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| Introduction to Information Technology  COSC2196  RMI-CPT110 |
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| Assignment 2: Team Project  Group Fourteen |



Contents

[Welcome to Group Fourteen 4](#_Toc5744418)

[Who are we? 4](#_Toc5744419)

[Meet the team 5](#_Toc5744420)

[Nicholas Young 5](#_Toc5744421)

[Lee van den Blink 6](#_Toc5744422)

[Michael 7](#_Toc5744423)

[Cory Atkinson 8](#_Toc5744424)

[Nathan Christos 9](#_Toc5744425)

[Harrison Williams 10](#_Toc5744426)

[Team profile 11](#_Toc5744427)

[Test outcomes 11](#_Toc5744428)

[Impact of results 12](#_Toc5744429)

[Ideal Jobs 13](#_Toc5744430)

[Tools 14](#_Toc5744431)

[Group Website Links: 14](#_Toc5744432)

[Industry Data 14](#_Toc5744433)

[Burning Glass Analysis 14](#_Toc5744434)

[Skills Matrix for Group Fourteen 15](#_Toc5744435)

[IT Work 17](#_Toc5744436)

[The name is Smith. Richard Smith. 17](#_Toc5744437)

[Q&A 18](#_Toc5744438)

[IT Technologies 23](#_Toc5744439)

[Report 1 23](#_Toc5744440)

[Report 2 23](#_Toc5744441)

[Report 3 23](#_Toc5744442)

[Report 4 23](#_Toc5744443)

[Project Idea 23](#_Toc5744444)

[Project title 23](#_Toc5744445)

[Reflections 23](#_Toc5744446)

[Group reflection 23](#_Toc5744447)

[Individual reflections 23](#_Toc5744448)

[References 23](#_Toc5744449)

# Welcome to Group Fourteen



## Who are we?

We’re a small and focused team of individuals from a diverse range of backgrounds and from many walks of life. We all have one thing in common. We are passionate about technology and we have been since before it was cool. Meet the team and learn more about the talents that power this unique company.

## Meet the team

### Nicholas Young

RMIT Student # s3793515

[Assignment 1 Profile](https://njyoung95.github.io/NJYWebsite/)

|  |  |
| --- | --- |
| ***“Ever since I was old enough to understand how to use computers, I have been constantly attached to them in some way, shape or form...”*** |  |

Young in name and in age, but don't let that deceive you. After completing high school Nicholas continued to pursue his interest in IT and studied both IT Networking and Level Design, and it currently studying his Bachelor of IT at RMIT. He discovered his natural affinity for all things IT while still young at high school, when he fixed a troublesome network issue using nothing but research and tenacity. Nicholas has self-taught himself many skills along the way through helping people with their own IT issues, which he then uses as an opportunity to further develop his own knowledge. In particular he has applied his self-learning ability to game level design, which he has pursued for a number of years, and has successfully designed his own levels for games. Aside from his pursuing further knowledge in game design he is also very interesting in developing his knowledge on IT networking.

### Lee van den Blink

RMIT Student # s3792973

[Assignment 1 Profile](https://leevdb.github.io/Lee-van-den-Blink/)

|  |  |
| --- | --- |
|  | ***“I'm incredibly inspired by the design and innovation that is continuously driving the games industry, which I feel runs in parallel with the IT industry and its technology...”*** |

With a decade long history in the vocational education sector, Lee has worked with database management and server management in both small and medium businesses. She is passionate about ‘clean data’ and using data analysis to paint a picture of what is really happening in a company based on the database information. Lee has also rolled out numerous upgrades to IT infrastructure and been responsible for training staff in new application and software. She was first exposed to computers through playing 80s adventure games with friends in primary school, and as technology improved her curiosity and involvement with technology has only increased. Being a teenager when floppy discs and dial up internet were still a thing, Lee sees that the world of IT has evolved so vastly and there's so much more to learn, and she wants to learn as much about it as she can. Being that technology and computers have been a part of her life for so long, it's no great surprise that Lee is an avid gamer in her spare time, which is somewhat limited these days as she’s also looking after her young family while working part time. Alongside video games she also enjoys playing netball and learning more about the world through listening to any number of the shows in her massive podcast library.

### Michael

RMIT Student # s 3040138

[Assignment 1 Profile](https://mdncb.github.io/assignment1/)

|  |  |
| --- | --- |
| ***“My interest in IT comes from a life-long interest and curiosity in computers, although I am only now pursuing it with the goal to support myself professionally...”*** |  |

After leaving Australia 7 years ago on a one way ticket to travel the world, Michael currently calls Moscow his city of residence, where he teaches English. He main interest is the pursuit of knowledge. A Bachelor of Arts graduate, Michael has continued his education into the IT industry, with a keen interest in learning more about software engineering. Seldom does he have downtime, as when he is not at work, he is often studying university, or any number of other online education. You could say studying is his biggest hobby, as he has completed numerous online courses to further his own knowledge on subjects, including maths, computer science and programming languages. Like many members of Group Fourteen, his interest in IT was first piqued at a young age with the family computer. He has witnessed the speed of evolution of the industry, and now understands that the world of IT has the ability to influence society, seeing first hand the differences between countries that have supported infrastructure, and those that are lacking. A few years ago Michael decided to remove himself from all social media, feeling the intrusiveness and ambiguity of the services far outweighed any benefit. This directly links with his interest in cybersecurity and privacy issues, where he hopes to specialise in his future career.

### Cory Atkinson

RMIT Student # s3775626

[Assignment 1 Profile](https://attikins.github.io/Attikins.github.io/dist/about.html)

|  |  |
| --- | --- |
|  | ***“Even to this day I believe there is so much more potential in the current 3D art and design market that hasn't yet been explored...”*** |

The seed for the idea of a career in IT was first planted in Cory at the young age of 10, by playing Halo: Combat Evolved on the XBOX. Unlike most other players at the time who just enjoyed the gameplay, Cory was intrigued by more than the game itself, but everything going on behind it: the hardware, the game mechanics, programming, the design. The seed took root and he pursed this interest further and while a teenager he learnt programming and even made his own “terrible 3d Games” to learn more about the craft around his passion. Fast forward to today and Cory passion about game design has only increased. Cory sees the potential for 3D art and design to be better and bolder, and he sees his current studies with RMIT as a big step towards learning more about his passion. His other main interests which he also approaches with passion and creativity are coffee and metal music.

### Nathan Christos

RMIT Student # s3788418

[Assignment 1 Profile](https://atamosmusic.github.io/itprofile-assessment01.git.io/)

|  |  |
| --- | --- |
| ***“A career in electronics has only fueled my desire to explore the fundamentals of computational processing and machine language...”*** |  |

Currently based in sunny Queensland where he works with electronic security and surveillance issues, Nathan originally grew up in a farming community in NSW. He was home schooled from a young age and it seems his quest for learning and knowledge was present from his early youth, as he continuously scored well above the curriculum standards. Eventually his natural curiosity for learning crossed paths with IT in the form of his family’s first computer. Nathan realised that computers were not magic, but machines, that could be understood and mastered. He has followed this curiosity with IT to a career in electronics, and plans to continue building on his insatiable quest for understanding by studying his Bachelor of Information Technology. Already being involved in electronics through his career, Nathan has many ideas for IT based projects and hope through further study he could bring these to fruition. His strong desire to always improve and master his skills has also been applied to his many and varied other interests which include archery, playing music professionally, being a Kung Fu Master, and being able to solve a rubik’s cube!

### Harrison Williams

RMIT Student # s3791005

[Assignment 1 Profile](https://harryw77.github.io/Assignment_1/Index.html)

|  |  |
| --- | --- |
|  | ***“My interest in IT has been long running as my dad is very tech savvy, and introduced me to computers at a young age...”*** |

Harrison currently resides in Melbourne, and after VCE completed a year of Bachelor or Psychology, before deciding to pursue his interest in Information Technology, while also working as a baker's apprentice. When he's not rolling dough his enjoys listening to and playing music, reading, and gaming online with friends. His interest in information technology was stirred from youth, and he learned a great deal from his father who was more tech savvy than most, learning about things like running from the command line to use dosbox. This interest grew more in primary and high school, where Harrison found himself being Mr.-fix-it for everyone else’s It issues, thus enabling him to delve deeper into his own understanding of computers and systems. He found a natural affinity with computers, and also learnt he really enjoyed being able to help others and fix their issues. He pursued this interest further and taught himself HTML coding and python language, however bakers hours don’t currently allow him much chance to continue this interest. He has decided to undertake a Bachelor of IT, as he believes there is great potential for him to find employment in an area he thoroughly enjoys, with the longer term goals of finding work in areas such as coding, connectivity systems, and servers and networking.

## Team profile

### Test outcomes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Myers Briggs** | **Learning Style** | **Creativity** | **Big 5** | **Problem solving** |
| Lee | ISFJ - A  “The Defender”  Introverted 64%  Observant 51%  Feeling 64%  Judging 61%  Assertive 68% | Auditory/Visual  Auditory 35%  Visual 35%  Tactile 30% | 69.64  Strongest:  Curiosity  Complexity  Paradox |  |  |
| Michael | ISTP  “The Virtuoso” | Tactile |  | Openness: 60%  Conscientiousness: 42%  Extraversion: 33%  Agreeableness: 48%  Neuroticism: 50% |  |
| Nathan | ENFP  “The Campaigner”  Extraverted  intuitive  Feeling  Perceiving | Tactile/Visual |  |  | Confident. Approaches systematically, planned decisions |
| Cory | ISTJ  “The Duty Fulfiller” | Auditory |  | Openness: 79%  Conscientiousness: 44%  Extraversion: 50%  Agreeableness: 73%  Neuroticism: 79% |  |
| Nick | INFJ - T  “The Advocate”  Introverted: 89%  Intuitive: 74%  Feeling: 51%  Judging: 51%  Turbulent: 60% | Visual  Auditory 15%  Visual 60%  Tactile 25% | 42.69  Strongest:  Complexity  Persistence  Abstraction |  |  |
| Harry | ENFP - T  “The Campaigner”  Extraverted – 56%, Intuitive – 74%,  Feeling – 90%, Prospecting – 72%, Turbulent – 60%  Role: Diplomat  Strategy: Social Engagement | Auditory  Auditory 40%  Visual: 25% Tactile: 35% | Creativity score of 66.43 |  |  |

### Impact of results

Of the 6 members of group fourteen, 4 received results of being introverted, and one of the extraverted members was only 56% on this scale. As we formed early in the process through a discord chat group based around our shared interest in video games, the application has been pivotal in allowing team members to jump on and off as needed, and leave comments and messages for other team members, so communication may be interrupted but is not dropped. All members have traits that lend them to high and intense focus, so the most efficient way for us to complete the project is a divide and conquer approach. By using the discord channel, we are able to bridge the obstacles of distance, and the need to meet face to face, provided that the communication continues. The group will probably work efficiently enough without an outright ‘project leader’, but would benefit from one or more members stepping in as ‘overseers’, while still allowing individual a large sense of automation towards their own contribution. The team has a wide range of interests and background but also a lot in common, particularly in the areas of IT and video games, and ensuring that communication remains steady and open any issues that arise should be shared without fear of criticism.

# Ideal Jobs

|  |  |
| --- | --- |
|  | **Ideal job** |
| Cory | Game Programmer |
| Harrison | Infrastructure Manager |
| Lee | Game Programmer |
| Michael | Software Engineer |
| Nathan | Technical Lead |
| Nicolas | Lead Technical Designer |

As our group is made up of many gaming enthusiasts, it’s not really that surprising that four of the six ideal jobs listed are linked to the games industry. The biggest overlap in experience requirements are knowledge and experience in development of software. There are many overlapping skills also focused around network administration and knowledge. Five of the six roles listed one or more programming skills, with the exception of the infrastructure manager. This was probably the biggest overall area of overlap of requirements.

Half of the jobs listed also required a formal education (specifically the two game programmer roles, and the software engineer role), whereas the other roles were more concerned with experience in the required skills ahead of listing a required formal qualification (although this could also be implied due to the nature of the previous experience required). Nathan’s ideal job of Technical lead had many serverless technologies listed as desired knowledge and seems to be focused on working with the leading edge of the latest technology, which makes it unique in this aspect compared to the other roles. Harrison’s role of Infrastructure Manager was the most heavily based in network, virtualization and security and these types of skills would be utilised in a wide number of businesses.

In the area related to personal attributes, the ability to work in a team, and having strong communication skills were paramount to all six roles, which clearly demonstrates that no matter which area of IT you want to be ultimately work in, having great communication and the ability to work effectively in a team are fundamental to your success, regardless of your individual specialisation.

# Tools

## Group Website Links:

Group website:

<https://groupfourteen.github.io/assignment2/>

Group Git repository:

<https://github.com/groupfourteen/assignment2>

*How well the audit trail on the Git repository reflects your group’s work:*

# Industry Data

## Burning Glass Analysis

## Skills Matrix for Group Fourteen

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Group 14: Skills Matrix | | Game Programmer | Infrastructure Manager | Game Programmer | Software Engineer | Technical Lead | Lead Technical Designer | *Skills Requirements Overlap* |
|  | Skill Requirements | *Cory* | *Harrison* | *Lee* | *Michael* | *Nathan* | *Nick* |  |
| Qualifications | Bachelors Degree (IT, Computer Science or Engineering) | R |  | R |  |  |  | 2 |
| Tertiary qualification in IT |  | R |  |  |  |  | 1 |
| Cisco, Microsoft, Citrix certifications |  | X |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |
| Experience/ Knowledge | Programming in C/C++, JavaScript, Object Oriented | R |  | R | R | D |  | 4 |
| Programming in C# | D |  |  |  |  |  | 1 |
| Programming AI (Unreal engine, Unity3D) | R |  |  | D |  | R | 3 |
| Programming in shell scripting language | D |  |  |  |  |  | 1 |
| Programming in Python |  |  |  | R | D |  | 2 |
| Programming for mobile (iOS/Android) |  |  |  | D |  |  | 1 |
| Programming for consoles (PlayStation 4, XBOX ONE) |  |  |  | D |  |  | 1 |
| Programming for Mac OS |  |  |  | D |  |  | 1 |
| Debugging skills | R |  |  |  |  | R | 2 |
| Game/Software development Experience | R |  | R | R | R | R | 5 |
| Development Portfolio | *(implied)* |  | *(implied)* | *(implied)* |  | R | 4 |
| Contribute innovative ideas towards production/development of a project |  |  | R |  |  | R | 2 |
| Multiplayer game development | D |  |  | D |  |  | 2 |
| Cross platform development | D |  |  | D | D |  | 3 |
| Specialising engines (networking, physics rendering, level design etc.) | D |  |  |  |  | R | 2 |
| Modifying/implementing systems | D |  | *(implied)* |  | R |  | 3 |
| IT Infrastructure Management and admin |  | R |  |  | D |  | 2 |
| Datacentre Operation |  | R |  |  |  |  | 1 |
| Server Virtualization |  | R |  |  | D |  | 2 |
| Network Engineering and security |  | R |  | R |  |  | 2 |
| Network protocols and communication (TCP, UDP, HTTP) |  |  |  | R |  |  | 1 |
| Linux platform |  |  |  | R |  |  | 1 |
| Client-server architecture |  |  |  | R |  |  | 1 |
| Web application development |  |  |  |  | R |  | 1 |
| API development and software |  |  |  |  | R |  | 1 |
| AWS Serverless experience |  |  |  |  | D |  | 1 |
|  |  |  |  |  |  |  |  |  |
| Skills | Project Management |  | D |  |  |  |  | 1 |
| Work within a team | R | D | *(implied)* |  | *(implied)* | R | 5 |
| Self Motivated/Strong work ethic | R |  |  |  |  | R | 2 |
| Excellent Communication skills | R | D | R | R | *(implied)* | R | 6 |
| Problem Solving Skills | R |  |  |  | *(implied)* | R | 3 |
| Passion for Games, game services | R |  | R | R |  | R | 4 |
| Strong organisational skills |  |  | R |  |  | R | 2 |
| Ability to work under pressure and prioritise tasks |  |  | R |  |  |  | 1 |
| Strong attention to detail |  |  |  |  |  | R | 1 |
|  |  |  |  |  |  |  |  |  |
|  | Key: | R = Required Skills | D = Desired Skills |  |  |  |  |  |

# IT Work

## The name is Smith. Richard Smith.



When Richard Smith was fifteen years old, he hacked into his school’s computer network so he could download movies and games. Richard recalls that he had always been “captivated and mystified by the hacker” and admits that he was “a little bit devious and attracted to the idea of breaking rules”.

If subverting the IT controls in his school wasn’t devious enough, Richard naïvely downloaded a copy of a text called The Anarchist’s Cookbook through the school server. Perhaps it might have gone unnoticed by authorities in an earlier age, but this was shortly after the events of 9/11, and Richard remembers that the section titled How to Blow up your School “didn’t go down too well”.

The police were called, and Richard received some “very stern warnings”. As penance, he was put to work by his Principal in the school’s IT department. The intention was to embrace Richard’s obvious talent and put him in the right direction. And it might have done so, had the IT Manager not refused to let the astute schoolboy near the network. Instead, Richard spent a month cleaning dusty computer equipment and lamenting his punishment.

He studied the two available IT subjects at school, and built computers in his spare time, but for the most part found the classroom instruction and text books “quite dry and uninteresting”. So, when he was 17 and offered a job in the construction industry paying over $1000 a week, Richard didn’t hesitate. He remembers thinking: “I don’t need to go to university for three years; I can go straight to work and earn heaps of money.”

Though he now looks back at his choice “with some regret”, Richard also acknowledges that his career path may have been quite different had he made another decision as a teenager. Richard says that the IT industry today is a vastly different—and more exciting—landscape than it was ten years ago. Where he may have once been relegated to the IT Help Desk, Richard is now the very mystical thing he was so captivated by as a young, devious schoolboy. Richard Smith is now a hacker.

## Q&A

How did you get into the IT industry?

I was a form worker doing carpentry work at Bond University. Due to the Global Financial Crisis, I was struggling with getting work and getting paid, not to mention the hard nature of the work. I remember observing the older tradesmen and how wrecked their war-torn bodies were; it was Summer, and we were all sweating our guts out. I was looking over the fence into the beautiful green Bond Uni campus at the nice shady pine trees, and I guess I was inspired. Prior to this, I had thought of pursuing a career as a dogman rigger, working with cranes and using my brain a little bit more or possibly even something with computers. The economic downturn and instability with my job was the motivation I needed to make a change, so I enrolled in TAFE to pass the time until work picked back up. After completing my Certificate III, I was less inclined to get back to construction, so I completed a Diploma of Networking and then started a Bachelor of Information Technology. My thought process at the time was aiming to get into cyber security as I always had an interest in this area.

What kind of work do you do?

I am a Senior Consultant and Security Tester for KPMG. Penetration testing is a large part of my job and a very lucrative service our company provides. Usually this testing is a requirement of the end of year financial review. When conducting a penetration test, we will go to the organisation and test their security in terms of their IT environment—rather than their process of people—and look for vulnerabilities or “low hanging fruit”, as we call it. This exercise regularly has a time constraint in which we have to test their protocols, network, servers, and wi-fi, and look for weaknesses in order to break in and get domain administrator access. After the tests are complete, we write two reviews, one summarising the integrity of their security and risks aimed at either the board or audit committee, and the second for the IT manager of the team advising on fixes to made.

Who do you interact with in your role?

Internally within my company, we have Consultants; Senior Consultants; Managers executing a particular engagement; an Associate Director doing client relationships and making sure things are running smoothly; and a Partner at the firm who signs off and checks everything. We will typically have an Audit Committee or a Board of Executives that will engage us to do a particular piece of work, as most audit requests come from higher up the chain than the IT team. This being said, we spend a lot of time interacting with people less knowledgeable in IT such as the Chief Financial Officer, Chief Operating Office, Chief Information Officer, Chief Risk Officer and the Audit Committee, whose goal it is to protect the shareholders’ interests.

Where do you spend most of your time?

We have our office on Eagle Street in Brisbane City overlooking the river, which has an agile environment so you can sit wherever you want on the six different floors. We are encouraged to spend time with the client, however this isn’t always necessary as I can VPN to the Melbourne lab and test a client’s security from my loungeroom if I choose. The reason we use the Melbourne lab is so we can nominate an IP address that will be attempting intrusions, plus it has useful tools and processing power available. I work for a national team, so a lot of the engagements will be for example in say Gladstone, Melbourne, Sydney or even Lismore where I was last week, so this usually means getting on a plane and spending a week in a hotel.

What part of your job do you find challenging?

There are a couple of things I find challenging, one being when you have spent days trying to break into a network without succeeding, and you just have to try harder. There is actually a Certificate called the OSCP, which is a penetration testing exam where you are given 24 hours to hack into five different boxes and the motto is “just try harder”. That mentality relates to my job because you can’t just shrug and say you didn’t get in, because the client spends significant funds on hiring you, so you have to give them value for money. The other challenge I face is reporting, which involves mostly articulating the data you have obtained into a language the client can understand. Also, an obvious challenge is completing a thorough test and reporting on the engagement within the time allocated to the job.

Has there been a moment in your career that you rate as most significant?

The work I did in Sydney recently was an important moment in my career as an IT professional. My company’s relationship with the client had seen some damage and straight off the bat I experienced hostility with the client’s CIO. Until then, I had only assisted with client engagements, shadowing a senior colleague, and now I was left to make good of the bad situation. I was able to exploit numerous holes in their security, gain domain administrator, and demonstrate to the audit committee and the CIO the value of our company all on my own, which was a great feeling. I started with KPMG in the IT auditing division and it has been a slow transition for me working my way into the cyber security division and penetration testing. Not only the successful completion of this engagement but also the relationship management, has very much solidified my existence within this new position.

How do you see the future of cybersecurity?

This is an interesting question. Members of my team are a little bit concerned as the overall security presence is improving and Microsoft and its competitors are pushing things out that are making it easier to optimise security. Years ago, everyone would have their own third-party security software but nowadays we are pretty much advising people to ditch that and just use int integrated OS security, so that’s good I suppose. We are actually testing system security mush less than we used to in exchange for testing the people and processes through what we call Red Team engagements; that being using methods like phishing, trying to get them to use a compromised USB, or even physically break into a building. I hope it doesn’t go that way because I love this role, but at the same time the purpose of what we’re doing is to protect. It’s interesting that because of cryptocurrency and online trading, everyone wants to get into cybersecurity as well, but at the same time I think it will improve in leaps and bounds. For instance, we’re moving towards Azura Cloud, which is cloud-based servers instead of physical servers at a client’s premises, and the security is far more advanced than what is available in a localised server.

Aside from what you do, what do you think the best role in IT is, all things considered?

I’ve got a lot of friends who pursued the developer path; one is working for Telstra now and another for Suncorp, and they have great futures ahead based around their skills. If I had to put cybersecurity aside, I guess I wouldn’t go wrong getting into this side of things. I’ve found that you can really get a job anywhere if you specialise in software development. I’m actually really glad when I hear that kids are learning software development from quite a young age; they can be really creative and build something new and I do believe it is the second language of the future.

What can the average user do to better protect themselves online and secure their information?

It really depends what you are worried about. Disk encryption is a big one; Apple do it, Microsoft do it. Basically, this means that if your machine gets stolen, anything that is in it is safe—unless the thieves are extremely motivated, they won’t be able to access what is in there. You can go to the next level and add a PIN to your disk encryption, so when you first turn your computer on you put the PIN in, which hampers people because they don’t want to be bothered with that sort of thing. You can run a Password Manager; I have one on my own phone and work machine to protect my personal files.

With regards to being a human in the modern world, how much security do we have?

Google and bank websites are for the most part secure. The communication channel is encrypted, and you know you are talking to, say, the bank server. It is pretty rare with these large organisations for your information to be accessible.

However, every website you visit, every search you make, is monitorable. With DNS requests, those messages are getting sent out to a DNS server and they aren’t encrypted; they are plain text. Your Internet Service Provider can basically see everything you are doing. Cookies can also be used to connect the same person as looking at, say, ten different things. So, there is not as much anonymity on the internet as people might like to think.

I know that Malcolm Turnbull set up a metadata program and built data warehouses to actually monitor the online activity of Australians on the internet and stored this data constantly. In December last year, the Five Eyes organisation got together, and they were saying: look, WhatsApp and Facebook etc. are encrypted and we are losing our ability to do our intelligence work. This is not good. So, Australia turned around and said: well we are going to make legislation changes and force these organisations and give us a back door. I haven’t heard whether the organisations are complying, but the law was passed so chances are it is underway. Basically, the Government wants to be able to access Facebook and these other encrypted applications if they need to. It is said to be a matter of security, but of course, it also raises questions of ethics.

What are your preferences for operating systems?

I had always used Windows, but when I was at university, I thought I would ask the lecturers what they recommended. They suggested the MacBook, mostly due to usability for coding and because it ran on Unix. Combined also with the fact that Windows Vista and Windows 8 were pretty bad in terms of operating systems, I jumped across to Mac and stayed over there for years, but I am only just now coming back to Windows 10.

Historically, Windows has been renowned for its lack of security compared to Apple – is this because most of the corporate environments are Windows, most of the hackers are targeting these systems?

Yes, that, and because of the price point of Mac as well. I don’t want to say anything out of line, but people who are in the countries where the trends of attacks are statistically coming from, don’t have the money to afford Mac computers. Mac has also been such a small market share historically, so they haven’t been attacked. Because of the widespread usage of the Microsoft platform, they have borne the brunt of attacks, but fortunately this has meant that they now they have defenses to stand up against it.

It has been said that sometimes the security problem is the user, rather than the system. To what extent is this true?

Yes, we do find that often the people operating the technology can be the issue. In my line of work, once we have tested the technology enough and it isn’t so easy to get into, we begin testing the process and the people. We do what is called the Red Team exercises—much like a secret shopper—where we try to test physical security. So an example might be where we try to clone access cards; we will put cloning technology in a bag we are carrying and try to get next to someone in a line who has an access card hooked to themselves; we will brush up against them and get it to clone their card and use that to gain physical access to the building.

We also conduct social engineering tests, so we might try to talk our way into a company and test if the security guards will allow us to walk into the building. If I tailgate someone into an elevator or through a glass door that is letting me into their office, or if I was to sit in a meeting room for a week when I wasn’t mean to be there, would somebody actually raise the question and stop me? While this itself isn’t so much cybersecurity, the idea is to ‘hack the humans’ so I can then go and plug in a network tap that has a 4G sim card that connects to their network and gives me secure access to their infrastructure. Obviously, this needs to all be done within the boundaries of Statutory Law.

In your opinion, how valuable is information as a resource in today’s world?

Very valuable. The basis of my job is to protect and make sure that there are adequate controls around information. I’m not checking the security of these organisations for a vault; there isn’t money sitting on the premises. It is 100 percent that they have valuable information that needs to be protected, whether that is trade secrets or databases with confidential details. There are various reasons why it has to be kept secure, but it always comes back to the protection of information.

What advice do you have for someone getting into the IT field?

I think typically you are passionate about this stuff anyway if you are considering a career in IT; it isn’t something that you just decide to study one day. But it is constantly changing and evolving; I have done four and a half years of undergraduate study, and postgrad work, and I still just don’t stop. You have to continuously learn; technologies are constantly changing, and you can learn stuff one day that you have to let go of the next when something better comes out. You have to be prepared to be dynamic. It is like being in school for the rest of your life; if you have an issue with that, it might not be the right industry for you.

# IT Technologies

## Report 1

## Report 2

## Report 3

## Report 4

# Project Idea

## Project title

# Reflections

## Group reflection

## Individual reflections

# References

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