

## **Introduction to Information Technology**

### **Assignment 2 : The IT World**



**Group:** Silicone Spiders

Rohit Menon: s3544222

Reilly Andrews: s3717650

Levin Alexander: s3514587

Mark Baptista: s3722699

Liam Farley:

## Team Profile

**Team Name:** Silicone Spiders

### **Personal information**

---

#### **Rohit Menon | S3544222**

I was born in Mumbai, India. I left India when I was just a year old and moved to Dubai, where I spent the next 9 years of my life. After this I moved to Melbourne and have grown up and studied here ever since. I always have been passionate about IT, and have great interest in web development and graphic design. I also have experience in IT, working as a freelance web and graphic designer for various businesses and organisations. Some of my hobbies include playing the guitar, graphic design and macro photography.

---

Levin Alexander | S3514587

**Background:** International Student Studying Information Systems

**Hobbies:** Playing Soccer, Reading

**IT Interest:** Coding, Creating Websites

**IT Experiences:** None at the moment

---

#### **Mark Baptista | S3722699**

I was born in Melbourne, Australia in August of 1999, I have spent all of my life living in Melbourne including my education from the Preparatory year to VCE units 3/4 (Year 12). From an early age Information technology has been my passion funneling through to an interest in programming and UX design, however, my past experiences in IT have only been in my VCE computing units. Some other things that I am interested in are: Gaming, Sports and Music.

---

Reilly Andrews | S3717650

My name is Reilly Andrews, I was born in Australia and I'm currently studying I.T at the University of RMIT. I enjoy playing video games and have a strong passion for reading and writing as well; I also love synth music. My I.T interests include things such as programming and learning how computer systems and hardware work. I

currently have no real experience in the I.T field, however I'm hoping that will change in the future!

**Hobbies:** Video games, reading, listening to music

**IT Interest:** Programming, learning languages

**IT Experiences:** None at the moment

**Website Link:** <https://s3.ap-southeast-2.amazonaws.com/3717650aws/index.html>

---

Liam Farley | S3600296

**Background:** Completed Diploma of IT in 2017

**Hobbies:** Gym, Learning new coding languages

**IT Interest:** Backend Coding, Website Development

**IT Experiences:** Created website for local crane business

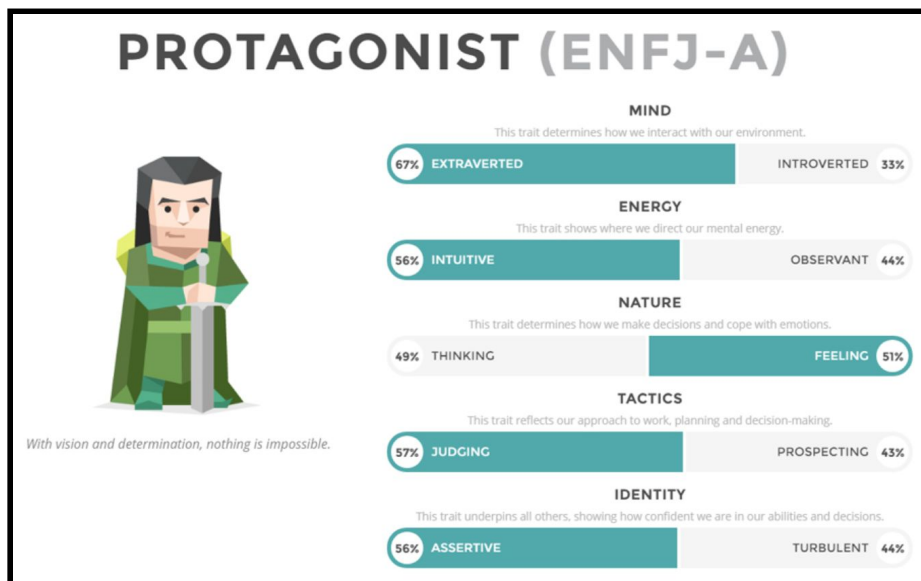
**WebsiteLink:**

<https://s3.ap-southeast-2.amazonaws.com/s3600296profile/index.html>

---

## Test Outcomes

### Rohit's Test Outcomes



### Your Scores:

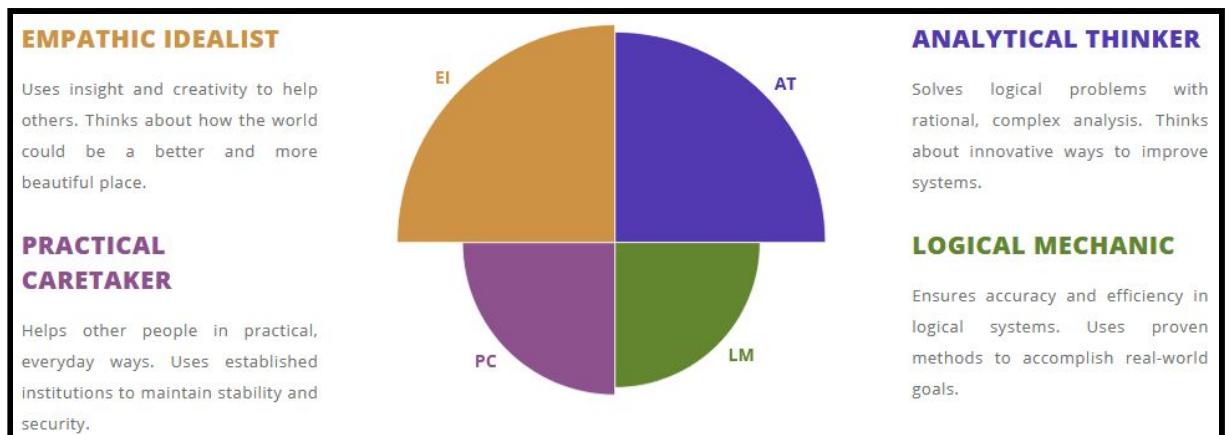
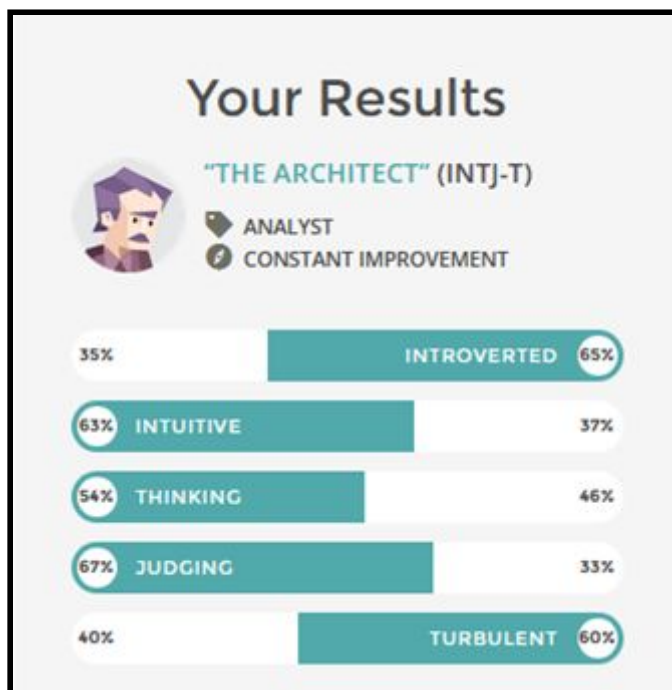
- Auditory: 30%
- Visual: 20%
- Tactile: 50%

You are a Tactile Learner

## Levin's Test Outcomes

## Mark's Test Outcomes

Reilly's Test Outcomes:



Your Scores:

- 65% Visual
- 15% Auditory
- 20% Tactile

## Liam's Test Outcomes



## **Ideal Jobs**

Compare and contrast the ideal jobs for each person in the group. This may have changed due to feedback from Assignment 1. 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?

## **Tools**

Group Website:

<https://s3-ap-southeast-2.amazonaws.com/siliconespiders/index.html>

Git Repository Link:

<https://github.com/rmit-s3544222-rohit-menon/Assignment-2---Intro-to-IT.git>

Having set up an individual website in Assignment 1, you should now set up a group website, using the same approach. You should then include links to each individual website on the group website.

You also need to set up a GitHub or similar repository for your group on which you can use Git. This is to facilitate the production and maintenance of group artefacts, which will include the assignment submission, but may also include other reports or information, code, examples, formatted data, images and videos, links, and similar information.

You will also need to set up your group on Canvas.

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, BitBucket, etc)
- 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.

## Industry Data

In Canvas, you will find a link to some industry data supplied by Burning Glass. You should use this (as well as any other data you may be able to find) to answer the following questions.

1. What are the Job Titles for your group's ideal jobs? How do each of these rank in terms of demand from employers?
2. From your group's ideal jobs, you can identify a set of skills required for these jobs (we will refer to this as your group's required skill set). These can be divided into general skills (communication, problem solving, writing etc) and IT-specific skills (Javascript, SQL, etc).
  - a. How do the IT-specific skills in your required skill set rank in terms of demand from employers?
  - b. How do the general skills in your required skill set rank in terms of demand from employers?
  - c. What are the three highest ranked IT-specific skills which are not in your required skill set?
  - d. What are the three highest ranked general skills which are not in your required skill set?
3. Having looked at the Burning Glass data, has your opinion of your ideal job changed? Why or why not?

---

**Rohit**

UH;PIOUHDFIFUH

---

---

**Liam**

1.

Software Developer - Software developers are always in high demand from employers as there is always a project or task in the IT field where something needs to be developed or in need of the knowledge from a developer. There is always different ways of completing the same project so having different developers with different mindsets is always useful especially when all developers have different skill levels.

2.

- a. IT-specific skills are very important in the ideal job as the job is a Java Software Developer, so the employer is looking for veteran java developers to work in a team along with great communication, problem solving and group skills.
- b. General skills for this job are an absolute must, you need to be able to stick to a schedule, be organised, time efficient, comfortable with talking/working with new people. You are always working in a team for projects so if you can't handle these basic skills then it will really affect your chances of getting/keeping your ideal job.
- c. Java, J2EE, C++
- d. Communication, independence, time efficiency

3.

Looking at Burning Glass data it hasn't really shown me anything surprising. Communication skills are and always will be the dominating factor in the IT field and is crucial for any project you may be working on.

---

**Mark**

1.

Automated Engineer - Just a fancy term for a software developer who builds applications which are automated. Similar to a software developer, automated engineers' are in demand and need to have very high levels of programming knowledge, as each organisation may use different programming languages, an ability to know multiple languages or can easily understand new languages is a requirement.

**2.**

- a. IT main IT skill related to this job is programming and automation setup. Knowledge of Go Language is a must as organisations use GoLang to build software like this. Essential to any development roles working well in team environments and abilities to look at problems and solve them are highly required.
- b. In terms of a general skill set, it is very important to have good communication skills

## **IT Work**

The IT industry is large, varied and changes over time. It is also easy to get a misleading impression of what is typically involved on a day-to-day basis from a job advertisement or a position description. In order to help you understand this, the best way seems to be to hear from some IT professionals about their daily work. There are two ways in which you can do this, as below.

1. Interview an IT professional.
2. View, summarise and discuss at least 10 YouTube videos or other web sources (you may be surprised how many hits there are for a Google search on A day in the life of an IT professional)

You as a group need to choose one of these two approaches. If it is all possible, it is strongly recommended that you (as a group) interview an IT professional. Not only will this information be more direct, it may provide you with a contact that you will find helpful in the future. If you choose this option, you will be provided with a list of questions to ask and some basic training in how to go about this interview.

If you choose the web sources option, you need to report on 5 different IT professionals, as well as indicate your 10 sources.

Whichever source of information you use, you should answer the following questions.

1. What kind of work is done by the IT professional?
2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?
3. Where does the IT professional spend most of their time?
4. What aspect of their position is most challenging?

## IT Technologies

There are a lot of fascinating developments going on in the IT world, many of which may fall by the wayside, but some of which are likely to change the way the world works. Historic examples of such developments include the Internet, smartphones, cloud computing and public-key cryptography.

In this section you should report on 4 of the areas below.

- Clouds, services, servers
- Cybersecurity
- Blockchain and cryptocurrencies
- Machine Learning
- Autonomous vehicles
- Natural Language processing and chatterbots
- **Robots**
- Raspberry Pis, Arduinos, Makey Makeys and other small computing devices

Some starting points and other information will be made available on Canvas.

For each of the areas covered, you should report on the following.

**What does it do? (600 words)** What is the state of the art of this new technology? What can be done now? What is likely to be able to do be done soon (say in the next 3 years)? What technological or other developments make this possible?

**What is the likely impact? (300 words)** What is the potential impact of this development? What is likely to change? Which people will be most affected and how? Will this create, replace or make redundant any current jobs or technologies?

**How will this affect you? (300 words)** In your daily life, how will this affect you? What will be different for you? How might this affect members of your family or your friends?

### **Project ideas**

You all have some project ideas that you reported in Assignment 1. You are to come up with a project idea for the group as a whole, which could be an individual's idea, but is more likely to be a combination of each of the ideas you had individually, together with comments and feedback from your Assignment 1 marker, your tutor, the lecturer, and anyone else who you would like to consult.

You may also wish to consider what problems need to be solved, for which there are many sources of information, such as the ones below. There are many more websites like these, of course.

<https://www.weforum.org/agenda/2016/01/what-are-the-10-biggest-global-challenges/>  
<https://www.cheatsheet.com/money-career/want-to-be-a-billionaire-solve-one-of-these-5-problems.html/?a=viewall>  
<https://www.quora.com/What-are-common-problems-that-need-solving>

There is no set length for this section, but it is difficult to see how a description of less than 500 words would be adequate. Do not limit yourself to this if you have more than this to write, though. If you are unsure of how much to write, ask your tutor or lecturer for advice.

### **Feedback**

By the time you get to Week 8, you should have been working as a group for three weeks, and hence have some experience of how well the group is working. A key feature of industry teams is the ability to give and receive feedback, particular to members of a team in which you are working. In order to give you some experience at this, your group should login to the SparkPLUS tool (instructions on how to do this will be given on Canvas). Each person should

Provide an assessment of each member of 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 your 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 tutor or lecturer. In particular, if you wish to have a group discussion about this feedback, please contact the lecturer 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.

### **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.

---

Reilly Andrews: Industry Data  
Job Title: Ruby Software Developer  
IT Skills Required: Bachelor's Degree in I.T/Computer Science.  
Minimum two years of software development experience.

General Skills Required: Should be intelligent, creative, hardworking, resilient and determined.

Burning Glass:



---