**Introduction to Information Technology**

**Assignment 3: Our IT Project**



**Team: DualCab**



**Project: Quick Quotes Calculator**

**DualCab Team Members**

|  |  |
| --- | --- |
| **Alex Milnes** | **s3987656** |
| **Chris Box** | **s3992802** |
| **Ashwani Choudhry** | **s3991119** |
| **Lachlan Neilsen** | **s3987677** |
| **Sjoukje Ida Gange** | **s3338810** |

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**Purpose**

**[All text in blue represents instructions and should be deleted before the assignment is submitted]**

Having completed one project with your team (Assignment 2), it is now time to develop a plan for an IT project of your own, which will show an understanding of both your group’s skills and talents, as well as an understanding of the IT industry and current IT trends. Your work in this project will develop a plan for your project, and as much of a prototype or other artefacts that you can produce in the time available to you.

**There are to be significant artifacts delivered and documented here.**

**Without the demonstration of tangible results towards implementing (at minimum) a functioning prototype there will be considerable penalties imparted on the moderated assignment marks for the team.**

**What you will demonstrate:**

[You’ll continue to demonstrate your ability to work in a team environment, complete research tasks, and to present information in a professional report format. You’ll also explore your creative side, and project planning by developing further your group project idea and expanding the details with more research and feedback from the unit staff.]

**How you will demonstrate it:**

[Writing up a document covering all of the different areas listed above (and detailed below), to be then formatted and presented in a PDF Report. Update your group website from Assignment 2 that was hosted on GitHub Pages.

Submission of both a written PDF report and a GitHub Pages hosted website.

Start by forking your A2 GitHub repository - <https://guides.github.com/activities/forking/>]

**Specifications**

**Team Profile**

[You will have submitted a Team Profile as part of Assignment 2. You can use this as a basis for this Team Profile, noting any changes in the group as appropriate. There are some slight differences this time around, as noted below.]

**Team Name: Dualcab**

**Project Name: Quick Quotes Calculator**

[You are free to choose any name for your group that you wish. However, this name will be used to identify your group for the rest of the course, so please choose wisely. You should also keep in mind that this name could be one that comes to the attention of potential employers. This is the same as in Assignment 2, so you can reuse your work from there, unless you wish to make changes.]

**Personal information**

One paragraph per person, including name, student number, background, hobbies, IT interest and IT experience. This should also include your team’s chosen name. This is the same as in Assignment 2, so you can reuse your work from there, unless you wish to make changes.

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| --- | --- | --- |
|  |  | **INTJ-A** |
| **Personal Information: Lachlan Neilsen – Team Leader** | | |
| Student Number: s3987677  My name is Lachlan Neilsen, I am a High Voltage Tester, and I have recently commenced Bachelor of IT with RMIT. I am a slightly introverted, open-minded worker with a primarily hands-on learning style. I developed a keen interest in learning IT at the when one of my friends showed me how to install Linux and play around with Python. Since then, I have used python extensively for processing and analysing data and have gained knowledge of core concepts of OOP. | | |
| **Team Profile** | | |
| I am a slightly introverted, open-minded worker with a primarily hands-on learning style. My greatest strength (as highlighted by Myer-Briggs) is my persistent need for clear, decisive answers. As an INTJ-A personality type, I pay great attention to detail, and as a result I usually complete tasks at a very high standard. My Greatest weakness (as highlighted by Big 5 results) is a relatively low extraversion, coupled with 69% neuroticism. If care is not taken this could lead to insular work patterns, and disproportionate doubt in my work. | | |

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| **Personal Information: Alex Milnes** | | |
| Student Number: s3987656  My name is Alex, I am 30, I have relocated to Brasilia, Brazil, and I love it. I am a loving husband and Father of twin boys with another set of twins on the way. I am Australian, born and raised in Sydney. I have studied after school; my significant achievement is attaining the Diploma of Security and Risk Management, which created my interest in information technology. I am a native English speaker and can speak Portuguese at an intermediate level; this has helped me professionally and has created many opportunities. I am interested in physical activities and team sports. I like to read about politics and economics, but I mostly enjoy sports, Cricket and Rugby being my favourites. | | |
| **Team Profile** | | |
| The test results opened my eyes to my attributes, and I was unaware of some traits the test claimed I had. I felt very accomplished with the result such as “humanitarian”, “innovator”, and “caretaker”, which I believe are very authentic. However, I was also taken aback by such claims of being “judging”; until now, I believed I did not display this trait. It would influence my behaviour positively due to claims that I am a “humanitarian” and a caretaker”. I am a team player and willing to perform any task assigned. I believe I would excel at speaking and writing tasks due to having prior experience with this before, where Git and GitHub skills I found difficulty with, but I am doing extra study to compensate. | | |

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|  |  | **ISTJ-T** |
| **Personal Information: Christopher Box** | | |
| Student Number: s3992802  My name is Christopher Box, I'm 42 years of age and live in Newcastle, NSW. I work at Telstra, in a team managing outages related to landlines, and the customer faults affected by those outages. My hobbies include gaming, technology/gadgets, travel and astronomy/ astrophotography. My interest in IT began at a young age, when I began gaming on a computer at Dad's work. This developed over the years into also building PCs, networks, and troubleshooting technical issues for friends and family | | |
| **Team Profile** | | |
| My Myers-Briggs Test outcome is 'ISTJ-T Logistician', which means practical, fact-minded, and reliable. I work best with some structure and leadership and am reliable in a role that requires me to complete defined tasks to a clear schedule. My learning Style Test outcome 'Visual Learner', which means that I remember what I see over what I hear and that I prefer to read/write rather than listen to information. In my group I would learn best using visuals such as a shared whiteboard - Trello in our case. Team Roles Test outcome 'Completer, Team Player, Expert', which means the top 3 roles in a group that suit me best are: at the end of a task, to polish and scrutinise the work for errors; diplomacy, team cohesion and helping others; being trusted to complete specific tasks working alone. | | |

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|  |  | **EFSJ-A** |
| **Personal Information: Ashwani Choudry** | | |
| Student Number: s3991119 Ashwani was born in India, migrated to Australia six years ago and is Australian citizen now. Had a degree in Mechanical engineering but could not carry over due to surname issues. Having a lot of experience in using software's related to mechanical engineering such as CAD, CAM, Solidworks and has worked CRMs like salesforce and SAP. My hobbies are Playing cricket, basketball, golf, enjoy long walks and some gardening. | | |
| **Team Profile** | | |
| My classification in the Myers-Briggs test is 'Assertive Consul'(ESFJ-A) which means that I am thought to be down to earth with a strong focus on what's happening or likely to happen. I will bring a high-level of organization but also an even temper and a resistant to stress. My Learning styles test shows that I learn best through hands-on experience and that I get a lot of satisfaction building things. My big-5 test shows that I bring conscientiousness to my team and that I strive for high achievement. | | |

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| --- | --- | --- |
|  |  | **INTJ-A** |
| **Personal Information: Sjoukje Ida Gange** | | |
| Student Number: s3338810  My name is Sjoukje Ida Gange usually called Ida. My hobbies include reading, making many craft items including quilts, plushies, clothes, books and bookbinding and I am now teaching myself leather work. I have qualifications in Information Science and Technology, and I worked for many years in Information Management, however my work was becoming more and more technology oriented. Since I very much enjoyed this aspect of my work and wanted to learn more, I enrolled in the Bachelor of Information Technology | | |
| **Team Profile** | | |
| According to 16 personalities I am an Advocate and a good diplomat. However, being inclined to perfectionism, I need to be careful not to impose my expectations on my team members. According to the VARK test I am mostly a visual learner although I also score highly with read/write skills and on the Big 5, I score very low on Extraversion and other qualities related to social skills which means that I need to work hard to develop relationships with other team members. | | |

**Group Processes**

How well did your group work together in Assignment 2? Will you be introducing any changes in process for Assignment 3? This is new for this assignment.

In Assignment 2 most of our communication was via Microsoft Teams, with asynchronous communication between each other as we progressed with tasks, as well as twice-weekly MS Teams meetings where we would discuss the team’s progress and any issues. Our team worked well over MS Teams, though one of our team members suddenly became unresponsive, and we weren’t sure at the time how long to allow them to reply before raising it with our course facilitators. This became a good learning experience for our team, and the remaining team handled it very well. Though it did cause troubles with our planned task allocation, and we had to change our IT project late on. From this experience we have grown to have expectations of meeting attendance and activity on MS Teams, as well as improving our task allocation and tracking of outstanding tasks.

Our team also used a Trello board to allocate some tasks, but we all experienced some technician problems accessing the Trello board at times, so we have decreased our expectations of using Trello to map everything out. Our team leader, Lachie, instead created an MS Excel spreadsheet to track tasks through to completion, paired with a more granular view of the tasks in a text file.



*Screenshot of our Team’s task tracking spreadsheet*

Our reliance on GitHub dramatically reduced for Assignment 3. In Assignment 2 we all learned to use GitHub and used it to store all our working documents in the team’s repository. This worked well, but when it became time to compile all this information into the submission PDF it became clear that it might be easier to input the information directly into the submission document throughout the course of the assignment. We are not using GitHub to store parts of the submission and are instead using a shared Word Document in MS Teams. We all update this draft submission document as we progress through our own tasks. GitHub was still a necessary, and useful, tool for our team during the build of our website for Assignment 3.

Another process we have refined since Assignment 2 is to ensure all team members use in-line citations and a reference list when contributing written sections to the submission document. This should decrease the amount of work required to create a reference section at time of finalising the submission document.

We have continued to communicate with facilitators via Collaborate Ultra for advice when necessary.

Overall, we our group processes in Assignment 2 worked quite well, but with experience we have refined how we used tools in Assignment 3

**Compare and contrast the career plans, including ideal jobs,**

for each person in the group. This may have changed due to feedback from Assignments 1 and 2. What common elements are there, if any? What differentiates each position from the others, if anything? How similar or different are your career plans across the group? This is new for this assignment.

**Career Plans**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | Lachlan Neilsen | Alex Milnes | Christopher Box | Ashwani Choudry | Sjoukje Ida Gange |
|  |  |  |  |  |  |
| **Future Career Choice** | .NET Developer | Cyber Security Specialist | IT Team Leader | Cyber Security | Quality Assurance Test Engineer |
|  |  |  |  |  |  |
| **Recommended**  **Career Qualities** | Budget Design | Critical Thinking | Active listening | Critical Thinking | Inquisitive |
| Time management | Communication | Communication | Communication | Thorough |
| Problem-solving | Problem-solving | Commitment | Problem-solving | Diplomatic |
| Customer service | Technical Skills | Failure tolerant | Technical Skills | Creative |
| Verbal communication | Learning new skills | Invest in Teams future | Learning new skills | Perspective |
| Collaboration | Ethical standards | Empathy | Ethical standards | Skilled |
|  |  |  |  |  |  |
| **Qualities by** **16 Personalities** **Test Results** | Rational | Receptive | Honest & Direct | Practical | Rational |
| Informed | Reliable | Responsible | Dutiful | Informed |
| Independent | Passionate | Calm & Practical | Loyal | Independent |
| Curious | Altruistic | Multi-skilled | Sensitive | Determined |
| Determined | Charismatic | Creates order | Connects with others | Curious |

**Compare and Contrast**

**Compare choices between team members**

A variation of what was written in A2?

**Compare choices vs career recommendations for personality traits**

**Compare choices vs career recommendations for 16 personalities**

**Conclusion – how did the choices reflect the interests and the personalities of the team members**

**Tools**

As in Assignment 2, you need to have a group website and a GitHub (or similar) repository for your group. In your report you should include a brief description of what you have done, and include the following:

- The link to your group’s website

- The link to your group’s Git repository (GitHub)

- Your comments on how well the audit trail on the Git repository reflects your group’s work. You will presumably only be able to do this close to the time of submission.

GitHub

Teams

Trello

**Artefacts**

**Trello Board**

Our Trello board reflects our organisational management of our remaining assessments:

Task 3: The main assessment for this course comprising our PDF document and the webpages that reflect the content of our PDF document. The main document is in Teams and all team members contribute to it with copies uploaded to GitHub on a regular basis. Our webpages for this project are edited on text editors on their own machines and then uploaded to GitHub

Task 4: Course participation – although this is an individual assessment, this provides a useful reminder for due dates particularly as there are a number of assessmets due at this time.

Task 5a: Storyboard and Draft script or other artefacts to demonstrate that Task 5 is

in progress

Task 5: Presentation

Task 6: A3 Contribution form

Task 7: Presentation Contribution Form

**Teams**

Teams is the main forum for our collaboration and provides the means for us to communicate, to hold our meetings and to share our documents.In this space we are also able topost our meeting agendas, record our meetings and store our meeting recordings.

Teams is a useful and versatile collaboration tool that also allows additional collaborative applications to be added to it to allow for convenient one place collaborative space.

**GitHub**

**? LucidChart**

Flowchart

**? Figma**

Lo-Fidelity Mock-up

Wireframes

**Project Description**

Having completed both Assignment 1 and Assignment 2, you will have thought about a personal project as well as one with your group. In this Assignment you are to come up with a plan for group project, and to develop it as much as possible in the time available. Naturally you will be very unlikely to complete your project; in fact, most worthwhile projects are “endless”, in that there is always more that you can do, more features to be added, more levels to be designed, or new devices that could be used.

Naturally the choice of what to do is up to you, but you should take the following into account when making your decision.

- The passions, interests and skills of your group

- IT industry trends

- What would assist you in your career plan

- Feedback from Assignments 1 and 2

Your group will have developed some ideas in Assignment 2; it is fine to build on and refine these for this assignment, or to develop a new project based on feedback and/or what you have learned since.

**Overview**

**Project: Quick Quotes Calculator**

**Overview**

The Quick Quotes Calculator (which we are going to call as QQC throughout this document) is a mobile app which aims to streamline the process of quoting jobs which is done by tradies very commonly. The QQC will primarily be targeted towards tradespeople and sole traders who regularly need to quote complex jobs. The app would allow the user to quickly tally up the quantity and cost price for each line item of any given task, with users being able to customize job names and types, making it a more streamlined and accurate process. This information is used to instantly generate an itemized quote that is individualized and can be exported to other apps such as email for streamlined customer experience. The user interface is going to very consumer friendly and easy to use with very easy to understand prompts and animations to make it look trendier and more attractive. It is going to be a very trendy app which will look very attractive to the customer and while designing we are going to be mindful that our main customers are going to be tradies so it’s going to suit their appetite and it’s going to be main user interface design constrain. It will have customer relation management (CRM) functionality also.

Topic An overview of what you propose to do in your project. Concentrate on the big picture and outcomes, rather than intricate details. At least two paragraphs is expected.

Motivation What are your motivations for your project. Why is this project important or interesting? How does it fit in with current IT trends? What would it show to a future employer if you were able to work on this project? At least one paragraph is expected.

**Motivation**

According to Hipages, 2023, “trade workers spend an average of seven hours a week preparing quotes”. Such a function equates to nearly 20% of the entire working week. Much of this time is spent summing up quantities, and total values for each job item. If the tradesperson were to make any errors in calculations, many hours may be spent trying to find the mistake. This figure will likely grow as jobs get more complex, and Australia’s math skills decline. By instantly generating quotes, QQC mitigates any risk of miscalculation, saving time and money for the business.

Landscape What similar systems or products are available? What competitors are there? What points of difference are there about your project compared to what exist now? At least one paragraph is expected.

In our research we found that there are a few apps are already existing in the market to generate quotes which can be found on the following web page

[Best Quoting Software 2023 | Reviews of the Most Popular Tools HYPERLINK "https://www.capterra.com/quoting-software/"& HYPERLINK "https://www.capterra.com/quoting-software/" Systems (capterra.com)](https://www.capterra.com/quoting-software/)

In today’s competitive market we were not expecting our app to be a first of its kind so we did a thorough research about all the app available and we reach to the following points which will make out app look different and eye catching.

* User Interface: - Almost all the apps have not paid any attention on making user interface very attractive they are all with plain and boring background whereas ours users interface is going to be very eye catching because we believe that first impression is the last impression.
* Distance measuring Tool: - None of them is having an option to measure length, width and height which is our aim to achieve. Along with quote our app is going to measure distance which has got application in construction industry as tradies need not run for tape measure everything is available in their app and it will help them while ordering the raw materials which is going to be part of the CRM.
* Customer Relation Management Functionality: - Addition of customer relation management (CRM) functionality into it is going to make it stand out of competition as this functionality is provided by any of available apps.
* Addition of artificial intelligence in future is going to make it way too advanced for our customers.

Customers

Are anticipated as being professionals who work in various aspects of the construction industry. Promotions would need to be aimed directly at workers in the industry and particularly at construction companies. We anticipate a general advertising campaign including radio, and professional publications, Facebook, ???what else

According to a study by Edison Research, since the Covid pandemic radio listening in Australia has increased to almost 80% of the population across AM, FM and DAB+ with radio being by far the most popular choice with the audio listeners spending over 13 hours per week listening time. Podcasts are also gaining in popularity ?possible tradie or information professional to create an industry podcase sponsored by our product

A more targeted campaign is anticipated for the larger organisations with a sliding scale of costs for the app to cater to the larger user groups that would be attracted by large companies subscribing to the app for their employees. These are thought to be personal visits to potential customer businesses or industry convention/exhibition presentations by our promotions team

Licenses

Negotiate with hardware suppliers to gain access to their catalogue of tools and other products. It would be advantageous to have access to the catalogue of a number of suppliers to cater to the various accounts that construction professionals may have. ---(will the suppliers charge us for access to their catalogues or will they give them to us for free to promote their products?)

Nb if the suppliers pay us to use their catalogues then we have an income stream. If they don’t charge us, them we don’t have an ongoing cost.

Over a period of years it is our intention to develop our own database of products and services that we will offer with our application.

Insurance – just in case something goes wrong

Suggested: Professional indemnity insurance, Public liability insurance (for customers and employees who enter our property), Cyber liability insurance, Management liability insurance (to protect our management team), intellectual property insurance (to insure our app as this is the core of our business) (StartupCover start up insurance, viewed 4/2/23)

License: Check out the terms and conditions of uploading the app to ApplePlay and GooglePlay and the cost.

Alternative if that doesn’t work is to load the app in downloadable form on the company website (with shop facilities so that users can pay for the app)

Follow up services and training.

Financial

This project will initially be financed by equal contributions from all team members. Once the project is underway, we will open the way for investment from angel investors, bank investors, and venture capitalists. The Australian Government publishes a list of Venture Capitalist Partnerships (Business, 2023) that our team will be able to present our business plan to and Australian Investment Network where we might find an equity partner.

What is a comparable cost for this type of app per unit??????

QuoteSpec.com <https://quotespec.com/pricing/> are quoting $55.00/month with one month free. They have an established databaseof products that they have collected over a period of 4-5 years. This would negate the need for contracts with individual suppliers, however contracts with suppliers would mean that any errors in quotes may be mitigated under the terms of any contract with them eg. They would need to ensure that their information is correct or honor the error.

This app should be available in IOS and Android to cater for all users.

Perhaps in a later iteration we could offer the app for ipad or Android tablet since many engineers and specialized quoters use these devices? - phase 4 expand our user base with extra features and more devices?

The app will allow businesses to enter their logo and business name, address, contact details, the name of the person making the quote as well as terms and conditions. It will also allow the user to add details for the person or company for whom the quotation is being made and a disclaimer that the quotation is accurate at the time of submission.

The information about the business making the quotation and the customer will be stored in a secure database and every care will be taken to ensure that any personal information will be protected in accordance with the Australian Privacy Principles (APPs).

Detailed Description

Aims

The topic description gives a general overview. However, it is usually helpful to have a specific aim for your project, as well as some smaller goals which will be helpful for achieving your aim. Describe these as best you can. Each project should have a single aim.

(e.g. “Re-establish the King under the Mountain", “Construct an artefact in Minecraft", “Produce a movie about green flowers", “Explore the use of Raspberry Pis for cooking"), but may have several goals which will need to be achieved in order to fulfil your aim (e.g. defeat Smaug, annoy Bard, befriend Beorn, kill as many giant spiders as necessary, fight Azog if he shows up, ... ).

If things don't go as expected, this is the part of the plan that you would fall back on to answer questions such as “What are the most important parts of the project? Which parts should have priority over the others? If we have only enough time or resources for one of our goals, which one should it be?". One paragraph for the aim and one for each goal is expected. Each paragraph should include a description of the aim or goal, and a justification for it.

**Plans and Progress**

Here you should give as much detail as you can about what your project will do, and how you will do it. This should also include how far you have got with developing any features or outcomes from your project. Tell us about the “story" of your project – how it began, how it has progressed, and what stage of the plan you are up to. Include any dead-ends you may have followed, decisions made, and changes that have been made to the project plan. This will need to include a significant amount of detail, so that it is easily seen what precisely you have done and are planning to do. If it helps, imagine the information that would be required if you were to hand this project over at the end of the semester to a new team to complete the job. What would you want to know, if you were one of the people taking over? There is no set length for this section, but it is hard to believe that less than two pages could be adequate. Three or four pages is far more likely.

Phase 1:

Where will our head office be located

How much will it cost

How much will it cost for insurances

What equipment will we need

What risk factors are we looking at

What are the team contributions (financial)

?Incorporate - team members as directors

Create the flowchart

Create the low fidelity mock up

Phase 2:

Create the wireframes

Get feedback from interested parties

Adjust design and function as required

Adapt flowchart and wireframes to incorporate changes

Test logic

Phase 3:

Create the application (unit test, integration test etc.)

Begin looking at promotions

Invite interested parties to come and look, use it, give feedback (user testing)

Make changes

Full Application testing

Phase 4:

Roles

It is sometimes useful to define roles for particular participants, such as Lead Developer, or Technical Designer, or User Interface Designer. It is also possible that roles are changed from week to week, depending on what needs to be done next. Have you defined any specific roles for your project? If so, describe and justify these. If not, describe your process and justify why there are no specific roles.

Please add to this – it needs a lot more discussion and validation

GitHub manager: Lachie Neilsen

Project manager: Lachie Neilsen

Risk Assessment & Industry consultant – Alex Milnes

Technical Document writers: Ash Choudry, Chris Box, Ida Gange, Alex Milne, Lachie Neilsen

We have deliberately kept the roles definitions as vague as possible to allow the team members free reign to contribute wherever they are comfortable contributing and/or in any area that they have an interest in. We are using Alex as an industry consultant as he has experience in this area. Lachie has a special interest in GitHub and development and as team leader he becomes project manager. Even so, all team members are making contributions to all areas as this will allow everyone to be familiar with the project, the processes and documentation.

Scope and Limits

“There's no such thing as perfection. You're never finished with a film. You run out of time.” -- Peter Jackson, director of `The Lord of the Rings’ and ‘The Hobbit’ trilogies

One of the more difficult parts of project planning and execution is to define the scope and limits of the project. As mentioned above, you never really complete project like these; all you can ever do is your best in the time available. Part of that involves setting priorities and accepting that there will be features that will take too long to develop. This means that it is important to set a scope for your project, as a means of ensuring that you make the most of the time available. For example, if you are developing a game, you might consider only producing one level and two or three characters, in order to show a proof-of-concept, rather than develop three levels and ten characters.

Ultimately it is our intention to have a fully functional application that will provide a quick and easy calculator for creating quotes for construction projects.

The users must be able to enter and store their own companies’ information and logo, their customers information, and the details of each job fully protected as per the Australian Privacy Principles. (Office of the Australian Information Commissioner, 2023). They will be able to enter each item of hardware and equipment, quantity and cost from a variety of suppliers, see the ongoing total cost to the customer, and when the quote has been finalized, they should be able to add this information to a formal quotation document that can be sent via email to the customer in PDF format. This application will also facilitate the use of a laser measuring device of the users, choice.

Over time we will create a database of resources for the use of our customers, however, in the interests of being able to provide a fully functional application in good time, we will enter into agreements with major resource providers such as Bunnings, Mitre 10, (

The scope is probably the most crucial part of your plan, and the most difficult to define. One way to define the scope is to think of the deliverables for your project, i.e. what outcomes would you be able to show to someone who asks you to see the results of your work. This will also include several statements about what will not be part of the project. For example, if you are using Open Street Maps to show the location of all your favourite shops, the deliverables would include the updated map, but not the Open Street Maps technology itself. It would also not include many other features of Open Street Maps, or other interesting location -- just those which show your favourite shops.

Also, be aware of the phenomenon of `scope creep', which is the tendency for projects to incorporate more and more features. There is nothing wrong with being ambitious, but you only have a certain amount of time. At least one paragraph is expected.

Tools and Technologies

What software or other tools are required by the project? Are there any software licenses needed? Is there any hardware needed (beyond a standard laptop or something similar)? This needs to be precise (e.g. Windows Movie Maker Version 45.3) but needn't be long. You should also include a brief description of any prior experience any group members have had with the tools and technologies you list. There is no minimum length for this. It is important to be as precise as possible, but descriptions of the tools are not needed here.

Testing

How will your test your project? How will you know when you have succeeded? Testing is not something that you should leave until the very end; often it is far more useful to have a quick and dirty “mock up" of a project and then do some (limited) testing, to and out whether you are building the right product. If your project involves user testing, you should describe in your plan how you will find the test users, approximately what number of people you will need, and what background (if any) is required. At least one paragraph is expected here.

Timeframe

Another difficult aspect of project planning is knowing how much time to allow. You will have something like 36 hours per person for this assignment. In order to develop a plan for further work beyond the end of this course, let us assume that you will have an extra 10 hours per week per person for 10 weeks in addition to this time in order to develop your project. This means that you will have six weeks (Weeks 7 to 12) of the semester to work on your assignment, with a further 10 weeks after that. This means that your plan will be for a total of 15 weeks, with the first 6 being on this assignment.

You will clearly not have the extra 10 weeks to work on the project; this is intended to give you a feeling for how much you would be able to achieve in that time. This means that the first 6 weeks of your timeline will end up being your actually progress on this project, with the remaining 10 weeks being your plan for the next stages.

This should be presented in the form of a table, with one row for each week, specifying as best you can the work for each person for each week. This means that the first six rows of the table will describe your progress so far, and the remaining 10 your best guess at how the remaining time would work.

This will no doubt change as you work on your assignment, as it will give you a more precise idea about how long it will take to get things done. This is not an unchangeable contract for exactly how things will work; that is unrealistic for just about any project. The idea is to get you thinking about how exactly your time should be allocated to the various tasks involved. It is a good idea to have a milestone (i.e. a specific outcome) for each week of the project. This may include getting familiar with tools, or reading up on a particular technique or technology. You should also include time for writing up the final report and Page 7 of 12

any other documentation. Writing reports always takes longer than you think, especially as you should expect to re-write any piece of writing that you do at least three or four times.

**Risks**

What risks can you identify for your project? There will always be some generic risks (such as computers breaking down the night before a deadline, health and family issues, and institutional changes). Do not include generic risks such as these. The idea is to be as specific as you can to your project. For example, if your topic is to develop a game, there may be a risk that the software you choose to work with may be very difficult to learn, poorly documented, or not turn out to have the features that it claims it has. These properties are often only discovered once you have started working with the software, and so unless you have had lots of experience with the particular tool, there is always a risk that it may not work as well as you believe it should, no matter how much prior research you do. Similar comments apply to hardware.

**Group processes and communications**

Communication between group members is arguably the most important aspect of your project. Past experience has shown that communication breakdowns between group members is the most common cause of project failures, so it is vital that you specify at the outset the means and expected frequency of communication between group members. How will your group communicate? How often will meetings take place? Will these be face-to-face, or using technologies such as Skype? Or Facebook? Or email? Or text? Or ... ?? What will you do if you have a group member who does not respond to communications? You should expect contact between group members at least twice a week. You can always make contact more often if you wish, but you do need to know what minimum frequency is expected from all members of your group. At least one paragraph is expected here.

**Skills and Jobs**

Let us suppose that a group of venture capitalists hears about your project, and is so impressed that they wish to fund you to develop it further for say six months. You will be the manager of a team of 4 people to deliver the project outcomes. What position description would be appropriate? Write 4 position descriptions for people that you would employ to take your project to the next phase. You will need to consider what skills are appropriate, which may include specific technical expertise, team work experience, leadership and management techniques, and innovative thinking.

**Feedback**

By the time you get to the end of the semester, you should have been working as a group for nearly ten weeks, and so you will have been able to judge how well your group is performing. As in Assignment 2, each of you should login to the SparkPLUS tool to provide an assessment of each person in the group, including themselves. This will then provide feedback to each of you, and in particular on how the rest of the team view’s you performance.

You do not need to include any information about the feedback you receive, as this is intended to give you experience with use of tools such as these, and how the information is gathered and processed in such tools. The markers will, however, check that each person in the group has contributed via SparkPLUS, and the marks for this section will only be awarded if all group members have contributed in an appropriate manner by the assignment deadline.

If you have any concerns with this process, please raise these with your instructor. If you wish to have a group discussion about this feedback, please contact the instructor who will facilitate a group discussion on this topic.

**Group Reflection**

Towards the end of the assignment period, you should reflect as a group on how well you think you have performed in this assignment. You should include whatever evidence you may have about the groups processes (such as commit trails from GitHub, or project meeting minutes). Each member of the group should contribute up to 200 words about their own perception of the group, and the group as a whole should contribute around 400 words. This should include the following attributes.

- What went well - What could be improved - At least one thing that was surprising - At least one thing that you have learned about groups - Remember to include in your section on Tools how well you think your GitHub log of activity reflects your group’s work on this assignment.

**References**

**Angel Investers Network,**

Business, 2023, *Business structures,* Australia. Business, viewed 4 February 2023, <<https://business.gov.au/Planning/Business-structures-and-types/Business-structures/>>.

Business, 2023, *List of Venture Capitalist Partnerships,* Australia. Business, viewed 4 February 2023, <<https://business.gov.au/grants-and-programs/venture-capital-limited-partnerships/list-of-venture-capital-partnerships>>.

Neris Analytics Ltd. (2022). 16 Personalities. viewed 4 February 2023, <<https://www.16personalities.com/>>

Office of the Australian Information Commissioner *(2023)* Australian Privacy PrinciplesOffice of the Australian Information Commissionerwebsite viewed 4 February 2023 [www.oaic.gov.au](https://www.oaic.gov.au/)

**Submission format**

A member of the group to upload as two (2) PDF files to Canvas via the link on the Assignment page.

**1 PDF Assignment Report [GroupID.PDF]**

* - Full Formatted PDF Report o GitHub Pages Link to Website Version
* o GitHub Repository Link

**1 PDF MS Teams Info [GroupID-MS.PDF]**

* - MS Teams Meeting Technology Artifacts
* o Agenda Notes
* o Recording Links
* o Minutes / Actions Notes
* o MS Teams Invite Link

Make sure the file type is an accepted format.

