Introduction to Information Technology

Assignment 1: My Profile (10%)

Background

The world of IT is vast and varied, and there are many possible career paths in it. Which one of these is right for you? That can be a very difficult question to answer. This assignment is intended to be a first step in the process for you.

A natural starting place is to ask why you have chosen to study this course at RMIT. There must be some reason why you are interested in IT, or you wouldn't have made it this far! What makes IT interesting for you? What lead you to study at RMIT? What do you hope to do after graduation? This assignment will require you to think about questions like these, and answer them as best you can. This information will be used in later assignments to assist you to form a group, and to plan an IT project with your group.

In order to help you develop a practical skill, you are to present your Assignment 1 information on a website, which you will set up via GitHub Pages or Amazon Web Services (AWS). You will be shown how to do this in the tutorial class in Week 3.

Overview

- This assignment is worth 10% of your overall mark.
- This is an **individual** assignment.
- You can seek feedback on your assignment from your tutor at any point during tutorials. You are strongly encouraged to work on this assignment regularly each week, therefore you should be writing relevant parts of your report each week.
- The Turnitin tool will be used on all submissions.
- Your information *is to be presented on a website*. You will be shown how to set up an appropriate website in one of the tutorials.
- This assignment should be submitted via Canvas. You should submit a short PDF document containing the link to your website.

Requirements

Your website should contain 5 sections, with the titles below.

1. Personal Information
2. Interest in IT
3. Ideal Job
4. Personal Profile
5. Project ideas

More details on each of these are given below.

Personal Information

Include your name, student number, email address, and some basic background information (nationality and culture, education to date, languages spoken etc). Include at least one fact about yourself that others may find interesting, such as a hobby, a pet or your favourite sport or other pastime.

Interest in IT

You should answer the questions below as best you can. Each answer should be one paragraph in length.

- What is your interest in IT? When did your interest in IT start? Was there a particular event or person that sparked your interest? Outline your IT experience (if any).
- Why did you choose to come to RMIT?
- What do you expect to learn during your studies?

Ideal Job

Find an advertisement showing what you believe to be your ideal job. This may require several years of experience, and hence be something that you have to work towards, rather than something that you are ready for now, or will be able to fill as soon as you graduate. There are various ways to search for IT jobs, including websites like \url{seek.com.au}. You should include the following information.

- The job advertisement itself. Include a link, and a snapshot of it (in case the link expires before the assignment deadline).
- A description (in your own words) of the position, and particularly what makes this position appealing to you.

- A description (in your own words) of the skills, qualifications and experience required for the position.
- A description (in your own words) of the skills, qualifications and experience you currently have.
- A plan describing how you will obtain the skills, qualifications and experience required for the position, building on those you have now. This need not be greatly detailed, (and will probably change significantly over time anyway), but try to be as specific as you can.

Personal Profile

There are a number of online tests that are commonly used by employers to get specific information about potential employees. One of the best-known of these is the *Myers-Briggs Type Indicator (MBTI)* test, which was developed by the mother-and-daughter team of Isabel Myers and Katharine Briggs. Another popular one (and very relevant to students) is about *learning styles.* There are various other tests available online as well, and while there is no guarantee that any specific test will be necessarily one that you will encounter in your career, it seems highly likely that you will have to do some kind of test like this as part of a recruitment process.

Accordingly, you are required to present the following information

- The results of an online Myers-Briggs test.
- The results of an online learning style test.
- The results of one further online test of your choosing.

The third test should be distinct from both the Myers-Briggs test and the learning styles test. This could be a *Big Five Personality* test, a creativity test, or a psychometric test. You should be able to find something free, and please ensure that it is something that a potential employer may find relevant (so please avoid things like a *Nerdy Personality Attribute assessment* or a *Generic Conspiracist Beliefs test!*).

In addition to the results themselves, you should answer each of the questions below with one paragraph.

- What do the results of these tests mean for you?
- How do you think these results may influence your behaviour in a team?
- How should you take this into account when forming a team?

Project ideas

You are to write a report of around 1000 words describing your project idea. You should describe the project itself, as well as why you think it is important or interesting, and any potential drawbacks or obstacles you anticipate.

What are you passionate about? What kind of IT innovation would you like to see? What project will help you develop the skills, experience and knowledge required to make you qualified for your ideal job?

You need not have full answers to any of these questions, but you are required to have some ideas about an IT project that you think will address at least one of these questions. It may not be possible to find one that answers all three, but it is quite likely that something you would find interesting or useful will have a similar effect on others.

There are a number of possible types of projects that you may consider. Some potential ideas are below; others will be discussed in class.

- Developing a game using tools such as Unity, Construct2 or Cocos2d.
- Developing a smartphone app, using whatever programming language in which you have expertise, or by using tools such as MIT App Inventor.
- Finding an innovative application for new hardware developments, such as Raspberry Pis, Arduinos, Makey Makeys, small robots or related technologies.
- Creating a FAQ and implementing it as a chatterbot, possibly involving speech-to-text and text-to-speech software.
- Building an electronic artefact such as a model for Minecraft or similar games, along the lines of the United Nations Block by Block project.

For this assignment, you need to write approximately 1,000 words about your project idea. This should not only describe what the project would be, but also why you think it is important or interesting, and what potential drawbacks or obstacles you anticipate.

Your description should include the following sections. The word counts below are recommendations only.

Overview (100 words) This should be a summary of **what** the project will be.

Motivation (100) words) This should be a description of **why** the project will be interesting or useful. This may include statistics or other evidence, such as ``There are 1.5 billion cat owners in Australia, and so there is a huge market for an automated cat feeder. Using Raspberry Pi technology is a cheap and easily assembled solution to this problem."

Description (500 words) Detailed description of the features of the product or service.

Tools and Technologies (100) words) Describe the software, hardware and/or other equipment needed. Include any relevant open source tools as appropriate.

Skills Required (100 words) List the skills are required for your project, including software that needs to be written, and special hardware (if any). How feasible will it be to find the skills, software and hardware required?

Outcome (100 words) If the project is successful, what will be the outcome? How will the original problem be solved? What impact will this development have?

Submission Requirements

Your submission should be a single PDF file. **Files in any other formats will be rejected.**

Submit your assignment on Canvas. You can re-submit any number of times before the deadline.

Marks

This assignment will contribute 10% of your final mark Your assignment will be marked out of 100, as below.

Section	Marks
Personal information	5
Interest in IT	20
Ideal Job	25
Profile	20
Project ideas	20
Presentation	10

Rubric

Your assignment will be graded in accordance with the rubric below.

	Exemplary	Accomplished	Developing	Beginning
Personal Information	You have included all relevant information about yourself, including an interesting fact.	You have included most relevant information about yourself.	You have some information, but there is more needed to give the relevant background.	Your information is very sketch or missing, and does not inform the reader very well.
Interest in IT	You have answered all of the questions well. Your answers clearly show your interest in IT.	You have answered most of the questions well. Your answers show your interest in IT.	You have answered some of the questions well. Your answers show some aspect of your interest in IT. More detail is needed in some aspects of your answers.	Your answers haven't given a clear picture of your interest in IT. More detail is needed in several aspects of your answers.
Ideal job	You have clearly identified your ideal job and what makes it attractive to you. You have clearly and accurately described	You have identified your ideal job and what makes it attractive to you. You have clearly and accurately described	You have identified your ideal job. You have described some aspect of what makes it attractive to you.	You have not identified your ideal job, nor described what makes it attractive to you. You have not adequately described the skills, qualifications and experience needed, and have

	all of the skills, qualifications and experience needed, and related these to your own. You have given a clear and appropriate plan to achieve the necessary skills, qualifications and experience.	most of the skills, qualifications and experience needed, and related these to your own. You have given an appropriate plan to achieve the necessary skills, qualifications and experience.	You have not adequately described the skills, qualifications and experience needed, and have not given an appropriate plan to achieve these.	not given an appropriate plan to achieve these.
Profile	Your profile includes all three test results, and a clear and appropriate description of your interpretation of them. You have clearly described how your profile results may affect your behaviour in a team, and how this should be taken into account when forming a team.	Your profile includes all three test results, and an appropriate description of your interpretation of them. You have described how your profile results may affect your behaviour in a team, and how this should be taken into account when forming a team.	Your profile lacks one of the three required results. Your description of your interpretation of the results need some more work, and it is not clear how you would take these into account when forming a team.	Your profile lacks two or more of the necessary results. Your description of your interpretation is inadequate, and and it is not clear how you would take these into account when forming a team.
Project ideas	You have clearly described what your project will do. Your description includes all of the 6 relevant aspects, each of which is well described within the approximate word length limits.	You have described what your project will do. Your description includes most of the 6 relevant aspects, each of which is described within the approximate word length limits.	Your have described some aspects of your project, but there are at least three aspects that need more work. The ones that have been appropriately described have done so within the approximate word limits.	Your project has not been described very well. There are descriptions lacking in detail, or have not been adequately described within the approximate word limits.
Presentation	Your website looks clean and professional, and uses appropriate font, colours and backgrounds. You have included at least one image of yourself.	Your website looks generally good, but lacks some final polish, and needs a little more care in a few places.	Your website has some reasonable elements, but the choices of fonts, colours and backgrounds needs more work.	Your website needs some significant work to make it look reasonable.