# Introduction to Information Technology Assignment 1

### **WEBSITE LINK:**

https://s3-ap-southeast-2.amazonaws.com/itprofile/index.html

#### **Personal Information**

Joseph Nemhara - s3723289

Hi! Im Joseph Nemhara, I was originally born in the United Kingdom, but my family and parents originate from Zimbabwe in Africa. As such, along with speaking English, I am also able to speak my native language, being Shona. However, after long periods of time of not speaking it, at this point I can merely understand the language but not fluently speak it myself. As of now I have attended a number of schools throughout my life, including primary school in both England and Australia, as well as high school in Australia as well with St Francis Xavier College. One fact about myself that not too many people are aware of, is that in the free time I have, I like to indulge in creating rap music, from creating the beats, lyrics and recording the songs and uploading them to music streaming sites such as Sound Cloud.

#### Interest in IT

Currently my interest in IT has transitioned to physically working with computers, such as building PC's from scratch, troubleshooting problems and the like. However previously throughout high school, I had gained an immense interest in video game creation. This was due to the amount of video games I used to play as a child, most notably first person shooters. They gave me the inspiration to want to create my own games in the same nature. In addition, this interest was then further heightened through the several computing subjects in which I completed in high school, many of which included basic coding and video game creation. However at the time, I had of been playing on video game consoles, which were supposedly said to be inferior to PC's in terms of performance, thus this gave me the inspiration to build my own PC. It was this which truly kick started my interest in IT. The feeling of accomplishment I obtained from finally building a fully operational computer, which I turn continued to upgrade through the later months, sparked my interest to peruse such a task and potentially make it into a career. Thus I initiated my research into the computer hardware industry, primarily through the use of YouTube videos from creators such as "LinusTechTips" who specialise in hardware reviews and informative videos about all aspects of computer hardware.

Through this new found interest, I knew that in order to peruse my career, I realised I needed to complete the right University degree. Where initially in my early high school days, I had intentions of attending Swinburne University to study Game programming, the Information Technology course at RMIT soon became an more appealing option. This decision came about as a result of the research I conducted about RMIT prior to preference selection. The research included asking past students about the courses available through personal interaction and the official RMIT Sub-reddit. All in all, the overly positive reviews about the IT courses available, and the industry connections that RMIT had, made this University the perfect choice in order to expand my interests and peruse my career.

Throughout my studies during my time at RMIT, I hope to learn a number of things. Firstly, while it may not be my most preferred thing, programming and coding is a major skill I need to learn due to the amount of jobs in the IT industry that require it. Furthermore, I expect that I will eventually learn the various aspects of computer hardware, including their operation, upkeep and purpose. As while I have done extensive research prior, I expect that throughout my studies my knowledge will be expanded even more in order to meet job requirements.

# **Ideal Job**

# **IT Support Officer**

Pattersons Insurerbuild Pty. Ltd. -

Established in 1996, Pattersons Insurerbuild has been servicing the insurance industry for 22 years, providing specialised insurance building repairs across Australia and the north and south islands of New Zealand following an insurable event such as fire, flood, impact, storm and malicious damage.

We operate in a responsive environment that fosters a "customer first" approach with a genuine commitment to meet our industry KPI's.

#### The role:

We are seeking an IT Support Officer on a full-time basis to support with various day to day tasks including but not limited to deployment, administration and maintenance of all computer software, hardware and telecommunications.

The IT Support Officer is an integral role within the business to ensure smooth day to day technical operations can be carried out efficiently.

### The successful candidate will preferably have:

Experience with Helpdesk

A good understanding of desktop, laptop, printer and mobile configuration.

Solid and demonstrated understanding of the Windows operating system

Good understanding of networking, wireless and virtualisation concepts.

Ability to troubleshoot complex technology related problems and use initiative

#### The candidate:

We encourage your application if you:

Possess sound written and oral communication

Can take directions and work autonomously, while being part of a team

Are well organised, methodical and committed to delivering work in a timely and accurate manner

Have excellent interpersonal and communication skills.

## Required skills:

IT Certification or qualification (completed or currently undertaking studies)

You will possess a positive 'can-do' attitude, a desire to learn and be looking to be part of a team in a contemporary firm, which will in turn provide the benefits of an excellent working environment.

https://au.indeed.com/cmp/Pattersons-Insurerbuild-Pty.-Ltd./jobs/IT-Support-Officer-21a263b4260a547a?sjdu=8EWtruxy728tzxKcUmN0cdawuvpe7BXSQbltlP3c00Fp9eUWsmrIJ KxEJ98ZGiEENnlWF1AnNhcTZR1ltn5uEA&tk=1c98g8p1g82kt9ma&vjs=3 My ideal job is that of an IT Support Officer/Specialist/Technician. The position primarily consists of maintaining and monitoring the computer systems and networks of an organisation, as well as troubleshooting issues that may arise from potential clients and customers. This job includes tasks such as, ensuring computers, printers and other equipment are functioning properly, network accounts are maintained and all software features on said devices are up to date and secure. This ultimately appeals to me as this job incorporates both the physical (hardware) and software aspects of IT, while also allowing for interaction with a multitude of people including team mates and customers.

The position of an IT Support Officer/Specialist/Technician requires certain skills, qualifications and experience. As for personal skills, this job requires extensive customer service skills, as well as the ability to work well and present yourself in a team environment. Other notable requirements involve good knowledge of network technologies such as Ethernet, HTTP and TCP/IP, strong knowledge of Microsoft Office 365 usage and support, and the ability to operate and troubleshoot PC/Laptop hardware and peripherals such as printers. Qualifications for the majority of positions in this field involve a Bachelor in Information Technology/Computer Science/Software Engineering. In terms of experience, while some positions offer places to newly graduates in order to introduce them to the IT industry, firmly established companies usually request the following. An experience in operation a variety of PC hardware, Windows Operating systems, Microsoft Office applications and network infrastructures.

At the current moment in time, of the required skills, qualifications and experiences, I currently possess the customer service, written and verbal abilities required. This is due to my previous employment in retail / customer service positions at places such as Woolworths and KFC. In addition, throughout my previous schooling, I have undertaken a variety of computing studies, many of which have involved the use of Microsoft Office applications and Windows Operating systems. Furthermore, my knowledge on PC hardware and its operation and maintenance has begun to grow over time since my initial fascination with computers. However my current knowledge in these fields is most likely limited to what is required for these positions, thus must be extensively expanded.

Ultimately there are number of things required to obtain the skills, qualifications and experience for my desired position. First and foremost, I would need to complete my Bachelor in IT, as the skills I would learn through completion of the course will provide me with the majority of the skills and experience required. In addition, personal out of school research on certain aspects will also be required. This includes personal study of aspects such as PC hardware, as well as attempting to obtain a role in a lesser position in the IT industry such as getting a job in a computer/hardware store. Not only will this further my customer skills required, but it will also begin to test my troubleshooting abilities.

#### **Personal Profile**

# **Myers-Briggs Test**

The results from the Myers-Briggs "16 Personalities" test tells me several things. Firstly, they highlight the fact that I am I fairly introverted person, who can be self-conscious and is sometimes sensitive to stress. However the results also show me that I am still success-driven are somewhat of a perfectionistic as I still try my best to improve in everything that I do. Furthermore, I am still open minded and curious to all situations, giving myself a somewhat soft-spoken traits while still having strong opinions. These results show me that in a group situation, I should be open to all suggestions and opinions put forth by team mates, and instead of presenting opposing views, I should be wishing to take up their ideas and build upon them and improve them to the best of my ability. Ultimately this tells me that I should be able to function fairly well in a team situation due to my open-mindness with various ideas, thus careful selection of team mates who possess similar traits will not be required.

### **Learning Style Test**

The results from the Education Planner "Learning Style Test" informs me of several aspects. They tell me that I am predominantly a Visual/Tactile leaner. This means that I learn best through reading or seeing pictures and best remember and understand things through sight. In addition, I also learn fairly well through touching and completing actions. In order for me to be able to proficiently understand and remember things, visual physical activity is required. These results show me that in a team situation, I would need to be the member that focuses on the visual side of the project, which ultimately includes aspects such as the presentation of the project, in order to ensure the delivery is perfect.

# Big 5 Personality test

These results tell me that overall my personality is a mixture between extroversion and Introversion. Meaning that there are times in which I enjoy having the company of others, but there is also a majority of times in which I prefer to be to myself. In addition, they show me that in a group situation, at times where team work is required, I will still be able to contribute significantly towards the project and its completion, while at other times, I may wish to complete the required work and focus by myself in order to get it completed to my own personal standards. Thus in a group I need to ensure to take this into account so that I am not neglecting and impacting my group partners in a situation where the contribution of all team members is required to complete a certain task.

# **Project Ideas**

#### Overview -

My project idea is that of a PC building simulator. Essentially it will be a computer program that allows the user to simulate the full process of building their own computer from scratch. It will primarily to be used as an educational tool to assist first time builders to learn the purpose, use and placement of PC parts to build a computer.

#### Motivation -

This program would be useful to the people who have always wanted to build their own PC, but have been faced with too many concerns on how to do so properly. It would allow builders to practise and experiment the process building a pc without having to use actual parts, enabling them the ability to learn how each part works and how they connect together without having to worry about any risks. In addition, it would allow users who may already be proficient in PC building the ability to plan their future builds, and view what the build may look like before actually building it.

### **Description -**

Firstly, for new builders, the program would have an inbuilt feature which gives the user a step by step tutorial on the full process of building a PC, from installing each part on the motherboard and case to Operating system installation. This would primarily be done through a 3D simulation, similar to a video game, where the program would guide the user through installation. These tutorials would be as detailed as possible, including aspects such as applying the correct amount of thermal paste to a CPU, and correct insertion of RAM modules. It would involve individually screwing each required part to demonstrate where they can be found on their real life counterparts. The program would feature the majority of the parts currently available on the market from CPU's and GPU's to Fans and hard drives, allowing for a selection of components to be used and educating the user of which parts are compatible with each one another. The program would also feature a cable management tutorial, guiding the user on how to properly organise their cables within their chosen case and cables, allowing for most optimum airflow in their case. The PC simulator would also give useful information once parts are placed. This includes information such as, the minimum and maximum recommended power supply wattage required for a build, the recommended amount of fans for case, and the best slot placements for components such as RAM and GPU(s) on a motherboard. In addition, the program would also allow the user to simulate certain common errors which can occur during building or installation of an OS, and show the process required to fix them. Furthermore, the program would feature motherboard BIOS simulations and tutorials, allowing users to safely experiment with BIOS features such as overclocking, teaching proper procedures. The program would feature true to life 3D models of each of the PC components, this would allow users to be able to see how their PC or certain parts of their computer would look before actually being built.

### Tools and Technologies -

The software required to build the program would mostly be a video game engine such as Unity or Unreal Engine for the 3D simulation development. This software would need to be run on a high-end computer in order to properly run and operate the software, meaning processor with at least 4 core and 32 GB of ram. In addition, the 3D models for the game would need to be created through a software such as 3DS Max or AutodeskMaya.

### Skills Required -

One of the major skills required for the project, is the ability to be able to code, most notably in C# or JavaScript. This is fairly feasible to learn due to the amount guides and books available. Furthermore, the ability to be able to 3D model is required along with rendering and animation. Likewise, this is an ability which can also be learnt over time, as well as be done by other individuals.

# Outcome -

If the project is successful, the IT community will see a significant increase in the amount individuals building computers and joining the PC community. Additionally, significantly more people will be more informed and knowledgeable of the operation, maintenance of a PC and its parts. This in turn will result in a global increase in PC revenue due to the influx in people beginning to purchase PC components.