this to be an exciting prospect, we have always found it to be quite a chore to scroll through the various sites to compare the different results. We believe that when arranging travel unless you are a travel agent, there are far too many different choices thrown at the user which can lead to unexpected fees, undesirable seats, and in some cases a higher than necessary price.

The aim of our project is to create a simple, mobile application, which aims to be available on, Android and iOS devices and also have a website allowing users to be able to utilize our services regardless of what platform they are connecting from. The application will streamline the booking

processes for individuals and business travelers alike, the app will present data in a simple format designed not to be overwhelming only requiring the user to enter the basic requirements of the trip. This will include such details as the date, destination, hotel standard (1-5 Stars). Preferred location of the hotel and flight times.

Landscape:

Quik Biz travel is to be an amalgamation of various travel applications, as such there exist several similar apps and services which will later become direct competition.

Some of the inspirations were: WebJet, Expedia, Travelocity, Hotel.com, and Booking.com all of which already have web apps and websites providing an array of services to users, however only Booking.com provides the same number of features as Quik Biz Travel, they will be the main competitor for us once we are fully developed.

Booking.com was the main inspiration for our application and competing with them will be tough. However, with a successful marketing campaign, an emphasis on innovation and by constantly striving to deliver the lowest prices to our customers, we may be able to successfully compete with them. Our main point of difference should be: Ads.

Most travel companies make their money through commissions, however if we where to allow companies to advertise on our platform instead of taking a commission of sales we could lower our price further making our service more attractive to customers. The ads could be placed as "Featured" flights, hotels etc and any company wishing to advertise on the platform must be relevant to the app. In addition to this event tickets could be sold at a slight premium to ensure an alternate source of income for the business.

Another feature that could be incorporated is the "Package" deals from sites such as Flight Center. They can offer holiday package deals which are a convenient way to skip the hassle of searching around for individual deals. Hotels, flights, travel around, events, etc can be booked with 'one' press of a button. All the user is required to do is simply select which holiday package they would like, and to check the available dates. Once a date has been selected they pay for their deal and the relevant itineraries and documentation is emailed to them.

Aims:

Overview

The overall goal of Quik Biz travel is to create a single all in one travel booking application. This Application would allow users to fully customize their travel experience from their mobile phone. The application would allow users to enter their desired travel dates, for single, multileg, and return trips their desired mode of travel (sea, air, bus, train) the app would allow for the booking of hotels, rental cars and would provide information on local attractions, events, tourism spots, and restaurants within the general vicinity of their desired destination.

The features of the travel application have been divided up and made into their own individual goal this was done due to timeframe constraints.

Priority	Aim
1	User Design (UX/UI)
2	Flight Information (function)
3	Hotel Information (function)
4	Rental Cars (function)
5	Local Area Information (function)
6	Restaurants, Cafes, ect (function)
7	Partnerships with businesses
8	Sponsoring, advertising, affiliates
9	Deployment / Launching

There are several individual goals or aims for this application to be considered a success, however there are some important Issues that need to be identified and elaborated on before the goals and their order of priority can be described in further detail.

UX/UI Design

While the overall design is not necessarily the most important aspect of the application, a clean and easy to use user interface goes a long way to gaining users and more importantly, keeping them. The application should contain an eye-catching logo which users will always see when they are scrolling across their device, keeping the App in the back of their mind for when they decide to travel next.

The colour scheme and general layout of functions is also important. Our goal is to create an easy-to-use user interface to avoid users becoming frustrated with having to constantly mess around with configurations and additional screens before they reach their desired page, the colour scheme should be easy on the eyes. A "dark mode" colour scheme could also be designed and implemented for users who have difficulty reading on lighter backgrounds.

Functions

The Functions can be defined as the capabilities of the application. The functions have been broken down into individual goals for task allocation, testing and have been prioritised based on their necessity due to time constraints. however, they are classified as the same "Aim" to avoid repeating the same information for every function.
The functions should be easy to access and use, their utilization should be straight forward, and any irrelevant information should not be displayed on these pages (eg. Ads)

Partnerships

Due to the design of the application and the way it functions Quik Biz travel came to the conclusion that partnerships may need to be formed in order to gain extra revenue. The partnerships are not an

integral aspect of getting the application up and running, as many larger businesses may feel more comfortable doing business with an organization that already has a large user base.

Understandably they may not want to do business with a newly formed company with no users and an unfinished product, which is why this goal is listed below others. As previously mentioned is not necessarily required before the application is launched, However partnerships could be started or, communication channels could be established between Quik Biz Travel and the desired partners before launch of the App.

Sponsoring, advertising, affiliates

Sponsoring, advertising, and affiliates are one of the last goals that was set by Quik Biz Travel and is listed as one of the lowest priority goals as it is not necessary for the application to function and to be usable by users.

These goals are essentially the backbone of the revenue to be gained by Quik Biz Travel, by partnering with businesses, advertising package deals and individual airlines and hotels along side running affiliate links and running affiliate-based APIs, Quik Biz travel could make a modest sum of profit every year provided the user base is large enough.

As previously stated in the "Partnerships" goal the best course of action would likely be to develop and deploy the application and then to gain a strong user base before implementing these features, some businesses may be skeptical about doing business and partnering with a small and unknown company however, if the application already has a large enough user base, then they would be more receptive to propositions by Quik Biz travel.

Launching the Application / Deployment

Launching the application onto the App store is the last goal, its position in the list depends upon whether Quik Biz Travel decides to form Sponsorships, advertising, affiliates and partnerships before deploying the application or after.

Its position in the list is also indicative of the fact that there is no point in releasing an unfunctional or poorly created application. First impressions are important and in the early days of the application the word of mouth and recommendations from the first users are highly integral to the success of Quik Biz Travel as a whole.

Plans and Progress:

The following pages contain the plans and progress of the current development of the Mobile application "Quik Biz Travel", these pages contain the specifics of what has been developed thus far, the issues encountered, how they where overcome and what the development team will need to do to accomplish their goals.

Introduction

The Quik Biz Travel application started as an Idea from one of the members – Peter. Peter has always been an avid traveler and has, over the course of his lengthy career as a Managing director of sales for various companies travelled all over Australia and the world for a myriad of reasons and corporate meetings.

Peter envisioned an all-in-one travel application, a single application that would allow the users to book flights, hotels, rental cars, find restaurants and local attractions, this idea gave birth to the "Quik Biz" travel application.

The Quik Biz Travel application was designed using SDLC (Systems Development Life cycle) . (ISO /IEC 12207), which is a process commonly used in the designing of Software and mobile applications. The SDLC system aims to produce High quality software that meets or exceeds expectations.

Because of this, the remainder of this section will be described using the formatting of the SDLC. The Testing and Deployment phases of the SDLC will not be covered within the scope of the "Plans and Progress" section of this document as they will be covered within the dedicated "Testing" section of the document.

Figure 7: Quik Biz - SDLC Life Cycle

Planning

The first stage of the development of the Quik Biz travel application was the "Planning" Phase. During this phase the development team met regularly to discuss the desired features and aspects of the application, specifically, what would the application physically do? How would it do it? The name of the application and first draft designs also started to be developed concurrently during this initial phase.

Due to the scope of this application, the first task of the development team was to seek out and identify any similar travel applications and to identify any potential issues they can find with them. The team found that several similar applications already existed such as Booking.com, Expedia, FlightCentre.com among others. The main issue that the development team found when analyzing these sites and applications is that often they do not include the full scope of features that Quik Biz Travel does.

During the Initial Planning stage some research into the legalities of the application where also conducted. Initially, the Application would allow users to register for an account, where they would enter their information along with any frequent flyer rewards cards they may have. This idea was quickly scrapped due to the legal implications of storing user data (in particular payment information), along with the potential risks and fallout that would occur should a data breach take place.

In addition to the legalities regarding the storing of user data, the team also researched appropriate business names including any currently registered trademarks and LLCs as a result of this the name chosen was "Quik Biz Travel".

The above events that occurred during the planning stage happened quite quickly. The team was able to identify these issues with a matter of days allowing them to focus more intensively on what features the application would contain, these features are covered in more detail during the "Defining" and Designing Stages blow.

Defining

The defining stage of the development started about halfway through the Planning stage. This occurred due to the apparent need for features to be analyzed and defined in more detail. During this stage the features of the Application were identified and prioritized accordingly. The following table shows these functions and their order of priority.

Priority	Feature/Funtion
1	User Design (UX/UI)
2	Flight Information
3	Hotel Information
4	Rental Cars
5	Local Area Information
6	Restaurants, Cafes, etc.

Table 6: App. Features

The above features were previously outlined during the "AIMS" section. They have been reiterated here out of convenience. The features, their functions, what information they hope to gather and how are outlined below:

1) **User Design (UX/UI)**
   The user design and interface encompasses everything the user will see and everything they will be able to interact with. The overall colour scheme, the buttons, text input areas, calendars for selecting dates, along with the overall design of the application plus the

placement of promotions and ads. Much of the User Design was created throughout the "Design stage" of the SDLC.

2) **Flight Information**

The Flight Information page/s will provide the user with several options for selecting and searching for their flights such as: the departure and return date/s the cost of the flights, the city names, number of passengers and the desired class (Economy, premium, business, and first class). Once the users in their desired information and click "search they will be presented with a list of matching results (if any).

3) **Hotel Information**

The hotel Information should contain the ability to search via City, the number of rooms, Star rating, and the check in and check out dates and times. Once the user presses the search button a list of hotels with matching specifications.

4) **Rental Cars**

The functioning of the rental car search and booking aspect of the Application is likely going to be the most complex, this is because of issues regarding API data. During later stages, the team found that the data from one single API would likely be insufficient, therefore multiple APIs or a custom API may be required in order for this feature to function properly.

However, similar to the Hotel and Flight information features, the Rental Cars feature would likely require the user to enter in their desired City, and the check-in and check out dates for the car, this can become an issue as some APIs require the car model to be entered, however others do not.

5) **Local Area Information**

The local area information search is to be designed to provide the user with information about local events, live shows, events and festivals. The user would be required to enter in the city and the dates they wish to search for

6) **Restaurants, Cafes, etc.**

This feature is to provide users with either a map of local restaurants, cafes and bars or with a list with ratings if possible.

Designing

The Designing stage of the project was a challenging one, Initially the development group was divided into 2 teams each consisting of 3 members. Each team was required to come up with a simple color scheme and overall design and layout of the application.

This proved to be quite a challenge as not all members have experience in designing mobile applications therefore inspiration was taken from existing applications while remaining careful as to not breach copyright infringement.

After some time the symbol or icon for the mobile application was chosen, it is depicted below:

Figure 8: Design of Quik Biz Emblem

The two designs from the groups differ in what their emphasis was. The first group decided to keep a simple design keeping with the Quik Biz Logo and an appropriate colour scheme to match. The second decided to focus on "Main menu" and the user input areas of the booking pages. The second group also included hotel destinations, this space is intended to either showcase popular destinations or could be where featured or promoted hotels are listed.

Group 1 Designs.
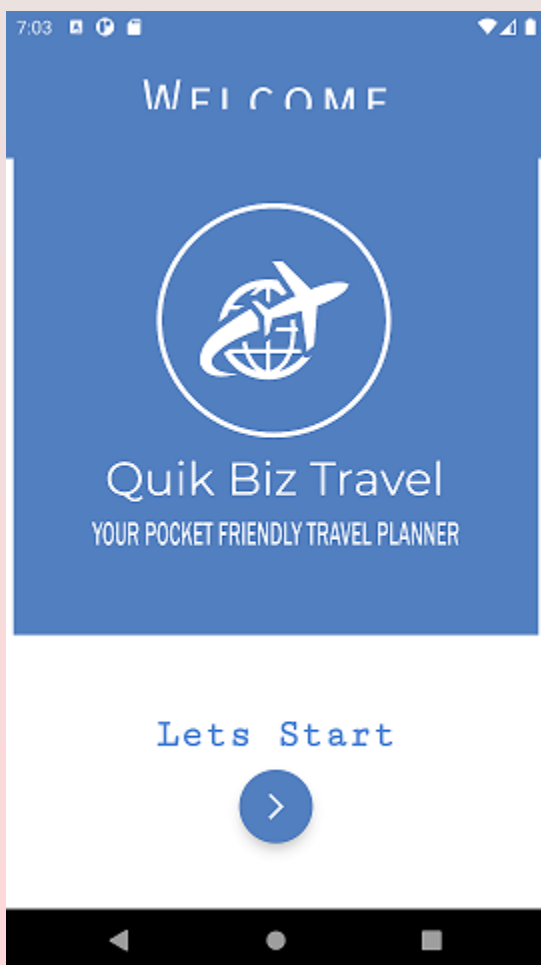
Figure 9: Quik Biz App - Main Menu
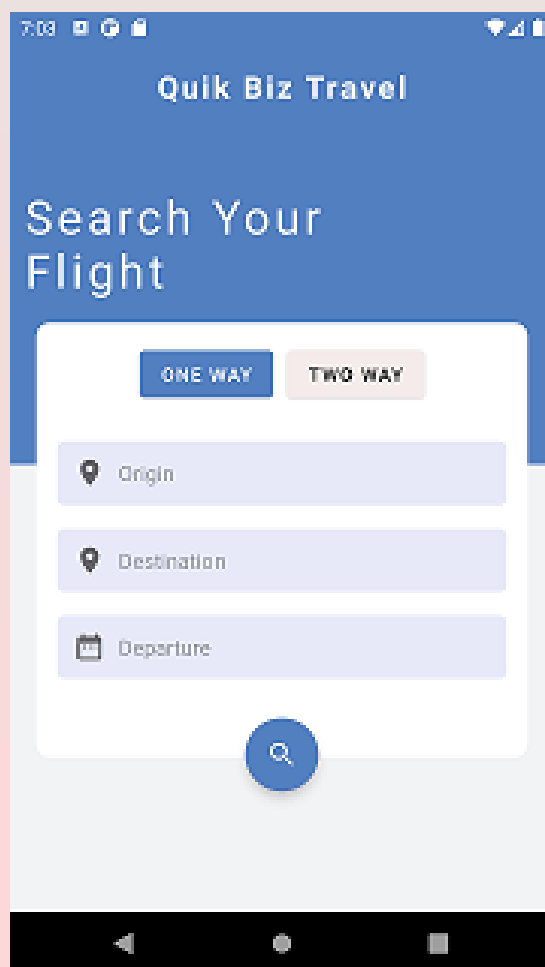
Figure 10: Flight Booking Menu (Team 1)

Group 2 Designs

Group 2 took inspiration from online templates, images, and existing applications. Also note that the application design for group 2 is called "Biz travel" and not "Quik Biz Travel" this occurred due to a lack of communication and some confusion during the design stage these designs however are highly subject to change and aspects from both would likely be incorporated should there be more time allocated.

Figure 12: Hotel Booking Menu (Team 2)
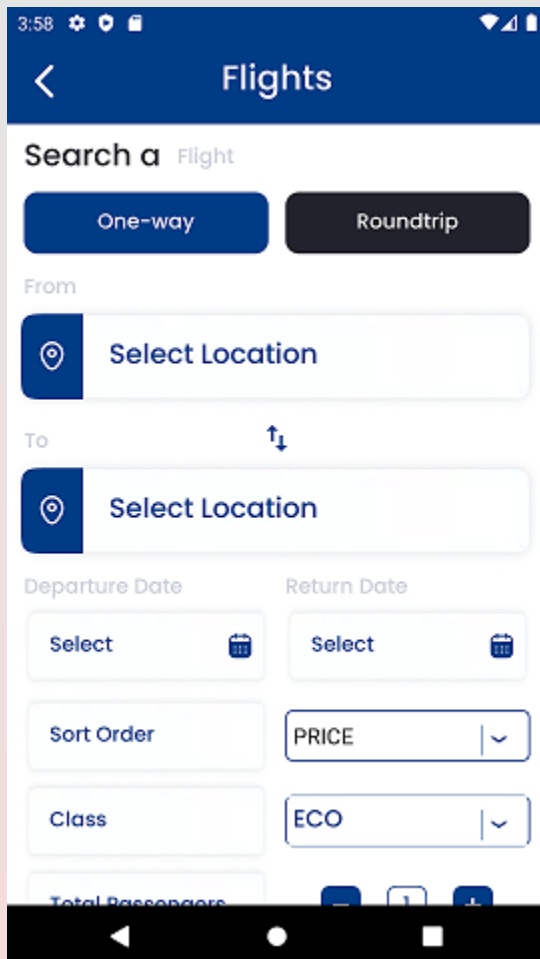
Figure 11: Flight Booking Menu (Team 2)

Building

Building this application took a lot of effort from everybody involved, many of the group members had never worked on or developed android applications before and this proved to be a very steep learning curve, nevertheless the group was able to develop some semblance of a mobile application with some limited functionality.

The application itself was built with Android Studio (version 4.3.1) with some elements being created or tested within Visual Studio Code (version 1.56.1/2). As previously mentioned, there was an apparent lack of skills regarding developing Android applications because of this some members where learning to create applications whilst simultaneously attempting to create this application.

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The building of the application took place along side the designing of the UX/UI elements while it was recommended that a Figma/Proto.io prototype be created. Members of the group also lacked experience in this regard and had difficulty in producing any tangible results along with confusion about how to utilize the desired APIs in order to pull information for users to view. As such the group decided to build the base of the application or, as much as they could (with the APK being contained at the end of this document).

Initially progress was slow, while the group may have had a head start by completing the tasks up until this phase very quickly the developers soon became bogged down with numerous issues arising including several APIs, which stoped functioning all together and the final API becoming almost obsolete as the maximum number of requests to pull information had been reached.

Progress may have been slow at first and there where numerous setbacks along the way, however the group did persevere and where able to implement the UX/UI designs for the Hotels and Airlines, along with the "Main Menu" containing icons or links to both with room for advertising or promotional links as outlined in the "Designing" phase.

What was not built:
Due to various reasons the entire project could not be completed, and while the following information is also contained within the "Scope + Limits" section of this document it is also being stated here due to the required need to emphasize this point

The table below contains the functions on one side and whether they were completed, advertising, sponsorships, affiliates and deployment are not included in the table.

Feature/Funtion	Completed Yes / No
User Design (UX/UI)	Yes (some issues)
Flight Information	Yes
Hotel Information	Yes
Rental Cars	No
Local Area Information	No
Restaurants, Cafes, etc.	No

Table 7: App Completed Functions

Roles:

Whilst our team has not allocated any 'specific roles' we have identified the following key roles that are most relevant to an App building project. Assignment 3 is a 'proof of concept' only, so there is not the 'critical mass' of work load for this allocation of roles to occur.

If the team agrees to continue with the project then these roles or a similar set of these roles will be allocated as the project workload increases.

A summary of the roles we have identified are as follows:

Role	Brief Description of Responsibilities.
Project Manager	- Analysing and understanding effect, cost, duration and size of the project. - Ensuring project meets timetable. - Assembling the project team and delegating responsibilities.
Business Analyst	- Effectively communicate clients' requirements. - Creating new models that support business decisions. ie what business structure is best Partnership / Company etc. - May incorporate Financial Reporting (P&L, BS), and business registrations.
User Interface Designer	- Ensure every page and every step a user will experience will interface with the final product. (Including it's looks). - Must be able to explain & justify design decisions
Technical Designer	- Develop software based on specific needs of end-users. - Determine customers' expectations. - Create a development plan for the design of the software. - Provide framework for the App including: such as: Delivery platform(s) (MAC, PC etc.), storage requirements, audio/video requirements, networking requirement, intermediate software such as browsers plug-ins, etc.
Lead Developer	- Ensure the team is adhering to the agreed methods and quality standards - Ensure consistency in software design.
Full Stack Developer	- Front-end and back-end development. - API, and version controlling systems.
Service Desk Analyst	- Responsibility for answering client calls when they experience difficulties. - Provide support for our office and reception areas.
Marketing Coordinator	- Determine provide and lead all marketing aspects of Quik Biz. - Determine communication needs and opportunities for our project.
Cloud Developer	- Implementations and maintenance cloud infrastructures. - Performing security checks
Security Architect	- Create blueprint for how applications will function, such as designing frameworks that prevent hackers from entering. - Create policies and security standards, - Incident response, data privacy, and system risk.
Software Tester	- Devise and implement a testing plan. - Assessing and evaluating proper functioning of application.

Table 8: Identified Roles

Skills and Jobs

Having identified the above roles for Quik Biz as it moves forward, we have written 4 job advertisements for employees to join Quik Biz Travel. Employees would be employed after the 'proof of concept' has been signed off and when workload is expected to ramp up. Four positions we most likely expect to hire are: a) Full Stack Developer – Android, b) Service Desk Analyst, c) Project Operations Manager and d) Marketing Coordinator.
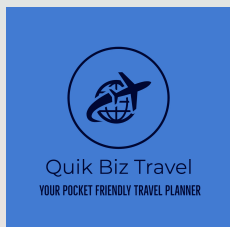
Full Stack Developer - Android

QuikBiz Travel are hiring!

We here at QuikBiz Travel are dedicated to providing the world with what we believe is a revolutionary new travel app. We need you to help make it happen.

We are looking for a qualified and experienced Full Stack Android Developer to join a small ambitious and tight-knit group. Within our environment you will be given the opportunity to test yourself and further your skills.

In this role, you will be working from a prime location in inner Melbourne, but there will also be opportunities to work from home.

Your primary role will be the development and maintenance of our travel app. This will include
- ✔ Front-end and back-end development.
- ✔ API, and version controlling systems.

To be able to do this you will have the following skillset:
- ✔ A strong proficiency in JavaScript, HTML and CSS.
- ✔ High level written and verbal communication skills.
- ✔ Experience in the utilisation of APIs within Android Development.
- ✔ High level of understanding of the Android Application development process.
- ✔ Sound knowledges of multiple programming languages.
- ✔ Solid graphic design.

This is a permanent position and the successful applicant will enjoy a competitive salary commensurate with experience. You will join a creative, fast-paced team, delivering engaging and inspired products.

If this sounds like you, we here at QuikBiz Travel would love to hear from you!

Please apply online with a cover letter and your CV addressed to Manager HR.

Service Desk Analyst

QuikBiz Travel are hiring!

We here at QuikBiz Travel are dedicated to providing the world with what we believe is a revolutionary new travel app. We need you to help make it happen.

We are looking for a service desk analyst to join a small ambitious and tight-knit group. Within our environment you will be given the opportunity to test yourself and further your skills.

In this role, you will be working from a prime location in inner Melbourne. At this stage there is little opportunity to work from home.

Your primary role will be supporting users of our app who experience technical difficulties. You will also provide support for our office and reception areas.

To be able to do this you will have the following skillset:
✔ A relevant tertiary qualification is desired but not necessary.
✔ A strong foundation in IT fundamentals, for example MS365 and Windows operating systems.
✔ A strong knowledge of Android phones and their operation.
✔ A positive and confident phone manner.
✔ Strong ability to multitask.
✔ Possess a passion and level of patience in helping people of all technical aptitudes.

This is a permanent position and the successful applicant will enjoy a competitive salary commensurate with experience. You will join a creative, fast-paced team, delivering engaging and inspired products.

If this sounds like you, we here at QuikBiz Travel would love to hear from you!

Please apply online with a cover letter and your CV addressed to Manager HR.

Project/Operations Manager

QuikBiz Travel are hiring!

We here at QuikBiz Travel are dedicated to providing the world with what we believe is a revolutionary new travel app. We need you to help make it happen.

We are looking for a qualified and experienced Project/Operations Manager to join a small ambitious and tight-knit group. Within our environment you will be given the opportunity to test yourself and further your skills.

In this role, you will be working from a prime location in inner Melbourne with some opportunity to work from home.

You will be able to provide our employees with direction and leadership while overseeing the development of our app. This will include:
✔ Analysing and understanding effect, cost, duration and size of the project.
✔ Ensuring project meets timetable.
✔ Assembling the project team and delegating responsibilities.

To be able to do this you will have the following skillset:
✔ Proven experience in previous successful projects under your direction.
✔ High level of understanding of the Android Application development process.
✔ Strong financial skills.
✔ The ability to develop high detailed project plans including timelines and action plans.
✔ Ability to track plan progress and maintain effective timelines.
✔ A relevant tertiary qualification.

This is a permanent position and the successful applicant will enjoy a competitive salary commensurate with experience. You will join a creative, fast-paced team, delivering engaging and inspired products.

If this sounds like you, we here at QuikBiz Travel would love to hear from you!

Please apply online with a cover letter and your CV addressed to Manager HR.

Marketing Coordinator

QuikBiz Travel are hiring!

We here at QuikBiz Travel are dedicated to providing the world with what we believe is a revolutionary new travel app. We need you to help make it happen.

We are looking for a qualified and experienced Marketing Coordinator to join a small ambitious and tight-knit group. Within our environment you will be given the opportunity to test yourself and further your skills.

In this role, you will be working from a prime location in inner Melbourne with little opportunity to work from home.

In this role you will determine, provide and lead all marketing aspects of Quik Biz. You will also be responsive to determine communication needs and opportunities.

To be able to do this you will have the following skillset:
✔   A relevant tertiary qualification.
✔   A passion for both Information Technology and Travel.
✔   Sound computer skills.
✔   High verbal and written communication ability.
✔   A knack for thinking outside the box and adding flair to projects.
✔   Previous experience is desired but not necessary.

This is a permanent position and the successful applicant will enjoy a competitive salary commensurate with experience. You will join a creative, fast-paced team, delivering engaging and inspired products.

If this sounds like you, we here at QuikBiz Travel would love to hear from you!

Please apply online with a cover letter and your CV addressed to Manager HR.

Scope and Limits:

We have divided the scope of the project into immediate, short term, medium term, and long term. Initially we are only going to develop an app for iOS through the App Store.

Immediate (Conclusion of our "Intro to I.T." course):

By then we plan for the 'App' to be a proof of concept only. It will only function for bookings of flights and accommodation. At this stage only the back end will be designed. The backend is the direct interface to the airlines and the hotels. It will use API calls and move the 'user' to the airlines or hotels web site. We will be focusing only on flights and hotels at this stage because we believe this is the vital and pivotal part of our app. This is what we are initially going to offer to our customers.

Short Term (up to 6 months from now):

This is where we will develop our 'front end'. This is what the user interacts with. We will design the majority of the screens at this point. The front end will pass control to the back end which will transfer the user to the airlines/hotel website.

We will also be developing the user login. This will include password control, verification of user details and the ability for the user to change his/her details. At this stage we will have a fully functioning App and theoretically could go to the market.

Medium Term (6 to 12 months from now):

At this point we have plans for 3 major developments. Transaction Processing, Android development and in App Advertising.

a) Transaction Processing:
We will develop business arrangements/partnerships with the airlines etc. so we make the transactions on their behalf. This will also involve stringent banking and regulatory requirements (ie Trust Bank Accounts). We will tweak our iOS app accordingly.
b) Development for the Android phone:
The exact requirement for the Android is not known, but we have made preliminary investigations and believe this will not be too onerous. From what we have read and understand the requirements are far less onerous than an iOS development.
c) Advertising:
Arrange and allow appropriate advertising in the App.

Now, users will pay us (Quik Bix Travel) and we will pay the airlines and hotels. With the introduction of advertising, this is where we begin to earn revenue and hopefully start to make profits.

Long Term (12+ months from now):

With revenue we can plan a major expansion of our services. We will introduce bookings for train travel, car rental, events, shows and restaurants etc. These will be fantastic to have and will give us a distinct advantage over our competitors.

Tools and Technologies:

Hardware Requirements:

After extensive research which involved comparing our projects to something of a similar ilk, our group has decided that we will require a fairly robust selection of hardware.

Firstly, and obvious, everyone will need some sort of a personal computer, whether laptop or desktop, either will suit the purpose. With this at least one of the computers must be an Apple computer running MacOS or failing that, at the very least be running MacOS through a virtual machine on a Windows system. This is so we can utilise XCode, the program used to write Swift, which is the programming language required to write applications for iOS devices.

In addition, we would require a minimum of one Windows computer, to assist in the development of the application for Android devices.

Along with the computers, both an Apple iPhone and an Android device will both be required for any troubleshooting and any general testing, as the intent is to create a functional mobile application for both platforms. Fortunately, the Google Play Store, has its own servers available to host Apps, and given our App is under a certain size limit, this eliminates the need for our own server.

Software used:

Android Studio 4.3.1
Visual Studio Code 15.1 | 15.2
Visual Studio 16.9.4
Eclipse 4.19

Most members of the group have used either Visual Studio Code or the Eclipse IDEs. There where only 2 group members who where confident in utilising Android studio and had some limited knowledge of application development. However another member had also previously used Android studio although they where not as confident as the others.

Testing:

Testing was conducted concurrently throughout the design and development stages of the application the image below depicts the number of API calls over the past 30 days, the graph is somewhat distorted due to the large number of calls that took place towards the end.
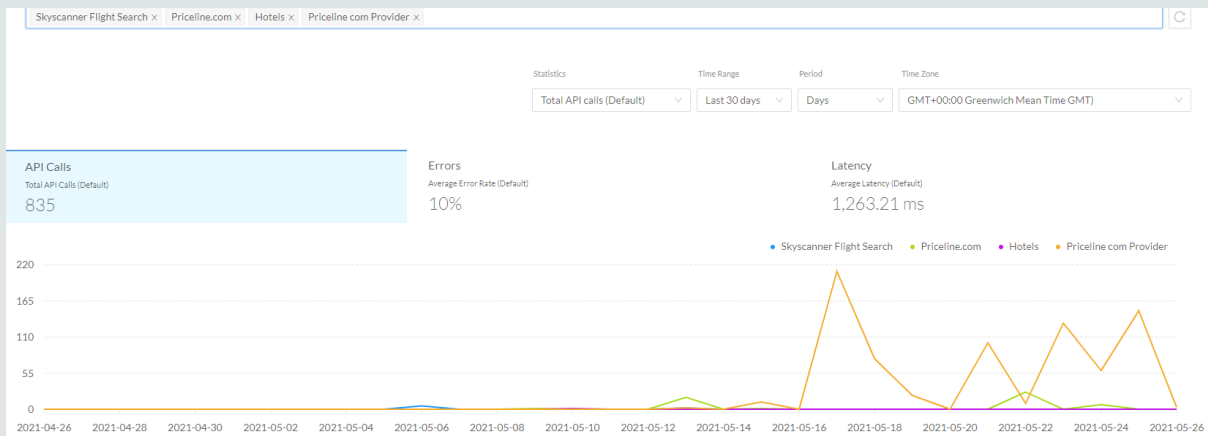
Figure 13: Number of API calls during Testing

Testing the remaining aspects of the application would likely remain the same. Once a feature has started being developed the new feature would be tested concurrently to ensure it is functioning as required – that is: the desired information has been displayed to the user.

TimeFrame (Gantt Chart)

The following Gantt Chart is in two Pages.

1) The time period upto and including the end of Assignment 3
2) The period following period one

Figure 14: Gantt Chart - Period One

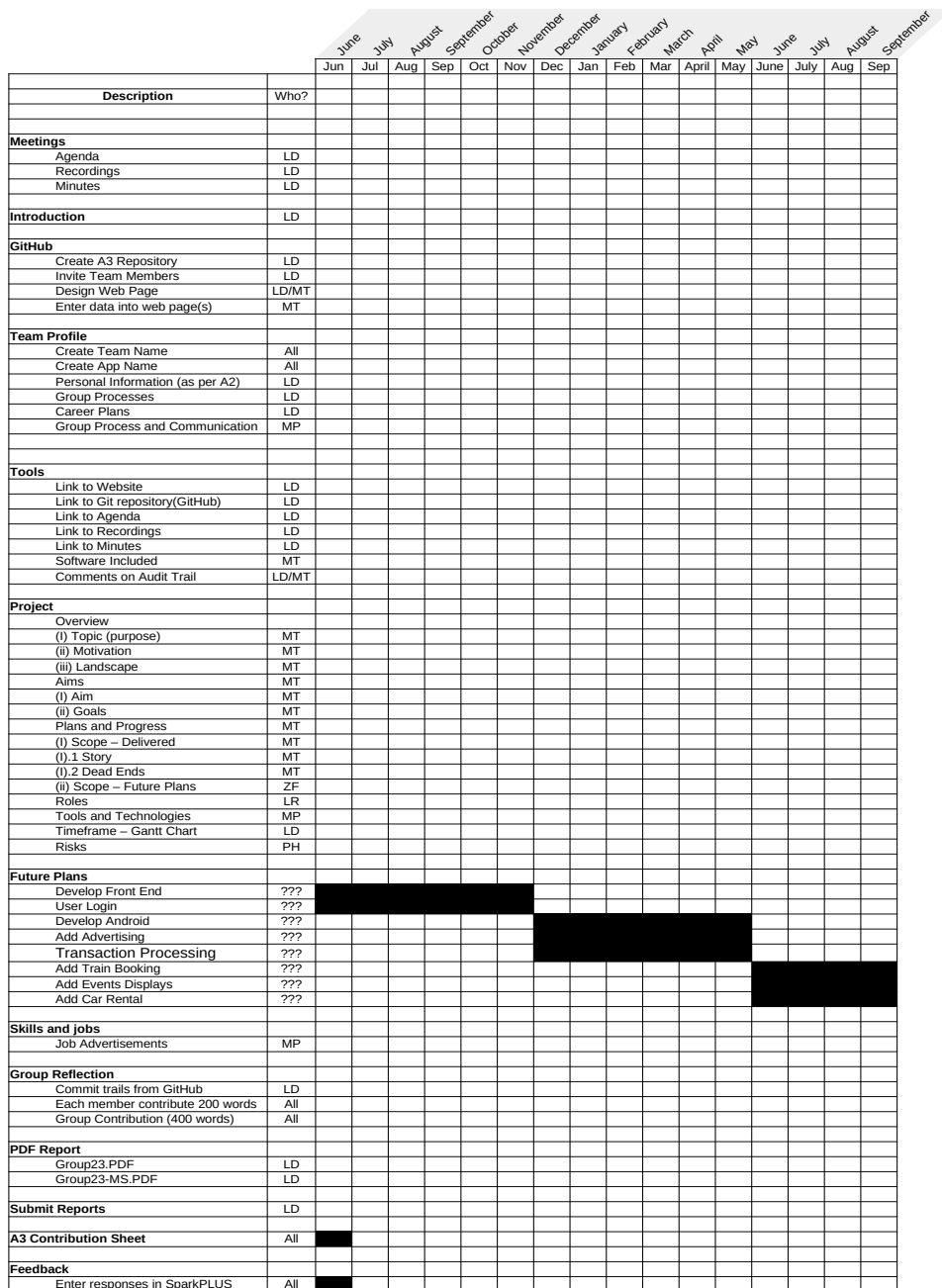| Description	Who?	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sep
Meetings																	
Agenda	LD																
Recordings	LD																
Minutes	LD																
Introduction	LD																
GitHub																	
Create A3 Repository	LD																
Invite Team Members	LD																
Design Web Page	LD/MT																
Enter data into web page(s)	MT																
Team Profile																	
Create Team Name	All																
Create App Name	All																
Personal Information (as per A2)	LD																
Group Processes	LD																
Career Plans	LD																
Group Process and Communication	MP																
Tools																	
Link to Website	LD																
Link to Git repository(GitHub)	LD																
Link to Agenda	LD																
Link to Recordings	LD																
Link to Minutes	LD																
Software Included	MT																
Comments on Audit Trail	LD/MT																
Project																	
Overview																	
(I) Topic (purpose)	MT																
(ii) Motivation	MT																
(iii) Landscape	MT																
Aims	MT																
(I) Aim	MT																
(ii) Goals	MT																
Plans and Progress	MT																
(I) Scope – Delivered	MT																
(I).1 Story	MT																
(I).2 Dead Ends	MT																
(ii) Scope – Future Plans	ZF																
Roles	LR																
Tools and Technologies	MP																
Timeframe – Gantt Chart	LD																
Risks	PH																
Future Plans																	
Develop Front End	???	■	■	■	■	■											
User Login	???	■	■	■	■	■											
Develop Android	???							■	■	■	■						
Add Advertising	???							■	■	■	■						
Transaction Processing	???							■	■	■	■						
Add Train Booking	???													■	■	■	
Add Events Displays	???													■	■	■	
Add Car Rental	???													■	■	■	
Skills and jobs																	
Job Advertisements	MP																
Group Reflection																	
Commit trails from GitHub	LD																
Each member contribute 200 words	All																
Group Contribution (400 words)	All																
PDF Report																	
Group23.PDF	LD																
Group23-MS.PDF	LD																
Submit Reports	LD																
A3 Contribution Sheet	All	■															
Feedback																	
Enter responses in SparkPLUS	All	■															

Figure 15: Gantt Chart Period Two

Risks:

There are many risks involved in developing any type of mobile application or website. Some of the risks we've identified to our Travel Booking App are as follows:

1. **Timeframe:** Due to the scale of this application, and some of the features required would require an immense about of time and energy in order to implement, such as: the rental car services.
2. **Experience:** Experience is likely the main issue regarding the successful development and deployment of this application. Not every member is experienced with mobile application development and the ones who are working with a very large workload, with limited time and experience to complete their goals it is highly likely that mistakes will be made along the way.
3. **Financial:** The financial aspect of the application is the most difficult to judge and or estimate on one hand the developers need to be paid according to data from Glassdoor.com the average mobile developer earns around $105,000 a year considering the size and scale of the application it is not too outlandish a statement to assume at least 5 developers would be working on the project.
In addition to the cost of labor the cost of APIs must also be considered there are almost no uncapped free to use APIs available so APIs will either need to be purchased or created from scratch.
The final financial consideration is: Partnerships, because Quik Biz travel is designed to be a free to use application the need to earn revenue through other avenues is paramount. This can be done by either partnering with airlines and hotels who would provide Quik Biz travel with affiliate income or, through advertising various hotels and airlines on the app. Realistically the total cost of developing this application could easily be over $1,000,000
4. **Saturation.** Developing an app that people don't want or saturation by similar apps in the market. A unique travel booking app that differs from all of the others, will give us the best chance in the marketplace. It is also important to develop an app from the "customer's perspective".
Peter Hodgkinson, one of our Quik Biz Team members, has had many years of international business & leisure travel under his belt. The perspective his input has provided into the team project, identifies the need fora simplistic travel booking app that provides, flight, hire car & accommodation availability on one single platform, as opposed to booking through multiple sites. We must adhere to the KISS principle.
5. **Growth.** What if there is exponential growth and the number of users of the site becomes unsustainable. Will we be prepared for the number of users of the app. (band width, support staff etc.). Providing service to an increasing number of users can be expensive and create anger and confusion to an end user if not planned for properly.
6. **Platform.** Do we develop an app for one platform, which would be simpler, but would limit us in the marketplace, or do we develop for multiple platforms. This in turn will cost more and require a lot more time and manpower o focus on developing the application. Apple regularly update their operating systems and use encryption. Choosing a single platform would be risky and would limit the company's future options.
7. **Vulnerability**. Another consideration is that we are at the mercy of Google, Apple and Microsoft. For example, with Apples Catalina's upgrade (macOS system Oct '19) they moved from 32bit to 64bit, thereby making all programs written purely for 32 bit debunked. If we don't play by their rules, they may reject our application request. Apple is more likely to reject our application at

least once and resubmission will be required until it is approved and listed. New rules often come into play and of course consideration this will involve increased ongoing costs.

8. **COVID-19.** Travel and tourism have been severely affected by the COVID-19 pandemic over the last 18 months. Several countries have temporarily banned the movement of travelers. It is certain that the industry will rise again soon, however there are no guarantees that this will happen in the short term.

9. **Technology.** We must keep abreast of future technology solutions because they will play a huge part in helping the travel and hospitality industry survive during these tough times.

10. **Software.** Software updates and changes pose a significant risk to the functionality of the application, in particular APIs, and the Android kernel. If either Android or Apple where to implement even a minor change there is a chance that the application will no longer function as intended or cease to function altogether. This was a problem we faced mid-way through developing our prototype as one of the APIs we where using lost its hosting and became unusable resulting in time lost and caused multiple pages to need to be reworked.

After we consider and contemplate the above issues and their potential effects on the development and deployment of the application, we can better understand what the goals are, and why they exist.
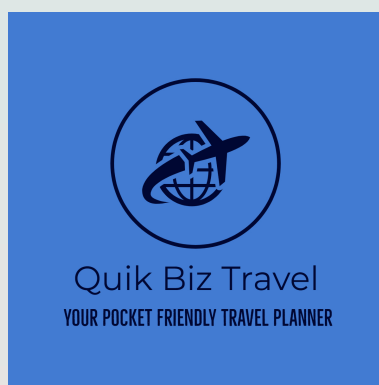
Chapter Four – Group Reflection

Career Plans:

"Desire! That's the one secret of every man's career. Not education.
Not being born with hidden talents. Desire." (Carson nd)

Ideal Jobs:

Quik Biz team members have not changed their ideal jobs from Assignment 2, which in turn had not changed from Assignment 1. Team members preferred (ideal) job are:

Team Member	Job Title	Job Characteristics
Lewis Dean	SQL Analyst Programmer	May be a 'contract 'employee for a fixed time, but more likely be a normal Employer / Employee relationship. Fixed office location with minimal customer contact.
Mark Parisotto	Penetration Tester (System Assurance)	Self Employed. Will be a sub-contractor to whoever needs systems checking/vetting. Variable locations of work, high degree of customer contact. Amount of work depends on Mark.
Peter Hodgkinson	Applications Developer	May be a 'contract 'employee for a fixed time, but more likely be a normal Employer / Employee relationship. Fixed office location with minimal customer contact.
Lucky Rubenecia	Software Developer	May be a 'contract 'employee for a fixed time, but more likely be a normal Employer / Employee relationship. Fixed office location with minimal customer contact.
Zac Foulds	Self Employed IT Field Technician	Self Employed in a franchise relationship. Will visit customers homes, similar to "Geeks2U". Variable locations of work, very high degree of customer contact. Amount of work depends on Zac.
Max Trounce	Software Engineer / Developer Programmer	May be a 'contract 'employee for a fixed time, but more likely be a normal Employer / Employee relationship. Fixed office location with minimal customer contact.

Table 9: Ideal Jobs

Ideal Jobs Summary:

Most of the team are sure of the type of job they wish to do, but are undecided on the type of industry they would like to work in. The team considers this not an important decision at this stage of their career.

Most of the preferred jobs are your traditional employer/employee relationships in a fixed office environment. However two jobs are best described as freelance, sub-contractor or franchise type employment where work is in multiple locations and the team member remains his/her own boss.

Job Skills:

The major job skills associated with the above preferred (ideal) jobs are:

Skills	LD	MP	PH	LR	ZF	MT
Communication Skills	✓	✓	✓	✓	✓	✓
Documentation Writing	✓		✓			
Work in Teams	✓	✓	✓	✓	✓	✓
Work Independently					✓	✓
Software Design (Programming Skills)	✓		✓	✓		✓
Systems Testing		✓	✓			
Data Manipulation Skills	✓			✓		
Australian Citizen or Permanent Resident						✓
Experienced	✓					
Masters in IT						✓
10 years Experience						✓
Criminal History Check					✓	

Table 10: Job Skills

Job Skills Summary:

As can be seen from the above table, all the ideal jobs insist on a number of core skills. The most prominent being communication and the ability to work in teams. Although one job does require working in teams plus the ability to work independently.

> '56% of jobs requires good communication and interpersonal skills while 33% require 'excellent communication skills' (Hotham-Gough, 2013)

After this, the jobs tend to specialise. Most require programming skills, one predominantly requires system testing abilities and one centres around in-home customer support.

Education requirements:

We believe an undergraduate degree is a 'minimum' for all the preferred positions. One position however, insists on a Masters Degree.

Career Paths:

With the teams preferred jobs not changing from Assignment 1 and 2, all team members see no reason to change their career paths from those discussed in Assignment 2. They are:

Team Member	Career Paths
Lewis Dean	Lewis's immediate goal is to complete the undergraduate degree. He considers this sufficient to be able to apply for his ideal job.
Mark Parisotto	Mark's career path involves firstly completing the IT degree with emphasis on Networks, then gaining the necessary qualifications (CREST and OSCP) to be able to apply for his ideal job.
Peter Hodgkinson	Initially Peter wishes to complete his undergraduate degree. Concurrently with that he wishes to develop a mobile app for his wife's catering company spudsisters.com.au. gaining an understanding of the creation, development and life cycle of these applications. He aims to identify a niche, through his volunteer work, through Alfred Health, in Melbourne. He has always had an interest in the community services sector and through his volunteer work, he will endeavour to identify ways in which Mobile Applications can be developed to assist doctors with managing their patients needs.
Lucky Rubenecia	Lucky has already completed a Diploma in Nursing at RMIT. After completing the IT degree at RMIT he intends to continue to understand Software Development and the fundamentals of Information Technology.
Zac Foulds	Loving technology Zac has developed a knowledge in different ranges of IT including Mac, iOS, windows and data. He completed a year of as an electrical apprenticeship so has a lot of knowledge regarding installing data points and racks, essential for home support. He plans to complete his IT degree and continue his own research into home electronics, and do small jobs for friends.
Max Trounce	Max will need to finish his bachelors here at RMIT. Upon completion he wants to do Honours in software engineering likely at a different University as he is unsure if RMIT has this option. He is aware that QUT does. After Honours he would then either attempt to enter the workforce as a junior software engineer in order to gain some hands on and real-life experience that he needs to acquire before applying for the ideal job, or he may commence a master's the year after. Considering the job, an Honours and Masters Degree in either software development, cyber security, or artificial intelligence would likely be his best course of action. This pathway so far is likely to take at least 6 years of uninterrupted full-time study provided that all units are passed and completed on time.

Table 11: Career Paths

Career Paths Summary:

Initially all team members wish to complete their undergraduate degree. After this they plan different strategies. These range from no further studies to completing an Honours degree and a Masters degrees. All but one of the team see a need for some form of further study after the undergraduate degree.

Members Reflection:

Team Member	Reflection
Lewis Dean	Lewis would like to thank Mark, Peter, Lucky, Zac and Max for being a fantastic group to work with. He wishes them all the best for their future careers. **What went well:** ✔ <u>Process.</u> Lewis felt that whilst all team members wrote different aspects of the project it was important that when these were combined it came together into one coherent article. Given the risks of this approach, he stated that this was the teams best achievement. ✔ <u>Output.</u> Lewis felt the quality of our output was exemplary. **What could be improved:** On a personal level, Lewis thought his leadership performance could have been better. He missed the due date of Assignment 5 (Video Submission) which put undue pressure and stress on all team members in delivering Assignments 3 and 5 on the same day. As a consequence, the team missed the submission date for the storyboard. **What was surprising:** Lewis had a 'misplaced' perception of the maturity and ability of the younger generation. But all the team members surprised him with their confidence, maturity and ability. He considers their command of IT (especially Apps) is mind boggling. Lewis added that this was the same surprise as Assignment 2 but also continued into Assignment 3. **What has Lewis learned about Groups:** (same as Assignment 2) Lewis felt it's difficult to say to one of the group that you think their efforts can be improved (English expression etc.). How do you tell them? Choice of words are so very important. You have to be aware of their sensitivities. This can be difficult in a team that is still trying to get to know one another. Fortunately, he felt all members of our team reacted positively to suggestions. But he felt the corollary is a bigger issue – to shy away from telling them, either by leaving work unchanged or not telling them of the change. Lewis felt that shying away causes more issues than being honest up front. Lewis concluded: ..."it all comes down to the main issue that permeates the whole of this I.T. course. Namely: **Communication / Communication / Communication"**

Team Member	Reflection
Mark Parisotto	Mark really enjoyed working within our group, and added he thought Lewis, Peter, Lucky, Zac, and Maxwell are a great bunch of guys and we got along really well, and he believes this shows in our group work. Our communication was excellent along with the discussion and sharing of each individual task for the assignment. Mark felt it's quite difficult to pinpoint anything that could be really improved. If he had to be honest it was the changing of project ideas at a late notice. One thing that surprising Mark was probably how effectively we worked as a team, despite never meeting each other in person. There is always some inherent risk when taking on group work regardless of whether you know the other group members beforehand, this fact coupled with how well we worked together genuinely surprised him. Over the course of our group work, he learnt that clear, concise communication is absolutely imperative. It is really a make-or-break factor when it comes to group work, as it can lead to potentially catastrophic errors, like two people doing the same task and leaving one task unattempted. That being said, he believed our team was really solid in that regard.
Peter Hodgkinson	Peter stated he thought, with regard to his individual performance in the two assignments, that he was dedicated to attending the weekly meetings, made sure that he was on time, as well as actively participate in each of the meetings. He believes that during his interaction with the other team members, he was able to identify his strengths and weaknesses, especially with respect to his technical knowledge, where he initially lacked experience and expertise. With the assistance of the other team members, he was able to grasp new concepts that helped him complete his portions of Assignments 2 and 3. In his many years of experience of managing other people he believe that it is just as important to listen to others and gain their perspective, as it is to impart your own knowledge. As with any project, he was committed to completing the tasks required and consulted well with the other team members, if he required any assistance or feedback. He did not take on a leadership role, but spent most of the time listening to the others in the group and taking their lead, due to his limited understanding of IT systems. This is important for Peter, but believe this will change, when he is well into the Bachelor of Information Technology Degree and increase his level of understanding
Lucky Rubenecia	Lucky stated that he felt the group worked well together. All tasks were allocated. We each had parts of the project to complete. The picking of the project was the worst part. We changed the project after Assignment 1 marking. The thing I've learned is that communication is very important as well as listening.

Team Member	Reflection
Zac Foulds	Zac's perspective on our group was similar to the previous assignment. Everyone continued to work well and was always willing to engage in conversation in our meetings and listen to each others thoughts. He also thought our production within our meetings was excellent and even better than our last assignment, getting everything we needed to get done on time. Zac was happy with the twice weekly meetings, with overall attendance of everyone being almost 100%. The team continued to bond with one another and form great connections. The team continues to get stronger and our ability to help one another was always there when needed. All group members continued to be prompt and on time when joining meetings and couldn't have asked for a better group overall. Zac was very happy our group stayed the same for both Assignments 2 and 3. This assignment (A3) had a lot more work than our previously and so our team was able to stand up and take on more work when required. All members of the group were able to step up and offer more help if another member needed it and one great thing we did as a team was always send in our work and look over others work to see if improvements could be made so we all should get a better mark.
Max Trounce	**What went well?** Max believes overall the group worked well, most of the work apart from the actual development of Proof-of-concept or artistic designs was completed very quickly which allowed for more time for members to complete the more time consuming tasks. **What could be Improved?** Max stated that there is always room for improvement and nothing is ever perfect, it is difficult to say what could be improved as there are many factors behind why something would need to be improved however, the proof of concept designs and the application itself could have been developed more and could have had a better overall design to make the application look better. Max thought it is important to note that not everybody has experience in application development and this assignment was a learning curve for everybody. **What was surprising?** The main thing that surprized Max was how quickly the group was able to divide up the tasks and get their initial tasks completed, some members had finished their work very quickly and where then able to assist others. **One thing you have learned about groups?** Through most of his life Max has worked in jobs and professions that required him to work cohesively as a unit, with all of these jobs the work has been conducted in person and when a meeting took place everybody was there face to face. One thing I learned was that it is important to build meetings and schedules around other peoples personal lives and their time zones when working in groups online.

Table 12: Team Members Course Reflection

Team Reflection:

Group work is always a challenge, even when working with people you have met and know, so when we were told to find people in our course to form up with and complete a major assignment, people were understandably nervous. We were a little more relaxed about the challenges we would face in Assignment 3 having done well in Assignment 2. However, we did not appreciate the amount of work Assignments 3 and 5(Video) would require. But we came through it. We feel the main reason for this is the bonding during our meetings.

Our team faced two major challenges in this course:

i) Assignment 2.

Changing of the project very late into our assignment work. Originally deciding to go with one project idea until Assignment 1 feedback was eventually received before making the decision to transition onto another project. One that we were incredibly proud and confident to present as part of our assignment and one that we believed was both feasible and potentially very successful. One that in the end scored very high marks. This high mark is a testament to the processes we adopted and the ability and attitude of our team members.

ii) Assignment 3.

Our team miss-read the due date for the submission of the Video component(A5) of the assignment. This initially caused panic, but with quite reflection and full communication during the group meetings this allowed us to prioritise our work.

Each member of the group was surprised at how well we were able to organise ourselves despite these two near disasters.

With that being said, we believe that as a group, we really enjoyed working together and everyone knows that down the line, they will always have fellow members of "Quik Biz Travel" to rely on. We believe that the bond formed in our group is highlighted by the quality of our group-work. We communicated well, meetings were organised comfortably, and we all felt safe contributing work to the group. All goals set were achieved by our group.

We believe the communication amongst each other for the assigning of individual tasks was one of the most surprising aspect of working as part of this group. As a group, we have learnt that open and honest communication is integral to any group if that group intends to do well. Whether it was a member of our group imparting their knowledge on to the rest of the group, or collaborative discussions and decisions we believe that our communication was an area in which we shined. This can be seen in our bi-weekly meetings in Microsoft Teams.

Appendices

Appendix One – References:

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Appendix Two – GitHub log of activity: