

Introduction to Information Technology

THE IT WORLD

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TEAM PROFILE

Team name: FoxHound

Personal Information:

Yongqian Huang:

My name is Yongqian Huang and my English name is Barry. My student number is \$3719368. my student email is \$3719368@student.rmit.edu.au, my personal email address is barrrr.h@gmail.com. I'm from China, I can speak both Mandarin and Cantonese. I first came to Australia in 2015 then I finished year 12 last year. Now, I'm studying information technologies in RMIT. I'm interested in PC online games and horrible movies.

Jingbin Yin:

Student number: s3549994

Nationality: Chinese

Education to date: this is the second semester for me in RMIT

Languages spoken: Chinese and English

Hobby: I am a crazy fan of online games, such as league of legends. I prefer to play RPG game rather than FPS game. I am more enjoy to chat with others in game.

Favorite sports: In my Chinese home, there was a swimming pool behind my house. In my childhood, my brother and I often swam there after school.

Although the swimming pool have been closed last two years, my favorite sport still is swimming.

QingKai Yi:

My name is QingKai Yi and my student number is \$3632505, my email is \$3632505@student.rmit.edu.au. I am an international student from North East of China. I have already spent 12 years for study , from primary school to middle school , high school and then come to Australia and study language and foundation , after that I get into RMIT university and study Information Technology . I can speak Chinese and English. I'm a fan of Warfare history , especially First and Second World War .I also like photography , taking photo of natural landscape is my favorite .

Bach T Dao:

Hello! My full name is Bach Truong Dao, student ID: s3673712. I am an international student, come from Vietnam. I was born in Hai Phong city, which is located in the North of Vietnam. I was a student of Tran Phu high school - school for the gifted, physics was my major in high school. Having finished 3 years high school, I decided to study abroad. For me, studying abroad is a big opportunity for me, and I was really looking forward to it. But my English was bad, actually it is still terrible until now and I still trying to improve my English.

I consider myself as an active person. I love sports, especially soccer and badminton. I used to join some of the sport competitions in my high school but have not received any winner price, yet. However, I am still practicing to be better. I also love music, Tropical house type. I usually listen to Kygo songs when I study, work-out, go on my way to school,...

When I moved here - Melbourne, everything was very new to me, from food, weather, language to public transport and school stuffs... I found a lot of difficulties in my daily. I have got lost at least 2 times already since I moved here and I feel terrible homesick too. However, I am living with my 2 cousins, they help me a lot with starting a new life here. My 2 cousins also studied IT, one chose RMIT, the other chose Swinbourne, and they are now working as a programmer for big company now. I always look up to my 2 cousins, try my best to be like them in the future.

HouGuang REN:

My name is Houguang Ren and my student number is s3538336. My email address is s3538336@student.rmit.edu.au. As a Chinese student, I can speak both of Mandarin and English fluently. Currently, I am studying at Monash College before RMIT University. I like swimming which is my only hobby and favourite sport so far. Furthermore, I have a cat which is British shorthair and I love him very much.

Shuyuan ZHANG:

My Name: SHUYUAN ZHANG (Simon)

Student Number: 3632704

Email Address: <u>s3632704@student.rmit.edu.au</u>

Nationality: Chinese

Education: Finished Yearu in Ivanhoe Grammar School, Then Finished Foundation Studies in Rmit Training, And Study Bachelor of information technology in Rmit

University now.

Language Spoken: Cantonese, Mandarin, English

My Hobbies: Playing Badminton, Programming, Computer games, billiards

Pet: Golden Retriever

Team Profile:

Yongqian Huang:

INTJ

Introvert (6%) intuitive (7%) Thinking (6%) Judging (28%)

You have slight preference of Introversion over Extraversion (6%)

You have slight preference of Intuition over Sensing (7%)

You have slight preference of Thinking over Feeling (6%)

You have moderate preference of Judging over Perceiving (28%)

Result of My learning style:

Auditory: 40% Visual: 45% Tactile: 15%

Factor	Factor label	Raw score	Score percentile
I	Extroversion		41
II	Emotional stability		87
III	Agreeableness		35
IV	Conscientiousness		60
٧	Intellect/Imagination		52

Big five personality trait scores calculated by openpsychometrics.org

Result of five big personality tests:

Those result means that what kind of person I am and what position is suitable for me. My learning style is tended to visual, so I might use more visual material to learn things in the future. The result points out that I'm not a very extrovert person so I might work quietly as a member in a team. However, the result of Myer-Biggs test shows that I have moderate preference of Judging over Perceiving, so I might good at analysing for my team. If I'm forming a team I will be a good worker and I can do analysis for my team mates.

Bach T DAO:

Result of MBTI test

What's Your Learning Style? The Results

Your Scores:

▶ Printer Friendly Version

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

You are a Visual learner! Check out the information below, or view all of the learning styles.

Visual

If you are a visual learner, you learn by reading or seeing pictures. You understand and remember things by sight. You can picture what you are learning in your head, and you learn best by using methods that are primarily visual. You like to see what you are learning.

As a visual learner, you are usually neat and clean. You often close your eyes to visualize or remember something, and you will find something to watch if you become bored. You may have difficulty with spoken directions and may be easily distracted by sounds. You are attracted to color and to spoken language (like stories) that is rich in imagery.

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

- . Sit near the front of the classroom. (It won't mean you're the teacher's pet!)
- · Have your eyesight checked on a regular basis.
- · Use flashcards to learn new words.
- · Try to visualize things that you hear or things that are read to you.
- · Write down key words, ideas, or instructions.
- Draw pictures to help explain new concepts and then explain the pictures.
- Color code things.
- · Avoid distractions during study times.

Remember that you need to see things, not just hear things, to learn well.



AnonymousEntrepreneur THE ENTREPRENEUR



Result of additional test (Spychometrics Project test)

Extroversion: 45

Emotional stability: 81 Agreeableness: 35 Conscientiousness: 31 Intellect/Imagination: 8 What do the results of these tests mean for you?

As I can see, I like group activities, I believe in practical things rather than imagination. I can control emotion very well, and I usually get lost in mind when walking in nature. Moreover, I am very flexible in bringing out the ideas, I always keep my options open. Because I can control my emotion so that I can be relax even in stressful situation. I hate boring thing, the best way for me to learn is see thing by myself and memorize it. When I forget anything, firstly I imagine the situation for that and try to get back to that time. I easily get distracted when I am studying, as a result, I need a quiet place to study.

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

Yes, definitely I will take this into account. By doing these tests, I was getting to know myself better, and I could know what I can do best. So when I do things as a team, I will have my options open, and learn from the others.

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

These results tell me that I can learn from the others, an I can co-operate very well as a team. Hopefully, when I participate in a team in real life, I will do my best so my team can get the best results.

QingKaiYi:

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This is my Myers-Briggs test result
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Personality type: "The Mediator"

Individual traits:

Introverted---68%,

Intuitive---63%,

Feeling---68%,

Prospecting---64%,

Turbulent---58%,

Role: Diplomat

Strategy: Constant Improvement

This is my learning style test result

Auditory: 25%

Visual: 45%

Tactile: 30%

You are a Visual learner!

This is my Big Five Personality Test result

Openness 71%

Conscientiousness 52%

Extraversion 48%

Agreeableness 75%

Neuroticism 54%

These results mean a lot for me, they show me what is my weakness and what is my strong point and also they give me some encourage. From these results, I know that I can let my group more energetic and coadjutant. The team spirit of my group will reach the top level. When forming a team, I will try to make best use of my advantages and bypass the disadvantages to make my team running well.

Shuyuan Zhang:

Online test 16 Personalities: https://www.16personalities.com

Result link: https://www.16personalities.com/profiles/1131827919de3



Your Test Results

Thank you for completing our personality test! Here is a copy of your results:

Personality type: "The Protagonist" (ENFJ-T)

Individual traits: Extraverted - 61%, Intuitive - 55%,

Feeling - 61%, Judging - 53%, Turbulent - 67%

Role: Diplomat

Strategy: Social Engagement

Link to your profile: https://www.16personalities.com/profiles/1131827919de3

Online test Education Planner: http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml

What's Your Learning Style? The Results

Your Scores:

▶ Printer Friendly Version

- Auditory: 35%
- Visual: 40%
- Tactile: 25%

You are a Visual learner! Check out the information below, or view all of the learning styles.

Vieus

If you are a visual learner, you learn by reading or seeing pictures. You understand and remember things by sight. You can picture what you are learning in your head, and you learn best by using methods that are primarily visual. You like to see what you are learning.

As a visual learner, you are usually neat and clean. You often close your eyes to visualize or remember something, and you will find something to watch if you become bored. You may have difficulty with spoken directions and may be easily distracted by sounds. You are attracted to color and to spoken language (like stories) that is rich in imagery.

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

- Sit near the front of the classroom. (It won't mean you're the teacher's petl)
- · Have your eyesight checked on a regular basis.
- · Use flashcards to learn new words.
- Try to visualize things that you hear or things that are read to you.
- · Write down key words, ideas, or instructions.
- Draw pictures to help explain new concepts and then explain the pictures.
- · Color code things.
- · Avoid distractions during study times.

Remember that you need to see things, not just hear things, to learn well.

Online test: TEST MY CREATIVITY: http://www.testmycreativity.com





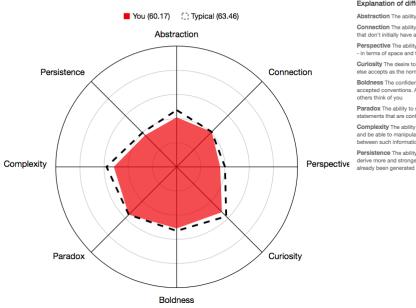








Your creativity score is 60.17



Explanation of different metrics

Abstraction The ability to abstract concepts from ideas Connection The ability to make connections between things

Perspective The ability to shift ones perspective on a situation - in terms of space and time, and other people

Curiosity The desire to change or improve things that everyone else accepts as the norm

Boldness The confidence to push boundaries beyond ntions. Also the ability to eliminate fear of what others think of you

Paradox The ability to simultaneously accept and work with statements that are contradictory

and be able to manipulate and manage the relationships between such information

Persistence The ability to force oneself to keep trying to derive more and stronger solutions even when good ones have

What do the result of these tests mean for me?

My Personalities online test result is extraverted-61%, Intuitive-55%, feeling-61%, Judging-53%, Turbulent-67%. After the test, This result tells me that I am a sleek person with unique judgment and communication skills. I can walk in various social situations. My result of leaner style test is Visual learner. That means I am more suitable to learn through reading or pictures . My creativity score is only 60.17, It is little bit low, I think I need to improve my imagination. In the past, my understanding of myself had always been superficial. I have not conducted a profound, comprehensive, and unified thinking, and I am still not very familiar with my character. After these tests, let me have a deep understanding of my character, can better plan for future study, and have a wonderful guiding role in future study and employment...

How do I think these results may influence my behaviour in a team?

I think these tests are not very accurate and can only play a psychologically suggestive role. These results have little effect on my behaviour in the team. I am of course pleased that the result is superior, and I will do better. If the measured result is not reliable, I will correct my behaviour.

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

I am a person who is good at communication. I think I can get along quickly with the team members. When I do things many times, I rely on my feelings and I am not stable enough. So I need to find a calm team member to stop me from making mistakes when necessary. Through the test results, find similar personality members or complementary

members. I can find the person who has the same hobby and do the project together. Make sure we can learn from each other's need in the same project.

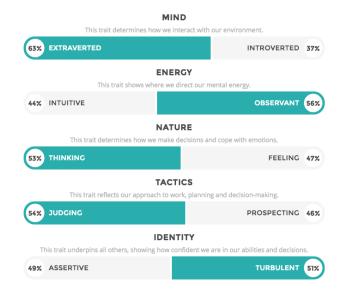
Houguang Ren:

YOUR PERSONALITY TYPE IS:

EXECUTIVE (ESTJ-T)



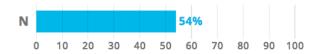




Neuroticism

Neuroticism describes a person's tendency to experience negative emotions, including fear, sadness, anxiety, guilt, and shame. While everyone experiences these emotions from time to time, some people are more prone to them than others.

This trait can be thought of as an alarm system. People experience negative emotions as a sign that something is wrong in the world. You may be in danger, so you feel fear. Or you may have done something morally wrong, so you feel guilty. However, not everyone has the same reaction to a given situation. High Neuroticism scorers are more likely to react to a situation with fear, anger, sadness, and the like. Low Neuroticism scorers are more likely to brush off their misfortune and move on.



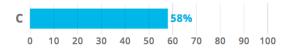
Your score for Neuroticism was moderate, at 54%.

Your score indicates that you are fairly typical in your tendency to experience negative emotions. You probably feel sadness, worry, anger, and guilt about as much as the average person. You are neither overly reactive, nor especially resistant to the stresses of life.

Conscientiousness

Conscientiousness describes a person's ability to exercise self-discipline and control in order to pursue their goals. High scorers are organized and determined, and are able to forego immediate gratification for the sake of long-term achievement. Low scorers are impulsive and easily sidetracked.

The concept of Conscientiousness focuses on a dilemma we all face: shall I do what feels good now, or instead do what is less fun but will pay off in the future? Some people are more likely to choose fun in the moment, and thus are low in Conscientiousness. Others are more likely to work doggedly toward their goals, and thus are high in this trait.



Your score for conscientiousness was 58%, which is in the moderate range.

Your moderate score in Conscientiousness indicates that you are fairly average in your tendency to respond to impulses. You probably have some long-term goals and are fairly successful in pursuing them, but can be sidetracked sometimes when a particularly attractive diversion presents itself.

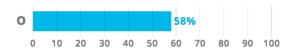
Your Personality Trait Scores

This Big Five assessment measures your scores on five major dimensions of personality: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (sometimes abbreviated OCEAN). Check out your scores on each of the five dimensions in the graphs below, then read on to discover what each score means.

Openness

Openness describes a person's tendency to think in abstract, complex ways. High scorers tend to be creative, adventurous, and intellectual. They enjoy playing with ideas and discovering novel experiences. Low scorers tend to be practical, conventional, and focused on the concrete. They tend to avoid the unknown and follow traditional ways.

Openness is strongly related to a person's interest in art and culture. People who are high in openness tend to enjoy the arts and seek out unusual, complex forms of self-expression. People who are low in openness are often suspicious of the arts and prefer to focus on more practical pursuits.



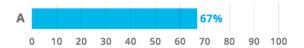
Your score for openness was **58%.** This is in the **moderate** range.

Because your score is in the midrange, it is likely that you do not stand out as either a particularly imaginative, nor a particularly conservative person. You probably do not consider yourself to be particularly creative or unconventional. You probably also do not appear especially conservative or narrow in your interests.

Agreeableness

Agreeableness describes a person's tendency to put others' needs ahead of their own, and to cooperate rather than compete with others. People who are high in Agreeableness experience a great deal of empathy and tend to get pleasure out of serving and taking care of others. They are usually trusting and forgiving.

People who are low in Agreeableness tend to experience less empathy and put their own concerns ahead of others. Low scorers are often described as hostile, competitive, and antagonistic. They tend to have more conflictual relationships and often fall out with people.



Your score for Agreeableness was moderate, at 67%.

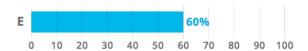
Your moderate score in Agreeableness indicates that you are fairly typical in the degree to which you balance your own interests with the interests of others. You are probably willing to sacrifice yourself for others some of the time, but you also watch out for yourself quite a bit.

Extraversion

Extraversion describes a person's inclination to seek stimulation from the outside world, especially in the form of attention from other people. Extraverts engage actively with others to earn friendship, admiration, power, status, excitement, and romance. Introverts, on the other hand, conserve their energy, and do not work as hard to earn these social rewards.

Extraversion seems to be related to the emotional payoff that a person gets from achieving a goal. While everyone experiences victories in life, it seems that extroverts are especially thrilled by these victories, especially when they earn the attention of others. Getting a promotion, finding a new romance, or winning an award are all likely to bring an extrovert great joy.

In contrast, introverts do not experience as much of a "high" from social achievements. Thus, they don't make as much effort to seek them out. Introverts tend to be more content with simple, quiet lives, and rarely seek attention from others.



Your score for Extraversion was moderate, at 60%.

Your mid-range score on this dimension indicates that you are fairly average in your motivation to seek out social rewards. You probably have some desire for admiration, influence, and prestige, but you can also be content when you're not winning recognition from others.

What's Your Learning Style? The Results

Your Scores:

Printer Friendly Version

Auditory: 40%

Visual: 25%Tactile: 35%

You are an Auditory learner! Check out the information below, or view all of the learning styles.

Auditory

If you are an auditory learner, you learn by hearing and listening. You understand and remember things you have heard. You store information by the way it sounds, and you have an easier time understanding spoken instructions than written ones. You often learn by reading out loud because you have to hear it or speak it in order to know it.

As an auditory learner, you probably hum or talk to yourself or others if you become bored. People may think you are not paying attention, even though you may be hearing and understanding everything being said.

Here are some things that auditory learners like you can do to learn better.

- · Sit where you can hear.
- · Have your hearing checked on a regular basis.
- · Use flashcards to learn new words; read them out loud.
- · Read stories, assignments, or directions out loud.
- · Record yourself spelling words and then listen to the recording.
- · Have test questions read to you out loud.
- · Study new material by reading it out loud.

Remember that you need to hear things, not just see things, in order to learn well.

The results of these tests will allow me to recognize myself more clearly. Nonetheless, these tests cannot be completely relied upon. I should properly use these test results to identify my own deficiencies and then correct them. Through the results, I realise that I should strengthen my social skills.

These results may affect my social behaviour in the team. According to the results, I know that I am socially weak. Thus, I will try to social with others more within the team.

While forming a team, I should look for people who are good at socializing. As the team is a group cooperation, better social cooperation capabilities can make it easier for others to understand the ideas. With no doubt, the ability of individuals to solve problems is of great importance because if one cannot even complete his/her own work, there will be no more exchanges and cooperation. On the other hand, management ability is also very significant. A person with strong managerial ability can make a team operate more orderly.

Jingbin Yin:

The results of an online Myers-Briggs test:



EXECUTIVE PERSONALITY (ESTJ, -A/-T)

Good order is the foundation of all things.

— Edmund Burke

Executives are representatives of tradition and order, utilizing their understanding of what is right, wrong and socially acceptable to bring families and communities together. Embracing the values of honesty, dedication and dignity, people with the Executive personality type are valued for their clear advice and guidance, and they happily lead the way on difficult paths. Taking pride in bringing people together, Executives often take on roles as community organizers, working hard to bring everyone together in celebration of cherished local events, or in defense of the traditional values that hold families and communities together.

The results of an online learning style test:

What's Your Learning Style? The Results

Your Scores:

▶ Printer Friendly Vers

Auditory: 40%Visual: 45%Tactile: 15%

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Visual

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- · Write down key words, ideas, or instructions.
- · Draw pictures to help explain new concepts and then explain the pictures.
- Color code things.
- · Avoid distractions during study times.

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The results of a Big Five Personality test:

Factor	Factor label	Raw score	Score percentile
I	Extroversion		54
II	Emotional stability		32
III	Agreeableness		32
IV	Conscientiousness		17
٧	Intellect/Imagination		18

Big five personality trait scores calculated by openpsychometrics.org

These three online test show the personality of me, let me know myself clear. The Myers-Briggs test tell me what roles should I take in the team, the learning style test tell me how could I study better and faster. In the Myers-Briggs test, the result show that I could be a

good organizers in the community. And the result of the learning style test show that I am a visual learner. That means the things I saw should be remember better than other ways. In the future studying, I could try to use picture to remember the study materials.

Base on the result of Myers-Briggs test, I should be the organizers in the team. For the programming team, I think I could be the leader to plan somethings.

When forming a team, we should find some person which have the similar learning style. Because we could get the information quickly by the same way. Also, we choose a person which have an outstanding leadership to be a leader.

Ideal Jobs:

It is actually still very equivocal because we just started to study Information Technology and most of us have no plan in the near future, yet. But in general, most of the members are looking forward to get a good job in the future as a software, applicant, game developer. Some of the common aspects that we all looking for are high salary, chance to get experiences, to learn about new thing while working and to work as a team. However, some want to start up their own company which focus on Information technology skill in the future.

TOOLS

Link to group's website: http://foxhound69.s3-website-ap-southeast-2.amazonaws.com/

The link to group's Git repository: https://github.com/FoxHound69/FoxHound69

We divided the assignment to different sessions for each of the member in our group to do specific tasks. With the help of Github, it is very easy to control our project. Every members in the group know how to use Github, push and pull functions and whenever a task finishes, it will be displayed on Github so everyone can check and edit it.

INDUSTRY DATA

Question 1:

The ideal job title of our group should be solutions architect, java developer, web developer and software developer.

Solutions architect

From the demand ranking list given, we notice that the demand of solutions demand from employers is increasing largely from 5th position to the 1st and become the highest in this year (2018).

Java developer

This is a position which is also have a high demand from employers. In this years, it become 7th popular job positions. We believe the demand of this job will increase in the next year.

Web developer

Web developer is a stable job. It keeps a stable demand from employers. And it is in the middle position of the ranking list.

Software developer

Unluckily, it is a job which is decreasing demand from employers. In last year, it is the second highest demand job. But we could not find it in the top of the ranking list, it is going down to the 10th.

Question 2

2a.IT special skill:

For getting our ideal jobs, we need to get a set of IT special skills. They are SQL, JavaScript, Java, Git.

SQL:

We would notice that all of these skills have a high demand from the employers. Unquestionably, Sql have the highest demand. Because it is the information collection age. Database is the most important thing to store the data and sql as a language for query data from database. So that, is must own the highest demand.

JavaScript:

If database is the most important thing to store information, website must be the most important thing to show and collect information. JavaScripts as a language to catch the users' input, it has enough reasons to get the second highest demand.

Java:

It is a popular language for programming and it is easy to study. So that it got a high demand of course.

Git:

Git is similar as a fork. But it is not for storing cargo, it stores the code. However, it could not get a high demand from employers.

2b. General skills:

We believe that we will master the communication skills, problem solving skills, and teamwork if we become a working group.

Communication skills:

Unquestionably, communication is the most important skill. We could use this skill to explain our idea, get the requirement of customers. It is easy to see how it meets the highest demand from employers.

Problem solving:

It is the second highest demand selections. Why employers employ a worker? It is an easy question to answer. They want to find someone to solve the problem for them. That is an explanation why problem solving is an important skill.

Teamwork:

This is the fifth highest demand job selection. It is the common sense, which is the team could do the work better than a single person. If we could have team work, it might be easier to get the job.

2C.

Graphic designer and .Net Developer are the IT special skills which are in the top 3 rank but not in our required skill set.

2d.

Organizing skill is the only one generic skill which is in the top3 rank but not in our required skill set.

Question 3:

In general, the individuals' opinions of ideal job have not changed much.

From what we have analyzed, the ideal job has the high rank in the list. Even it is not all of the highest. But they are still the dream work we want to get. In addition, who knows the demand from employers?

IT WORK

https://www.youtube.com/watch?v=om8AygYdrto

Day to Day Work Life in Information Technology - What do I do?

1. What kind of work is done by the IT professional?

They have a ticketing system and that is service dusk.

He checks this tickets on this ticketing system and answers the phones constantly by short telephones with little headsets. He needs to go around to their clinic and their general facility. He also creates user account and email accounts manage users through that.

2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?

He interacts with clients, he creates user account and email accounts for his clients.

3. Where does the IT professional spend most of their time?

He spends most of his time on active directory.

4. What aspect of their position is most challenging?

A lot of putting out fires in his current position. His takes vary every day, he cannot expect one thing that happened.

https://www.youtube.com/watch?v=hFhuMGanjT8

IT Manager - A day in the life

1. What kind of work is done by the IT professional?

As an IT manager, his typical day involves getting involved in activities that any of my staff are involved in. He does things like one on one meeting with staff for performance reviews, video conferences, phone conversations with his customer or staff.

2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?

He works with other IT professionals, clients and investors. From projects, he works with project managers, business managers.

3. Where does the IT professional spend most of their time?

He has freedom to choose when he does his job. He spends most of his time on conversations with his staff to help them success in their roles.

4. What aspect of their position is most challenging?

He needs to have very lot of conversations with customers, staff and business manager, he has to tried to make everyone feel satisfaction.

https://www.youtube.com/watch?v=RYdmWa-i7Gs

IT Support Technician - A day in the life

1. What kind of work is done by the IT professional?

His job consists of him responding to technical queries raised by their customer. Sometimes, it is updating software application releases, new website releases that we have for their customers.

2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?

He interacts with clients, he works for their client's requirements

3. Where does the IT professional spend most of their time?

Sometimes he works from home. It depends on whether it is scheduled after hours work. He spends his time on fixing issues.

4. What aspect of their position is most challenging?

His position requires him to know a little bit of everything.

https://www.youtube.com/watch?v=vt79JcPfZQA

Day in the Life: Software Engineer

1. What kind of work is done by the IT professional?

She works on code and program things for computer. In her company, she works as a website developer.

2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?

She interacts with other IT professionals, they worked together.

3. Where does the IT professional spend most of their time?

She spends most of her time on communicating a solution for a problem and coding.

4. What aspect of their position is most challenging?

Her position is full of men, and as a girl she afraid to act grily in the office.

https://www.youtube.com/watch?v=Rt3rLVJTTAw

A Day in the life of IT Specialist

1. What kind of work is done by the IT professional?

He is a reliability specialist which basically means that he would support all of in-house written system.

2. What kinds of people does the IT professional interact with? Are they other IT professionals? Clients? Investors? The general public?

He interacts with his team, other IT professional to solve problems.

3. Where does the IT professional spend most of their time?

He works on cases that he has and then he solves problems and he does some enhancements sometimes, but mainly he solves problems

4. What aspect of their position is most challenging?

In his position, he does not know what is going to happen and everyday is different.

5 other links:

https://www.youtube.com/watch?v=-VtiOSOviy4

https://www.youtube.com/watch?v=cNSqKMOyayk

https://www.youtube.com/watch?v=876nGJHoF18

https://www.youtube.com/watch?v=o6uPygYQmj4

https://www.youtube.com/watch?v=KzxNgPafgrw

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 theollowing.

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 affects members of your family or your friends?

Clouds, services, servers

Cybersecurity

Blockchain and cryptocurrencies

Natural Language processing and chatterbots

As the world revolves more and more around the internet and information technology, there plenty of sectors and parts of the internet which is being further developed. Information Technology generally would mean the use of any computers, storage, networks and other physical devices, infrastructure and processes to create, process, store, secure and exchanging in all forms of data. Generally and typically, Information Technology is the use of context in enterprise operations as opposed to personal or entertainment technologies. As Information technology develops and to further advance, plenty of sectors are being categorized and plenty more opportunities and information are being showcased to the public. The 4 developments in the information technology sector that i will talk about is the clouds, services and servers, cyber-security, blockchain and cryptocurrencies and natural language processing and chatterbots.

Clouds, services and servers

Cloud computing is the general idea of storing information and accessing data through the world wide web in comparison to your system's computer hard drive. The term "cloud" is generally a metaphor for the term internet, but it is used to widely that it became a term for this particular service. The history of cloud computing derives from the days where plenty of information technology development ideas were drawn and presented in the form of flowcharts. The infrastructure of a cloud would be represented by a big, fluffy and puffy

form which was shaped like a cloud. This was how the term cloud was formed and since then, everyone was using the term cloud as a representation of information being stored in the servers and hubs. The significant difference between a local storage and a cloud storage is technically, when you store information in a local storage, the information would be stored in the hard drive of the computer while when you store in the cloud servers, the information would be stored in the servers and users would be able to retrieve the information anytime they have access to the internet and the storage servers. This would also bring much convenience to the users as they would be able to not only retrieve data anywhere anytime, but they would also be able to retrieve them in an easier manner while the device would be able to sync their data automatically by itself through the system settings.

The concept of a cloud is very simple, it is simply not having a dedicated network attached storage (NAS) or server in residence. Albeit being able to remotely access the cloud, the concept of using it in a home premise or office settings doesn't necessarily mean that you're optimizing the cloud storage, But through the synchronization of the system, they would be able to optimize the usage of cloud through arrangement and the placement of the data in a better manner that saves much more space optimizing the cloud to its full potential. There are several advantages and disadvantages through the usage of cloud computing. The first advantage that would be mentioned is the benefit of cost saving, the advantage of being able to save cost is probably the most significant benefit amongst all the others. As for the use of cloud computing, users would not only be able to save cost from purchasing storages and servers, but they would also be able to save cost from purchasing equipment. This would allow corporate companies to save cost from different aspects and they wouldn't have to worry about unnecessary cost that would affect the company. The second main advantage of cloud computing is the reliability of it. As you know, plenty of factors would occur when it comes to the use of storage in a company and most of the time it is deemed unreliable albeit spending so much money on it. With cloud computing, companies would be rest assured that there would be no problems as there would be representatives from the cloud computing companies to solve their issue incase of any problems. The third main benefit of using cloud computing is the manageability of it. With the use of cloud computing, there are plenty of fees that would also be eliminated along the process. As you use cloud computing as a service provider, maintenance fee and resource fee would not be required as your service provider would already be covering most of it, therefore it is beneficial for a company as they would also not have to spend unnecessary money on all these fees. Although there are plenty of advantages along the use of cloud computing, but there are also disadvantages along it. The first disadvantage would be downtime, although cloud computing is often deemed reliable and safe, but there are certain times where downtimes are needed for the benefit of the cloud. Therefore, a company is required to wait and they would not be able to control the downtime period. The second disadvantage of cloud computing would be security, although cloud computing service providers would often implement the best security software to protect their consumers from breach of data, but there is always a risk when consumers provide their service providers with their data. Therefore it is not always safe albeit saving a lot of problems.

As cloud computing progress and to continue to replace external storage devices, it is no doubt that consumers would convert to using cloud computing sooner or later. Therefore in the near future, plenty of consumers would convert and to use cloud computing as it is not only convenient, but is it also reliable and it saves plenty of work, effort and time through the use of it. Therefore in conclusion, the development and the innovation of cloud computing is a major advantage in the IT industry and it would definitely help the industry in plenty of aspects.

Cybersecurity

Cybersecurity is the general idea of having to protect the software systems ,networks and programs from digital attacks. The purpose and the goals of these attacks are usually aimed to destroy, manipulate or to change sensitive information in the system. This would allow the invader to be able to gain access to the information in the system and to allow them to extort money from the users or to interrupt normal ongoing business in the organisation. Cybersecurity works in a form where it contains multiple layers of protection spreading across computers, networks, programs or data that one intends to keep safe. A successful cybersecurity data approach would contain all of the above. In a widespread organisation, the people, processes and technology are the ones that complements each other to create an effective defense from cyber attacks.

There are several types of cybersecurity threats when it comes to the potential breach of cybersecurity. The few most common cybersecurity threats would be ransomware, malware, social engineering and phishing. The first common threat would be ransomware, ransomware is typically a type of malicious software where it is often designed to extort money by blocking the user in gaining access to important files or system in the computer system until the ransom is paid. Hackers would often times lock the computer through a special code and the user is required to pay the hacker a certain amount otherwise the whole computer system would often be wiped out. Often times, user would be forced to pay in order for their files and this is why it is always recommended to back up the system or to back up important files into clouds or external hard drives. Sometimes when even the user has paid the ransom, it is not guaranteed that the files would be recovered or the system restored. It often times would depend on the hacker itself. The second common threat that often occurs would be the malware threats, malware is a type of software that is specifically designed to gain unauthorised access towards user or to allow hackers to be able to gain access to cause damage to a computer. This would often times lead to a breach in data allowing the hacker to gain access to the users computer, the user would then be vulnerable to other hackers as there is already a trace there. The third most common threat in the cybersecurity would be social engineering. Social engineering is often a tactic that would allow hackers into tracking you into user to reveal their sensitive information. They would often times be able to hack you and to obtain monetary payment or to gain access to your confidential data. Social engineering could also be combined with any other threats into making it more invulnerable. The final and most common threat lastly would be phishing. Phishing is the practice of creating and sending fake messages making users into believing that they are the actual user. This would often times be used to obtain sensitive data, passwords and credit card information. It is the most common threat amongst all the others. Albeit this is very common and plenty of people know about it, plenty of users are still often tricked on a daily basis by this threat.

Cybersecurity is a major thing in the Information Technology community and as technology advances, cybersecurity is more required in certain aspects of it. As the world revolves more and more around digitals and gadgets, plenty of sensitive information and personal information are inserted into digital devices, therefore having the knowledge of cybersecurity is rather important and is highly encouraged to everyone.

Blockchain and Cryptocurrencies

Blockchain is the general idea of having a digitized, decentralised, public ledge to all cryptocurrency transactions. Blockchains are often and still constantly growing as blocks, blocks are commonly known as the most recent transactions. Blocks are constantly recorded and added in a proper orders, this allows market participants to keep track of their blockchain transactions without central recordkeeping. Each node in a computer that is connected to the network would always get a copy of the blockchain, which is then downloaded automatically into the computer alongside the network. Blockchains are originally developed as the accounting method to partner alongside the virtual currency Bitcoin. The concept which Bitcoin uses would be commonly known as the distributed ledger technology (DLT), and it is commonly appearing in a variety of commercial applications today. Currently in the blockchain technology and community, blockchains nowadays are primarily used to verify transactions amongst all digital currencies. Doing so, through the process of verifying transactions, this would allow the system to create a record that cannot be changed. The process of verifying transactions and storing of records are often verified by the community instead of a single authority.

The main blockchain nowadays would often times be Bitcoin, it is the main technological innovation and it has been the head of all blockchains ever since. Bitcoin is created through the process of mining data and it isn't regulated by a singular authority. Users would be able to dictate and validate transactions when one another pays for good and services, eliminating the need for a third-party to process and store payments. The transaction would then be converted into blocks and then it would be recorded into the blockchains. This is the simple concept on how bitcoins work and how they function. The whole drive for bitcoin

is also due to the simple fact where it is attracted by the idea of eliminated a third-party middleman in the transaction allowing users to be able to directly pay to the party that they are purchasing from.

The concept of blockchains are very innovative and as technology advances in the digital world today, plenty of more blockchains are being developed and produced and ever since then, the prices of each of them are skyrocketing. Each blockchain produced are at a different level and each has their unique hash key to it. As technology advances today, a digital currency is much needed in the process of purchasing and it truly would change the world of transactions if it is more commonly used amongst more parties.

Natural Language processing and chatterbots

A Chatterbot, which is also commonly known as chatbot, talkbot, interactive agent is the general idea of having a computer program or an artificial intelligence to conduct a simple constructed conversation via auditory or textual methods with a user. Such programs that has been programmed are often times used to simulate how a human would behave during a conversation and to replicate a similar feeling towards it. Chatterbots are typically used in dialog systems usually in the customer service industry or information acquisition. Some chatterbots commonly use sophisticated language processing systems but the simpler versions would commonly scan for keywords in the input, and then displaying the sequence of sentence that has been incorporated in the system.

The original term known as "Chatterbot" has been originally originated by Michael Mauldin. Michael Mauldin is also commonly known ass the creator of the first chatterbot in 1994, the chatterbot is known as Verbot. In the times today, most chatbots that are most commonly used would be the chatterbots in google assistance, amazon alexa, facebook messenger or wechat. Chatterbots would also commonly be classified into a few categories which is the conversation commerce, analytics, communication, customer support, design, developer tools, education, entertainment, finance, food, games, health, VR, marketing, news, personal, productivity, shopping, social, sports and travel and utilities.

In the current society that we all live in, plenty of people and consumers would already somehow heard of or have already been using chatbots for quite awhile already. Chatterbots are very interactive and in the current digital society, chatbots help out a lot in the daily basis of either work or entertainment. Everyone in all certain industries would often benefit in the concept of a chatterbot. Chatterbots are fast to reply and prompt in providing services in industries that they are specified in. Consumers would be able to get a prompt response and to be happy about it. Chatterbots are also capable to learning and implementing information into their system, they would also be able to retrieve information and provide a more human approach to consumers.

Although there are plenty of benefits towards a chatterbot, in today's digital era, chatterbots still lack the ability to sound exactly like a human. The experience given by a chatterbot would still differ in comparison to having a conversation with a real-life person. Therefore, research and studies have proven that chatterbot might be the potential future of Artificial intelligence and communication and it holds a great future ahead of everyone in all industries.

PROJECT IDEAS

The project idea of our group is a transport drone. At present, people's lives are very convenient because they do not need to go out for dinner and shopping. It only need to move their fingers on the mobile phone. All this is inseparable from the courier. However, Transport drones can better replace couriers to complete the job.

The transport drone uses an eight-rotor aircraft equipped with a GPS auto-control navigation system, an GPS receiver, various sensors, and a wireless signal transmitter and receiver. The UAV has various flight modes such as GPS auto-navigation, fixed-point suspension, and manual control. The transport drones can carry packages through unmanned low-altitude aircraft operated by radio remote controls and self-contained program control devices. It can also be automatically delivered to the destination. Transport drones can save a lot of human resources for transportation. Furthermore, Transport drones have higher distribution efficiency than humans. Because drones can fly straight in the air, it does not need to consider the shortest distance to the destination or traffic jams and even get lost. Transport drones can solve distribution problems in remote areas. Remote areas like roads are not built or even in the mountains. Drones can replace couriers to complete delivery mission. Transport drones can improve distribution efficiency and reduce labour costs in this situation. The drone also has a loss of control protection function. When the drone enters an out of control state, it will automatically maintain accurate hovering and search for empty lands in the vicinity to wait for collection. UAVs transmit data through 4G networks and radio communication remote sensing technologies and dispatch centres and self-service courier cabinets, send their own geographical coordinates and status information to the dispatch centre in real time, receive instructions from the dispatch centre, and receive the destination coordinates. Later, it will use the GPS autonomous navigation mode to fly. After entering the target area, it sends a landing request, a local mission report, and a local operating status report to the destination courier. After receiving the landing request response, the courier guides the drone in the express cabinet. Top landing platform landing, loading and unloading courier, and rapid charging. The drone will fly to the express delivery distribution point after losing contact with the dispatch centre or experiencing an abnormal failure. Moreover, the position of the drone is connected to the recipient's mobile phone, and the recipient can check the position of the drone at any time. When the weather changes abruptly, the drone has a sensor that senses it and will return home quickly to wait for the next instruction. This prevents accidents happening. Transport drones also have many disadvantages and uncertainties. One of the downsides of transport drones is that drones cannot be delivered in bad weather. The rain in some places all the year round will seriously affect the delivery efficiency of drones. Furthermore, Transport drones are vulnerable to vandalism. If human damage occurs during the flight, it will cause pedestrians to be hurt when falling from a high altitude. In some remote areas, the benefits of express delivery may not be sufficient for the construction of drone outlets and payment of maintenance costs. Although, UAVs can effectively improve distribution efficiency and reduce manpower and transportation costs. However, the previous period will have to pay a very high cost.

(there should be update from Bert)

GROUP REFLECTION

Team: FoxHound 4/28/2018

We have six group members in this group, everyone is active during this assignment, everyone keeps working hard and no one think about quitting and we do care about it, we decided to finish this assignment by everyone taking one part. Plan went well at first and then there came some troubles , some section cannot be finished by one people , luckily , groupmates are understanding and we redistribute the work , we always talk about our assignment online and we use GitHub to transfer the work , we have two people to check the words error and make sure the format is the same , maybe our working speed is not as fast as other group , but we still try to finish it and obviously our time distribution is quite good , no one in our group feel pressure . Although it looks pretty smooth during this assignment, there were some problem, we will try to fix it in the next assignment. At the first of assignment, no one got idea about how to finish this assignment, and then we come together and talk about that, after that, the blueprint came out.

After this assignment, we know that there are some secrets of success, first one is trust, we trust each other, we believe that everyone can finish their job, thus we can focus on our own job, that made we finish our part quickly.

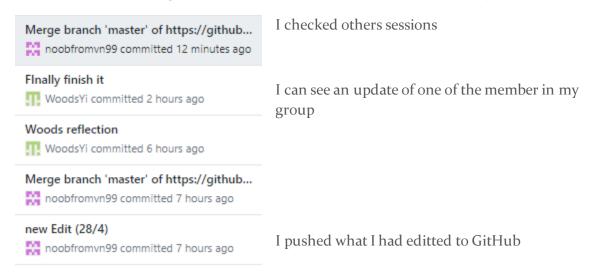
The second is unity, we are united and we encourage each other, when problems came out, we figure them out together.

The last one is selfless, when a groupmate face a trouble, the rest of us gave him help, we didn't keep our knowledge, we put them out and let others take them, no one should hide their progress during such a group work.

In the end, we enjoyed the experience of finishing this assignment, many people said that they feel good by working together and they wish other assignment group in other classes can be as good as this one. No one in this group feel uncomfortable. We all hope this assignment can get a good mark because everyone worked hard.

Bach's reflection:

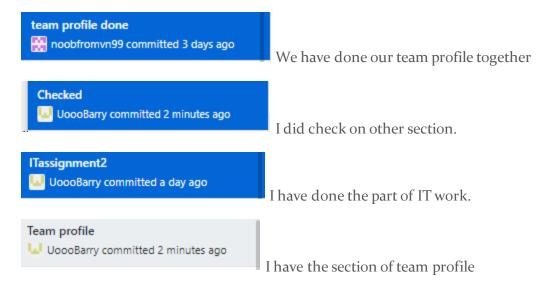
First of all, I think it is a pleasure that I have a chance to work in a good group like this and I am very happy of what we have done together. I have to admit that I was the only Vietnamese in a group of Chinese but we communicate well enough to understand each other. Most of the thing went smoothly, every member in the group received the amount of work equally, and they finish their tasks successfully. However, there are some people in the group who not really know how to use Git properly, but at the end of the week before deadline the others finally help them out with this. If there is anything to be improved, I believe it is our writing skill, in academic way. We actually learn a lot of each other, such as different cultures, languages, hobbies. And I was very surprised that we share a lot of things in common. I hope we can be friends and work together as a team in the future. Not but not least, with that amount of work, how we organized the work is each of the member work on specific day in a week, and at the end of the day he will push everything so the others can pull on the following day. I think it is an efficient way to finish the project.



Yongqian's Reflection:

During our cooperation, we have a good communication. We enjoy our teamwork. Although we have issue to form a 6-people group, we still work smoothly. I think I make a good effect on this assignment, I finished the part that our group planned, and I had discussions with others on the assignment. We decided our working day in the first week and we always finish our jobs on time. We are happy to notice each other when the task is due, so we can finish our tasks on time. We have a group chat on a chat app, we were enjoy working and discussing together. In the process of completing the section of IT work, I did plenty much of research on jobs in IT area, I share this information to our group so that we can have a good idea about our ideal job. In summary, regarding to our group's pleasant atmosphere and high effectiveness, we are happy to work together.

GitHub commit history:



Project meeting time:

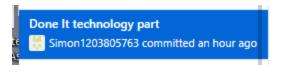
16/04/2018: We finished our team profile and set up a website. We got our distribution.

23/04/2018: We have discussion on this assignment about what needs to be done, and we discussed about IT area and jobs.

Shuyuan's Reflection:

From my personal point of view, I think everyone in group Foxhound all did a good job on what they were assigned with. I did the IT technology part for my group. I chose to talk about the content of clouds, services and servers, cyber-security, blockchain and cryptocurrencies and natural language processing and chatterbots. Everyone in our group has got an equal task and everyone is willing to take on the tasks what they assigned with.

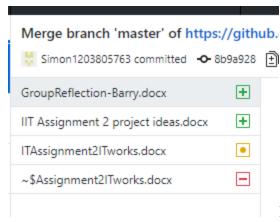
Each of us helps each other. When someone has any doubts about the task, someone immediately stand out to answers it. We trust each other and we all finish the task on the stipulated date and deliver it to the person who finalized the task. In conclusion, I am really honored to join this group Foxhound. Everyone is kind and helpful when needed. Through this assignment, It's not only increased my opinion of IT, but also made me acquainted with this group of friends.



I did my task.



I fixed some problem of my task.



I read other's task.

Assignment meeting:

16/04/2018: We finished our team profile and build the group website. We let team members choose what they want to do.

23/04/2018: We discuss together about the IT field and IT work. We find out what should we done within 3 days.

QingKai's Reflection:

At the starting of Assignment 2 , six of us(Jimmy, Jim, Bert, Simon, Barry also me) become a group , this group include some people I never talk to before , and after all of these , we become friends , although our group working speed for finishing this assignment is not fast , but we still try to get through it and we encourage each other all the time , as we all know , group work is not easy for everyone because we all have different thinking and it is hard to let other people one hundred percent agree with your ideas , so we fixed our ideas together and made some compromise , that's how our assignment2 come out . My work is to perfect all of these assignment such as check the error ,format and change some words to make sentence reads smoothly .I need to appreciate Jim's help , without his help ,I cannot finish the huge number of words checking and format , he is a really helpful people , honestly. This assignment let me have a general understanding of GitHub. I'm sure I will use is wisely in the future.

Houguang's Reflection:

We jointly decided to set up a group of six people. Everyone has chosen what they want to accomplish. In terms of project ideas, we discussed together and chose one idea. The

advantage of doing so is that it can gather everyone's opinions and prevent problems that are not considered due to lack of personal experience. In the group meeting, we talked about our own ideas. Finally, after everyone's discussion, we integrated the ideas of everyone. Everyone in the meeting is actively asking questions and then working together to solve them. Everyone helps each other and solves problems. During the discussion, everyone can also actively put forward various ideas. At the same time, I also successfully completed my part, and my team members also gave me a lot of help on project ideas. At the same time, when we do not have a group meeting but there are problems that need to be discussed. We will use WeChat to solve the problem online. As we work, we will urge each other to complete the work. I am very honored to be able to join this group. We are all very happy to work together and hope to have the opportunity to continue working together.

Jingbin's Reflection:

This is a pretty interesting assignment about teamwork. In these week, I learn about how to use the Github and get the general knowledge about the IT job. Also, this is a funny process to work with my group. We have a discussion about our ideal job and our project. I am happy to share my opinion to my group member. It makes me excited that there are some one have a similar dream with me.

Summary work done by myself:

- 1. Participate into the group meeting.
- 2. I fill up the team profile of mine.
- 3. Draft the industry data part and analyze the data.





Here is the github log which is done by me.

Project meeting time:

16/04/2018: We finished our team profile and set up a website. We got our distribution.

23/04/2018: We have discussion on this assignment about what needs to be done, and we discussed about IT area and jobs.

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