# **Introduction to Tech Assignment 1**

# **About Me**

Name: Joshua Hung

**Student Number:** s3819603

Email: s3819603@student.rmit.edu.au

**Nationality:** Australian

Cultural Background: Australian Chinese

# **Education:**

• Higher School Certificate

• Diploma of Arts (Media and Culture)

• Bachelor of Arts (Major Cultural Studies, Minor in Media Studies)

• Bachelor of Education (Primary)

# **Hobbies & Past Times:**

- Gaming
- Rugby Union
- Basketball and Rugby Coach

### Interest in IT

### Question 1

My interest in IT started in high school through gaming. I didn't personally have a lot of IT in the house, but my friends had computers and video game consoles which I really enjoyed playing with. Later in high school I began using the internet and social media such as msn messenger and MySpace. In university I had a little experience with HTML and I worked for much of my time at Dick Smith.

It was my job at Dick Smith which really sparked my interest in IT. I worked with it constantly and found how all the different hardware and software components melded together to allow for amazing new innovations. I also found all the changes in technology and the pace at which it moved exciting and interesting.

Overall my IT experiences have been fractured. In my spare time I've built computers from the ground up, and set up my own systems for gaming and computing. I have a little experience with home automation whilst consulting with our IT technician setting up my houses home automation systems. I did some HTML in my first university degree. I am currently the IT Liaisons for the school I work at. My role involves liaising with our IT department to have our systems up and running and pushing for the implementation of new software's and technologies within the school. I also perform some basic administration duties such as creating logins for students and password resets.

### Question 2

I decided to attend RMIT because they have good reputation and an online format for their Bachelor of Information Technology. These were attractive as I would like to move out of my current role in education and are looking a career change. IT is only going to become a larger part of our world and is an area industry that I have as mentioned above, always been interested in. Looking at all the course options RMIT seemed to have the best aligned degree for me as I could study and work at the same time whilst heading towards a new career.

## **Question 3**

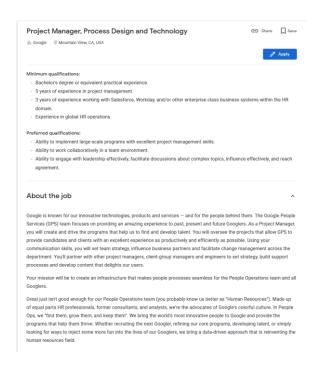
During my studies at RMIT I expect to learn a wide range of skills and knowledge in regards to the IT industry. This will of course depend somewhat on the direction and different areas of study I would like to take. I do have some interest in programming as I find the idea of being able to create something very interesting. I believe it is a very useful skill and something which is of greater need in Australia as the IT industry continues to grow. Overall however, I would like to learn about the various areas of IT offered.

#### **Ideal Job**

### Job

## Google Project Manager

https://careers.google.com/jobs/resu lts/111901843962897094-projectmanager-process-design-andtechnology/?company=Google&comp any=Google%20Fiber&company=You Tube&employment type=FULL TIME &hl=en\_US&jlo=en\_US&q=project%2 Omanager%20classroom&sort\_by=rel evance



## Description

The job is a project manager which entails creating and developing projects in relation to clients and directing those projects to meet client needs. It appeals to me as I believe my skills are well suited to the job. I by this stage would have a solid knowledge of the technical skills required as well as a well-grounded knowledge in hardware and software. I have good communication skills and enjoy working with people and managing people as well as communicating with clients and discussing needs.

## **Qualifications & Skills Required**

The job requires the minimums stated by Google:

- Bachelor's degree or equivalent practical experience
- 5 years of experience in project management
- 3 years of experience working with Salesforce, Workday and/or other enterprise business systems within the HR domain
- Experience in global HR operations

(Google Careers. (2019). Retrieved 15 December 2019, from

https://careers.google.com/jobs/results/111901843962897094-project-manager-process-design-and-technology/?company=Google&company=Google&20Fiber&company=YouTube&employment\_type=FU LL TIME&hl=en US&jlo=en US&q=project%20manager%20classroom&sort\_by=relevance)

Other skills that would be required is working on large scale programs and projects. You would need to be able manage a large team and direct and communicate with a range of different people. I would also need to have technical understanding in software and hardware solutions

## **Current Qualifications**

My current qualifications that would be relatable to the job include:

- 6 years experience as an IT Integrator for a school
- Management of 4 different projects (small scale)
- Management of team (small-scale)

This would all be relatable to the job however not necessarily meeting the exact requirements that are being asked of Google.

# **Obtaining Skills and Experience**

To develop my skills I would most likely look at the following plan in order to reach my goal of an ideal job:

- 1. Complete Bachelor Degree in Information Technology
- 2. Find employment in IT industry
- 3. Work towards becoming a project lead
- 4. Become a project lead and work through a number of projects

### **Personal Profile**

Myers Briggs Test Results

**Personality Type:** Advocate

Mind: Introverted

**Energy:** Intuitive

Nature: Feeling

Tactics: Judging

**Identify:** Assertive

("Introduction | Advocate Personality (INFJ-A / INFJ-T) | 16Personalities", 16Personalities, 2019. [Online]. Available: https://www.16personalities.com/infj-personality. [Accessed: 15- Dec- 2019])

Learning Style

### **Your Scores:**

Auditory: 10%Visual: 35%Tactile: 55%

# **Tactile**

If you are a tactile learner, you learn by touching and doing. You understand and remember things through physical movement. You are a "hands-on" learner who prefers to touch, move, build, or draw what you learn, and you tend to learn better when some type of physical activity is involved. You need to be active and take frequent breaks, you often speak with your hands and with gestures, and you may have difficulty sitting still.

As a tactile learner, you like to take things apart and put things together, and you tend to find reasons to tinker or move around when you become bored. You may be very well coordinated and have good athletic ability. You can easily remember things that were done but may have difficulty remembering what you saw or heard in the process. You often communicate by touching, and you appreciate physically expressed forms of encouragement, such as a pat on the back.

Here are some things that tactile learners like you can do to learn better:

- Participate in activities that involve touching, building, moving, or drawing.
- Do lots of hands-on activities like completing art projects, taking walks, or acting out stories.
- It's OK to chew gum, walk around, or rock in a chair while reading or studying.
- Use flashcards and arrange them in groups to show relationships between ideas.
- Trace words with your finger to learn spelling (finger spelling).

- Take frequent breaks during reading or studying periods (frequent, but not long).
- It's OK to tap a pencil, shake your foot, or hold on to something while learning.
- Use a computer to reinforce learning through the sense of touch.

"What's Your Learning Style? 20 Questions", *Educationplanner.org*, 2019. [Online]. Available: http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml?event=results&A=2&V=7&T=11. [Accessed: 15- Dec- 2019]

Via Character Results: Institute on Characters (top 5 only)

- 1. Judgment
- 2. Prudence
- 3. Fairness
- 4. Forgiveness
- 5. Humor

"Login | VIA Institute", *Viacharacter.org*, 2019. [Online]. Available: https://www.viacharacter.org/survey/surveys/finished/9009513. [Accessed: 15- Dec- 2019]

What do the results mean to you?

The results tell me more about how I am as a person .They also give me a clearer indication of my strengths and weaknesses so that I can work on self-improvement. The tests also give me greater direction in regard to the type of jobs and work I may be suited to and the roles within them I might be able to best fill.

How do you think these results may influence your behavior in a team?

Knowing these results will allow me to be more reflective of how I act in a team as well as my role in a team. I will also be more aware of others and that others may function differently. I will know how to use my strengths in a team environment but also work with and allow those with other strengths to support or fill in my weaknesses.

How should you take this into account when forming a team?

It is a good idea to take into account the different areas because you can form a team around support each other in the different areas of weakness that we may have. People can fill in each other's weakness and work together to compensate for them.

This information can also be useful in forming a team which will work well together. You can not only support each other's weaknesses but also form a team with similar traits to create continuity and homogeny among the team possibly reducing the number of conflicts. Alternatively people can discuss their traits amongst each other to figure out better ways of working with each other.

## <u>|Project Proposal: Holistic School LMS</u>

#### Overview

The project is to create a holistic student centred school learning manage system or LMS . The student centred and holistic nature of this LMS is that it covers all areas of the school directly related to the student. This includes managing direct classroom delivery, resources and management as well as managing administration to do with students. The secondary function of the LMS is accumulate data on students and all the areas of their schooling. This will assist schools in meeting new data collection requirements in the new National Consistent Collection of Data or NCCD. The function of NCCD is to use data to inform funding and decision making.

#### Motivation

As a school teacher who has worked with students with special needs I have seen how difficult it can be to make decisions about students around their development and their academic progression, this includes managing students behaviour and delivering classes. Each student is an individual. Therefore, it is necessary to consider each individuals circumstances and history when making any decisions around them. This can be made easier using data that tracks students in regards to the various aspects of their day to day school lives.

Unfortunately, the tracking of data can be a difficult process. This is because it can take time and hard work to maintain accurate records. This LMS system can assist teacher is both delivery of curriculum but also maintain accurate records and data to track student progression in a holistic form. This LMS system aims at empowering teachers to be able to best work with their students.

# **Project Description**

The project is a LMS or *Learning Management System*. However, unlike current LMS system the design of this one is more holistic as it aims to integrate classroom and administration. Thus, it has three main components to it:

- Student experience
- Classroom & Curriculum Delivery
- Administration & Data Collection

## Student Experience

The program will be designed to be cloud based and accessible by both desktop and web app. Its core visual design will be modelled on social network conventions and layouts. The reason for this is that it is an intuitive interface which students will find easily accessible due to is familiarity. Students will be able to perform the following functions:

- Access classroom resources
- Interact with staff and students
- Complete submit class work remotely
- Confirm attendance or communicate absence

Students will also be able connect their other services to the system such as *Google* and *Microsoft* to allow for easier integration with word processing suites and cloud storage

# Classroom & Curriculum Delivery

The program will allow for teachers to create a digital classroom and deliver curriculum to students. This will allow teachers to better integrate technology into their teaching in a productive and useful way. It will also create a centralised space for teachers and students to communicate and collaborate through. The classroom section will also include:

- Ability to stream classes
- Monitor student attentiveness realtime
- Create a safe learning environment
- Set and receive classwork and assessments

### Administration & Data Collection

The administration and data collection section ties both the student experience in with the classroom and curriculum delivery. Administration and data collection can take up a large part of a teachers workload but are also extremely important for the success of students. Administration for a teacher can include duties such as:

- Report writing
- Role records
- Marking & feedback
- Grade Tracking
- Attendance
- Behaviour management

These are some of the duties that are required by teachers. Some of these can include the data useful for schools to make decisions with. The LMS system is designed to make these more easily trackable and accessible.

Areas such as roles, behaviour management, grade tracking and attendance are important metrics for teachers to track. They can communicate patterns in behaviour and progression. The LMS will be able to track these metrics and allow for transfer in to excel files as well as display these in several different graphical representations.

Within the administration and data collection function, will be communication tracking systems which track peer-to-peer communication, public/private posts and files sent between all users. This is to maintain a secure and safe environment for students and staff.

All sections of the project are aimed at assisting teachers to better teach students and engage them with curriculum. The project is grounded in student centred learning principles in which the environment is built with the student in mind.

# **Tools & Technologies**

The project will require a number of different tools and technologies to create and test it. This will include:

# Laptops/Computers

The project is will require a range of different computers to meet different needs. This includes; graphic designer, programming, UX design and testing computers

Each category will require specific specifications. Testing computers in particular will need to span low end machines to higher specified. A key factor to this project is that it needs to accessible to all students and staff.

## Internet/Cloud Services

As the project functions are built around accessibility and thus cloud services, the internet is intrinsic to the project and its functionality. This is to promote accessibility, equity and equal opportunity to users.

## Software

The project will require a number of different software options including an IDE for an associate programming languages (most likely python and HTML), UX design program, graphic design program and creativity programs for marketing.

### **Skills Required**

The skills required to complete this project in its entirety will include both soft skills and hard skills.

## Soft skills will include:

- Teamwork
- Communication
- Leadership
- Interpersonal
- Conflict resolution
- Empathy
- Work ethic

Those working on the project may not need to have all these skills but they will be required by at least one individual:

- Programming (language specific, HTML and most likely Python)
- User Experience Design
- Graphic design

- Professional and Public relations writing
- Video Editing
- Photo editing

# Outcome

The outcome of the project is to have a LMS system which is built on the idea of creating a LMS system which is centred around the student and focusing on the student as a learner. The project will give schools an LMS that is comprehensive and designed to assist teachers in meeting their students needs. The project will allow schools to engage and educate students effectively whilst compiling data to allow them to make informed decisions around how to best meet student needs.