
Team8

Assignment 2

Cover page.



Rukshana Shrestha
Elijah Crowe
Susan Phonsongkham
Ashton Nicholson
Mark Pomery

GitHub page: team8-rmit.github.io/Team8/
GitHub Repository: <https://github.com/Team8-RMIT/Team8>

Table of Contents

Team8	0
Cover page.	0
Table of Contents	1
Personal information	3
Mark Pomery Student No. S3923312	3
Rukshana Shrestha Student No. S3928070	3
Ashton Nicholson Student No. S3915895	3
Elijah Quinton-Crowe Student No. S3925652	3
Rasamee Phonsongkham Student No. S3925656	4
Team Profile	5
Ideal Job	8
Tools	10
Github Page	10
GitHub Repository	10
GitHub Log Reflections	10
Meetings	10
Link to Join team	11
Industry Data	12
Industry Data Table	13
IT Work	15
IT Work - [Elijah]	15
IT Work - [Ashton]	16
IT Work - [Rukshana]	17
IT Work - [Mark]	18
IT Work - [Susan]	19
IT Technologies	20
IT Technologies - Cybersecurity.	21
IT Technologies - Blockchain and Cryptocurrencies	24
IT Technologies - Clouds, Services and Servers	27
IT Technologies - Machine Learning	30
Project Idea - Puberty App	32
Overview	32
Motivation	32
Description	33

Tools and Technologies	34
Skills Required	35
Outcome	35
Group reflection	37
Rukshana	37
Ashton	37
Elijah	37
Mark	38
Susan	39
Group As A Whole	39

Personal information

Mark Pomery Student No. S3923312

I am 36, Ex army and working in mining as a Surveying technician. I enjoy playing games, running and playing soccer. I love upgrading my PC setup and am always happy to try out new technology. I have a limited background in It, mostly user level knowledge and dabbling in computers. Team's Chosen name is Team 8.

Rukshana Shrestha Student No. S3928070

I am from Nepal, a small southeast Asian country with beautiful mountains and natural sceneries. My mother tongue is Newar, one of the oldest languages in the country. We follow Hinduism and Buddhism and celebrate festivals, traditions and customs almost every month. I am studying for a master in teaching (Secondary), which I enjoy learning about the history of Australia and its inclusive culture. I am very excited about my path to become a teacher. I like to go out and spend time with a close group of friends to hike in a quiet, serene place. And I love spending time with my daughter.

Ashton Nicholson Student No. S3915895

I was born in Australia and grew up in Coffs Harbour. My Hobbies include programming and gaming. My IT interest is in programming and developing software. I have had experience in building computers, programming and am currently working as an IT Help support officer for a biometric company. I have a diploma in software development as well as a Cert III in information technology ICT. The Team name we have chosen is Team 8.

Elijah Quinton-Crowe Student No. S3925652

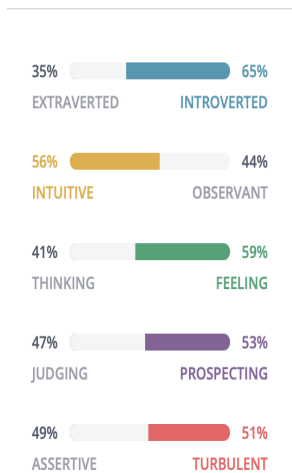

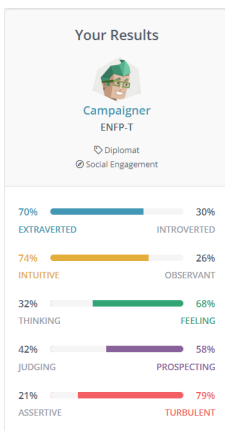

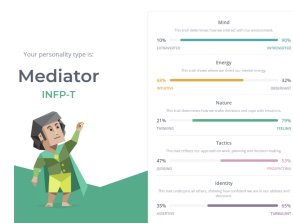
I was born in Melbourne, Victoria and grew up there until I was 17 years old where I moved out of home to Cairns, Queensland. I have a vast variety of hobbies that I occupy my time with, this includes creative writing, reading, basketball, gaming and building computers. I have always had a knack for technology and the older I got the more I found myself relying on each piece I had. As well as my love for technology I have always felt the drive to find out exactly how things work, this included opening up computers to see how they run and teaching myself as much as I can with my limited time about each part and how to make them better. This then turned into wanting to know how apps are created, and then websites and it grew from there.

Rasamee Phonsongkham Student No. S3925656

Currently studying for a Bachelor of IT at RMIT and also playing football professionally representing the U20 Matildas Team. Rasamee is a hard working person who is willing to learn and take on many challenges. I was born in Thailand and moved to Western Sydney when I was 12. Being in Australia has allowed me to do many things that I love, such as playing football, while I was able to study at a great school. Other than practicing football and going to the gym, I also like spending time at the beach, hiking and exploring places around Sydney. CNC machining was something I really liked when I was working as a Boilermaker and other than figuring problems with tech, I am quite new to IT. Team 8 was chosen for our Team Project.

Team Profile

The test outcomes for each person in the team (all 3 tests), and your understanding of how this information may be helpful to the group. You should do this as soon as your group is formed. You will have a chance to reflect on how well the group has worked later.

Name:	Rasamee	Mark	Elijah	Rukshana	Ashton
Roles:	Diplomat	Sentinel	Diplomat	Diplomat	Diplomat
Strategies:	Constant Improvement	Confident Individualism	Social Engagement	Social Engagement	Constant Improvement.
Traits:	 <p>35% EXTRAVERTED 65% INTROVERTED</p> <p>56% INTUITIVE 44% OBSERVANT</p> <p>41% THINKING 59% FEELING</p> <p>47% JUDGING 53% PROSPECTING</p> <p>49% ASSERTIVE 51% TURBULENT</p>	 <p>46% EXTRAVERTED 54% INTROVERTED</p> <p>13% INTUITIVE 87% OBSERVANT</p> <p>49% THINKING 51% FEELING</p> <p>51% JUDGING 49% PROSPECTING</p> <p>85% ASSERTIVE 15% TURBULENT</p>	 <p>Your Results</p> <p>Campaigner ENFP-T</p> <p>Diplomat Social Engagement</p> <p>70% EXTRAVERTED 30% INTROVERTED</p> <p>74% INTUITIVE 26% OBSERVANT</p> <p>32% THINKING 68% FEELING</p> <p>42% JUDGING 58% PROSPECTING</p> <p>21% ASSERTIVE 79% TURBULENT</p>	 <p>Your personality type is:</p> <p>Protagonist ENFJ-T</p> <p>67% EXTRAVERTED 33% INTROVERTED</p> <p>57% SENSITIVE 43% SENSUAL</p> <p>38% THINKING 62% FEELING</p> <p>65% JUDGING 35% PROSPECTING</p> <p>24% ASSERTIVE 76% TURBULENT</p>	 <p>Your personality type is:</p> <p>Mediator INFP-T</p> <p>50% SENSITIVE 50% SENSUAL</p> <p>60% SENSITIVE 40% SENSUAL</p> <p>21% SENSITIVE 79% SENSUAL</p> <p>47% SENSITIVE 53% SENSUAL</p> <p>37% SENSITIVE 63% SENSUAL</p>

Mark

Defender ISFJ-A 16 personalities

"Visual" Learner- educationplanner.org learning styles test.

58 - mindtools.com creativity test.

These results sit well with me and aren't overly surprising as it makes a lot of sense reflecting on my work habits and relationships with others. I benefit from being social and active in groups rather than working privately on my own tasks and learn from seeing examples and being demonstrated rather than interpreting text. These results will help me in a group setting to offer assistance where required and also know when to allow others to do their tasks and not avoid conflict so much as to not have my own input in decisions or tasks.

Elijah

Campaigner ENFP-T 16 personalities

"Tactile" Learner- educationplanner.org learning styles test

Ravenclaw- Hogwarts Test

The results I obtained have a hint of leadership in them, although it's more of a shared-leadership role that I enjoy having, where each person of the team is leading their own section. I think this is a great thing to have as everyone has their own expertise in any one field. Another part of the results I got was the empathy; this I believe is a great skill to have when working as part of a team as I can get a better understanding of how other's feel about certain topics and/or ideas and when members may feel left out or let down.

To me, these results indicate that I am a great team player who will work great in a team. However, the downsides I will face will be through my rash decision making and my want to do everything at one time. I tend to stop midway through a project to start on another and this can be quite detrimental to a team. Another hardship I'll face is my will to please everyone. Sometimes in a team it requires quite a bit of compromising and I have to be sure that I'm not compromising too much that way the others will be happy.

Rukshana

Protagonist ENFJ-T 16 personalities

The Big Five Personality Test Results

Mild Kinesthetic Learner VARK's Online Learning Style Test

This test tells me that my personality type is Protagonist, and they are natural-born leaders full of passion and charisma. It means I am perfectly fit to become a good teacher which is a relief since I am preparing to become one. It tells me that the protagonists take great pride and joy in guiding others to work together, so I work better in teams than alone. I feel that I work great in teams too. I like to have fun while working so that it is not monotonous and boring. When forming a team, I believe I should look for people who help me, understand me, share the same vision, and be honest, most importantly. I think these test results have indeed motivated me and made me feel good about myself.

The test result is a bit different from the Myers-Briggs test result. It showed a low score on extraversion which means the tendency to become solitary and reserved. It shows a preference to work alone than with the team. However, it also showed me as confident, helpful, trustworthy, and cooperative, a little too trusting and willing to compromise. I sometimes like working alone if the task needs my full attention, and I do not want to be distracted, but I prefer working in teams with the same vision.

I took this test because I wanted to know what kind of learner I am. And I am surprised at how accurate the result was. Yes, I like using visual aids, materials based on real-life experiences instead of theoretical readings. Rather than theories, I want to learn the mindset of the theorists.

Susan

The study Guru- Auditory

P16- Mediator INFP-T, Constant Improvement

Truity- visual

Based on specific questions conducted the result was surprisingly accurate. Some traits and values that I didn't know before make a lot of sense now. Personally discovering my strengths & weaknesses, career path, workplace habits, personal life and traits will help to benefit me as I become more aware of it to potentially use it to my advantage. Mediators tend to have creative and imaginative thoughts, and also in tune spiritually. Will work well with others but prefer to operate alone because they strongly believe in ethics and values that they hold, and tend to be very passionate about advocating or defending their beliefs. While strongly values our own values, but always interested in learning about others and willing to consider many sides of an issue too. Being deeply in touch with values and beliefs, decisions tend to be made with emotion based on what feels right. Emotional decisions lead to missing a huge amount of important information as we don't take them into account.

Ashton

The Mediator -

INFP-T

Using "personalitymax" as the learning style -for the following results the test means that I am a visual learner and need to have instructions this makes sense as diagrams are the favourite style of understanding information. This can influence the behaviour in a team by requiring information to be in visual form this may require a little more work with images to be created or a simple diagram to get a wider picture of a task.

IQ test was used for my choice of test. The results won't influence much in a team as the average of education is that of a student who is studying the same course material. I would bank more on life experience being a bigger factor than IQ.

Ideal Job

Susan

Cybersecurity engineering is one of the many fast growing roles in today's society. Different industries try to take advantage of others unethically. The role of cybersecurity is to “develop and supervise data and technology security systems to help prevent breaches, taps, and leaks associated with cybercrime.” It could also be described as, “information assurance engineer, information systems security engineer, and information security engineer.” Moreover, cybersecurity engineers install firewalls, breach detection systems, and work closely to monitor data to ensure that sensitive information isn't being manipulated in anyways.

Rukshana

With the boom in new technologies and artificial intelligence, we need IT in every part of our lives. I can see many opportunities available to teachers who have knowledge and experience in Information and Communications Technology. When I was given the option of choosing maths or IT for my curriculum subject, I chose IT. This Head of Information Technology role particularly interested me because it entails both a service-oriented and strategic mindset. I have been in the service industry, and I feel fulfilled when I can help a guest and make them happy. And now, I believe, to serve the future generation and help them build a successful future will be the kind of role I dream of. So, this is the reason why I chose this job opportunity.

Elijah

A Developer Programmer is someone who oversees and programs projects for and under the advice of their employer. This particular position is to program and create software to use within the company and with others outside the company. A position like this is quite attractive to me as it allows me to create things useful to others and myself. In my studies and my goal for my career is to be able to create software and/or build hardware for customers and companies to use. A position that gives me boundaries and requirements, but I still get my own creative freedom.

Mark

Ideally I would love to work in the defence industry, this position was for a software engineer working in an electronic warfare project for the airforce. The defence industry is still interesting to me with many varied aspects and just working with cool stuff in general. Programming language used in this position is mainly C#, C and C++ of which I would need more experience with.

Ashton

Ideal job will be to do software development mainly programming and making applications for mobile development. The Idea of making a basic set of instruction into a full-blown operation makes it an ideal job in the IT field with many opportunities to learn and teach the skills of programming. The part of development would be the programming side as it is the most interesting part of the process to create the workings of a software application.

Tools

Github Page

team8-rmit.github.io/Team8/

GitHub Repository

<https://github.com/Team8-RMIT/Team8>

GitHub Log Reflections

Ashton

The Github audit trail shows what we agreed on. Our GitHub repository was created by Rukshana and Elijah added the web templates. I volunteered to lead the website construction and this is reflected on the contribution audit of the changes as information was added.

Rukshana

Our group's effort on the content creation of the assignment was amazing. However, the website part was done by Ashton as he volunteered to be one. We are very thankful for and all agreed on. This is reflected on the GitHub audit trail.

Elijah

The GitHub audit trail does show all the information being put onto the website and does show the amount of effort Ashton put into the development of the website. However the action information that the website contains is not reflected in the audit log as all the information was placed onto the google doc and Ashton then put it onto the website as agreed.

Mark

Ashton has done an amazing job putting the website together. The team has done well to fill out all the relevant topics/paragraphs plus the team needed someone to lead the web design role and Ashton excelled at this task. Rukshana took the initiative and created the repository for the team and Elijah added templates to get it started.

Susan

Ashton has done amazing with the website. He has exceptional skill in this area and was able to construct balanced layouts and have chosen colour palettes that work well.

Meetings

27/09/21 [Agenda](#) [Recording](#) [Actions](#)

30/09/21 [Agenda](#) [Recording](#) [Actions](#)

4/10/21 [Agenda Recording Actions](#)
11/10/21 [Agenda Recording Actions](#)
12/10/21 [Agenda Recording Actions](#)

Link to Join team

<https://teams.microsoft.com/l/team/19%3anGjCMgkUDtfCAqiiipmkWK1gVS-ddhi2ad4QCyqBukk1%40thread.tacv2/conversations?groupId=8726545a-3e88-4fd6-ac9b-745ab489286c&tenantId=d1323671-cdbe-4417-b4d4-bdb24b51316b>

Industry Data

What are the Job Titles for your group's ideal jobs? How do each of these rank in terms of demand from employers?

Job Titles

- **Elijah:** Program Developer.
- **Rukshana:** Head of Information Technology (High School).
- **Susan:** Cybersecurity engineer.
- **Ashton:** Software Developer.
- **Mark:** Software Engineer.

Industry Data Table

Jobs	Software Developer, Head of Information Technology (High School), Program Developer, Cyber Security Engineer, Software Engineer.
Skills	Programming, Databasing, communications and problem solving and written skills, some Math knowledge.
IT Specific	Java, HTML, Python, Collaboration Software (Github), Office tools SQL, and Project management tools.
Rank for IT Demand	Our top three skills in demand are JavaScript, SQL and Project Management Skills, although some of the 'smaller' ranked skills that are still required include Git, Python and HTML.
Rank for General Skills	Communication is a top general skill needed within all the IT Jobs that are mentioned above, all areas of work needing to work together. Software and Program Developers are required to work together and so needs good communication, Head of Information Technology's communication skills also is required to be top notch. Problem solving skills are the next highest ranked within our shared skills for our groups, quick thinking and management coming underneath that skill.
Three High Ranking IT Skills	1.SAP 2.Business Management 3.Graphic Design.
Three High Ranking General Skills	1. Writing 2.Detailed orientation. 3.Research.

Ashton

The opinion of my ideal job hasn't changed with the burning Glass data as the passion of this field is within the realm of most IT jobs and can be evolved to suit any career path chosen in IT.

Elijah

Upon reading through the Burning Glass data the skills set required for my ideal job as a Program Developer has become more apparent and specialised into certain areas, however my ideal job has not changed.

Rukshana

After reading the Burning Glass data, my opinion on the ideal job as Head of IT is still the same because I have always wanted to be in the teaching field. However, I gained more interest in cyber security and even if it is just a short course, I would like to study it one day.

Mark

Software Engineer places in the middle of the results, I feel like it is a position that will always be in demand somewhere and the skill sets involved have a wide variety of applications and opportunities in which software engineering will be needed and sought after.

Susan

Reading through Burning Glass IT data, Cybersecurity sits in the middle range of occupational intake. The view on my ideal jobs hasn't changed because I believe that Cybersecurity is a role that will challenge me in many ways and it's the main core of multiple companies around the world.

IT Work

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

IT Work - [Elijah]

What kind of work is done by the IT professional?

Information Systems Technician - Title of position

Works in IT at a hospital

Ticketing system, service desk

Check the tickets

Answer telephones

Going around to clinics and facilities

User account creation, email accounts etc.

Every day is different

Computer imaging, setting up new imaging

Project for "sleep lab", making a new server

What kinds of people does the IT professional interact with?

Customers, nurses, doctors, other IT professionals

Where does the IT professional spend most of their time?

In the office answering phones and going through ticketing.

Changes day to day

"Putting out fires and rarely getting to things that you really desperately want to get to."

What aspect of their position is most challenging?

The ticketing system. Absolutely *hates* tickets.

Gets a call, make a ticket

Get an email is automatically creates a ticket

Tickets take too much time

Sometimes the job can be the difference in someone's life

Source References

1. (YouTube, (2021) **Day to Day Work Life in Information Technology - What do I do?** Available at: <https://www.youtube.com/watch?v=om8AygYdrto> (Accessed 11 October 2021))
2. (YouTube, (2021) **Creating Tickets is the Worst! I.T. Ticketing Systems - Day to Day in Information Technology** Available at: https://www.youtube.com/watch?v=XFYgP25yKBw&list=PLNftqnrnKiH_3JpjlN-FqUDLa1cE8od (Accessed 11 October 2021))

IT Work - [Ashton]

What kind of work is done by the IT professional?

Developing software, Websites and Writing up scripts for YouTube.

What kinds of people does the IT professional interact with?

The professional interacts with Clients. The client interaction is to fix websites and rectify issues within the site via debugging.

Where does the IT professional spend most of their time?

The IT professional spends most of their time at home on his computer. Most of the time is coding on the main computer at home whilst the basic fixes are spent at cafes or eateries on a laptop.

What aspect of their position is most challenging?

The professional claims that the hardest part is the client-based fixes that are more time consuming and can take away most of the day regarding planning other projects.

Source References

1. (YouTube, (2021) *Adrian Twarog - A programmers life* Available at:
<https://www.youtube.com/watch?v=Rbw24tAOXP&t=87s> (Accessed 12 October 2021))
2. (YouTube, (2021) *Adrian Twarog - My most productive time of day as a developer*
Available at:
<https://www.youtube.com/watch?v=QmdFISEk2f8&list=PLsprmdocuVe8y99Jf24x7V7RVfzlsVp8i&index=9> (Accessed 12 October 2021))

IT Work - [Rukshana]

Cyber Security Analyst/ Security Analyst

What kind of work is done by the IT professional?

Advising colleagues on password complexity, data loss mitigation and other security practices, protecting technical information relating to assets in space. Looking through emails for cyber incidents reported throughout the night, Coding, Scripting in Python, working in different projects in different teams, sometimes busy attending meetings and some just busy in coding language, mentorship calls

What kinds of people does the IT professional interact with?

Mentors and mentees, clients, team members, partners. Aviation, maritime and land-based customers.

Where does the IT professional spend most of their time?

They spend most of their time on their desk, doing calls, meetings, and coding language,

What aspect of their position is most challenging?

Sometimes they have to learn different coding languages based on different projects, other than they are used to

.

Source References

1. (YouTube, (2021) **A Day in the Life of a Cyber Security Analyst | Work Vlog 9-5: Coding, Stress, Fun after work** :) Available at: <https://www.youtube.com/watch?v=afAfPW6jp3g>
2. (YouTube, (2021) **What does a Cyber Security Analyst do?** Available at: <https://www.youtube.com/watch?v=IAFqgmpRJ-g>

IT Work - [Mark]

What kind of work is done by the IT professional?

Software Engineer, works with adding features to clients software, bug fixes, scripting, databases, internal tools, documentation and brainstorming solutions to known software issues.

What kinds of people does the IT professional interact with?

Clients, team members and support teams.

Where does the IT professional spend most of their time?

Working from home, in the home office and mostly due to covid, otherwise at a company office space.

What aspect of their position is most challenging?

The role allows you to use your brain, it requires you to think about problems and find solutions to those problems and coding the resolutions into the software. The job requires long hours worked and on call arrangements.

Source References

1. (YouTube, (2021) *What it's like being a Software Engineer: Interview* Available at: <https://www.youtube.com/watch?v=uDc5elxSiew> (Accessed 14 October 2021))
2. (YouTube, (2021) *A REAL Day in the life of a Software Engineer* Available at: <https://www.youtube.com/watch?v=j1fc0FICjyl&t=2s> (Accessed 14 October 2021))

IT Work - [Susan]

The IT work selected was to gather information from various sources to answer the questions posted in the following headings.

What kind of work is done by the IT professional?

Cyber security analyst specialise in all cyberspace protection of the business classified data from hackers. James Weston works for Inmarsat, the roles he takes on are challenging but rewarding at the same time. Everyday tasks include safeguarding the networks, services and customers from the highly complicated nature of cyber attacks. Consistently analysing spike in network traffic indicating an attack, or failed attempts to access the systems.

What kinds of people does the IT professional interact with?

Cyber security analysts collaborate with a broad range of employees within the business. Advising colleagues from password complexity to recommend security best practices for the business. Working closely with the IT engineer team to better improve the system. Protecting customers personal datas from breeches and leaks. Gaining valuable trust from investors with the mindset of constitutently improving cyberspace. But also meeting the regulations and guidelines, consulting best practices and best approaches to resolve the issues.

Where does the IT professional spend most of their time?

It is well known that all IT professionals conduct tasks on a computer but also integrate and share information to those related IT colleagues. Cybersecurity analysts spend time configuring tools reporting issues and evaluate Weaknesses.

What aspect of their position is most challenging?

Many companies like to take advantage of others, in particular the ones that are excelling. Networks can be compromised anytime and anywhere. No network can ever be fully secure and protected, but the goal is to best prepare and improve the systems. This role is one of the most challenging positions in the companies as it takes on many aspects of cybersecurity. Continuously testing all company networks and finding weaknesses to minimise threats and attacks.

Source References

1. (YouTube, (2021) **What does a Cyber Security Analyst do?** Available at: <https://www.youtube.com/watch?v=IAFqgmpRJ-g> (Accessed 11 October 2021))
2. (YouTube, (2021) **A Day In The Life Of A Cyber Security Engineer** Available at: <https://www.youtube.com/watch?v=KJlKvjrrj6I> (Accessed 11 October 2021))

IT Technologies

- Clouds, services, servers - Rukshana
- Cybersecurity - Ashton
- Blockchain and cryptocurrencies - Elijah
- Machine Learning - Susan/Mark

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 done soon (say in the next 3 years)? What technological or other developments make this possible?

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

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

IT Technologies - Cybersecurity.

What does it do?

Cybersecurity is defined as the practise of protecting a system or program from forms of digital threats. This can be done preemptively to avoid an attack or to mitigate the threat. It is not uncommon for cybersecurity mitigation to be done actively when a threat has already caused malicious damage to a system that may have or may not have a security plan implemented prior to the attack.

The major issue with cybersecurity is that the experts are constantly trying to outsmart the adversaries, and this has led to newer technologies and practise to evolve to defeat many new tricks used by the attackers. Encryption methods are always a target for these attacks and one example is that of SHA or Secure Hash Algorithms this technology has become increasingly more complex as computing has evolved the battle for encryption is that we compromise speed for security but with the rise of faster systems this maybe less of an issue in the future.

The latest state of the art practise in cybersecurity are in the field of Deep learning. Deep learning is a sub field of machine learning where machine AI code is left to self-maintain its code and to change or create new code as it continues to learn from segments of behaviour linked to the AI machine. Deep learning can be seen as a neural network of information used to link one segment to another.

Cybersecurity experts are looking into the way we can harvest the ability of deep learning to check on behaviours that may or may not be that of a malicious attack or simply a harmless process. Deep learning may be the key to determine if an attack is trying to jeopardise the integrity of the system by detecting behaviours that are out-side the deep learnings recognised permissions or access to certain areas of its base AI machine. With the rise of technology there are always going to be "gremlins" in the machine and the issue that may cause the most harm may be that the deep learning might not be able to forward plan an attack as the behaviour is simply not known to the deep learning code or not a known behaviour. For example, as a human age they learn new experiences and new behaviours so the deep learning if looked out in the context of say a child may not know how to drive a car or simply what a politician is. This leads to the fact that this could be only one process in the detection of threats as other systems like most Cybersecurity plans require multiple processes to combat looming threats.

Deep Learning is increasingly being used and as technology grows exponentially with rapid contributions from other technologies in the next 3-5 years deep learning will be part of some systems. Technologies that contribute to this growth are the use of cloud-based systems for data storage as deep learning requires growth within the way the code expands as the machine learns new behaviours. Another contribution to aid in the rise of deep learning is communication infrastructures for the transfer of data at faster speeds to cloud systems. Take the self-driving car concept. This requires quick decision-making processes that are suggested to be advanced by mobile technology for communication such as 5G allowing for faster data with shorter latency.

Deep learning, cloud computing and communications work together and as these technologies grow and are made more available to consumers so will the threats to data and information so in turn the need for cybersecurity will be a required area of IT as well as new methods to mitigate threats.

What is the likely impact?

The likely impact of cybersecurity advances will open a new set of ideas for the future of human dependents on automation including the automation of machines and services. Having the machine itself check for issues may ease the process used when setting up a cyber security plan for the systems linked to the machine. Deep learning could change the way a program functions based on behaviour and tailor an application to the needs of the consumer.

The improvements to Mobile computing have also come about rapidly and cybersecurity within this area is becoming a new challenge as threats are more likely to infiltrate more users as most of the global population are using a mobile device one way or another. Recent spikes in flubot attacks during Covid-19 has prompted cybersecurity to enhance their policies regarding external links and the focus on human education or social engineering being top of the mitigation strategies. Deep learning will take advantage of many services such as help support which can benefit from automation as well as online shopping and the reflection on purchasing behaviours with the consumer.

The impact of development might in the future see less involvement in tasks and send the work to deep learning as a way of reducing time and cost with human employees. Redundancy of human workers has seen to be an issue with automation but the fact that cybersecurity is beneficial for the safety of people and data this industry should hold strong in the race to automate the world. What we may see is that the technologies of deep learning are leaning towards the reduction in hard programming and a shift in programming towards machine learning. The security base of AI is especially important when we talk about the medical side of AI as well as Banking and finances and cybersecurity is a strong runner for these areas of IT.

How will this affect you?

The rise of Deep learning and cyber security will impact the way of learning, shopping, and general support from online service. This may be a product of automation that will use behaviours to impact the way advertising is shown to what product or companies can bid the highest to get the attention of the consumer. The impact of cybersecurity is that the trust of the service's cyber security policies is implemented correctly and not reliant on the use of deep learning or machine learning to be centre stage. Also, the insurance that private data is not overlooked due to the deep learning not being able to recognise an attack pattern.

The daily impact would be little, and it is seen even now that Google Ads have allowed for the norm of the computer using cookies to sell targeted ads. But to oneself a concern is that the target advertising will be shown and if an attack changes the deep learning and the deep learning doesn't recognise then this can leave oneself vulnerable to the attackers' intentions. The effect on friends and family would see that the collated data of a household or if not monitored a friend's social media post may be aggregated to be sold to the highest bidder and as seen in today's society gives power to the major company and rejects the smaller business leading to price setting by major parties.

Cybersecurity is essential to the upcoming change in the technological landscape and there is always a target for attackers when we deal in the new gold of the space age being data. Deep learning and cloud computing is not going away and the adaptation to these technologies needs to be embraced but still micromanaged enough to not allow for attacks to have a knock on effect on the people who use these services.

References

(Infocyte, (2021) **5 Amazing Applications of Deep Learning in Cybersecurity**. Available at:
<https://www.infocyte.com/blog/2019/08/13/5-amazing-applications-of-deep-learning-in-cybersecurity/>
(Accessed 9 October 2021))

(Revelock, (N.D) **Deep learning in Cybersecurity: The Definitive Tool**. Available at:
<https://www.revelock.com/en/blog/deep-learning-in-cybersecurity-the-definitive-tool> (Accessed 9
October 2021))

IT Technologies - Blockchain and Cryptocurrencies

What does it do?

Oxford Languages defines cryptocurrency as *“a digital currency in which transactions are verified and records maintained by a decentralized system using cryptography, rather than by a centralized authority.”*

In better terms, cryptocurrency is a type of digital or online money maintained but not controlled by any one entity. This has many pros and less cons, however, it is not widely accepted as a form of money yet, the vision of cryptocurrencies is that it will become mainstream and used globally online. Cryptocurrencies give online users another way of payment through a technology called blockchain. Blockchain is the system that records and stores all the transactions of cryptocurrencies to be able to maintain the system across several different computers.

The first ever cryptocurrency to be created was Bitcoin, this was created to be a “purely peer-to-peer version” of electronic money. Cryptocurrencies as a whole give power within money back to the users instead of having overall government control over them and Bitcoin was the first to implement this. The value of Bitcoin has been seen to increase over the last five years especially although it was first created back in 2008 and remained the only cryptocurrency until 2011.

Cryptocurrencies can be described as having three major playing fields while in use. The first is giving the power of the user's money back to them rather than under the thumb of another authority. This means that there is no one that can freeze, access or use the funds without strict permission directly from the user. Generally the overall Government or Banks can access and freeze people's accounts until a necessary task is completed and gives those authorities all the real power behind the money. Cryptocurrency works better here as it is all in the user's hands.

The second is the fastness and simplicity behind the transactions. With cryptocurrencies like Bitcoin, it takes out the ‘middleman’ and no longer has the small part paid to the bank when used. This means that the user will only be paying for the things they choose to pay for, without the bigger authority looming over and taking bits and pieces of their money with every transaction.

The third and final major point to cryptocurrencies is the support of people without access to payment systems. There are a lot of people who don't have access or the support to use payment systems such as banks, gift cards or cash. Cryptocurrency would give those people a chance to be able to purchase things and be in complete control over their own money. Anyone can start using cryptocurrency through their mobile phone, it is quick and easy to use and is widely more accessible.

As with anything there are many risks and factors to using cryptocurrency, however the biggest one that stops many people from investing into cryptocurrencies is the lack of regulation. Much like the stock market the value of these online currencies goes up and down and can be quickly debilitating to the wrong person. Another risk is something that many people have to worry about in their day-to-day electronic life, and that is hackers. The

downside to the currency being all digital is hackers that can infiltrate a user's computer and/or account and therefore have access to their entire digital wallet and spend it how they please. Of course there are many blockers and ways to prevent being hacked and the majority of people using cryptocurrencies are aware of this. As cryptocurrency grows it will likely see lots of inexperienced users come into practise with them, allowing many hackers to easily gain more money and scam users out of money from their wallet.

What is the likely impact?

The most likely impact of cryptocurrencies on the world is solving money problems that almost everyone faces. By more people investing in cryptocurrencies we'll see businesses that allow that kind of payment to be supported and grow. Smaller companies will also get the chance to expand and grow in their particular market because of the value behind these currencies.

Unfortunately a rather bad impact that blockchain is having on the environment is the amount of energy it consumes, the Bitcoin network alone consumes more energy than many countries around the world. This can lead to more resources than we have being used and until blockchain and cryptocurrencies become widely accepted it can also lead to impact on the environment in a quite debilitating way.

For everyday users, the impact that will come from Blockchain and cryptocurrencies can be a positive one. As cryptocurrencies are run on blockchain rather than the government users will be able to get more bang for their buck, in other words they'll be able to get more things for the little money (bitcoin or ether) that they actually have. This is until inflation or deflation kicks in and the value behind bitcoin either skyrockets or hits a low (which happened back in 2017).

Another positive impact of cryptocurrencies and blockchain is the protection from payment fraud, there are a rather large percentage of people who have fallen prey to fraud and scams. Aside from hackers, the blockchain platform and the security behind cryptocurrencies creates a safe environment from fraud. This is because it is a lot harder for scammers to create fake accounts and give fake details to gain your money.

How will this affect you?

I personally have placed a small amount of money into bitcoin and have my own wallet, I have not spent a great deal of money on it and have not used it in a couple years. However, the influx of people who want to use bitcoin has impacted me in such a way of deflating the value behind bitcoin. Thankfully over the last year the rise and fall of the value is quite predictable and easier to manage than it was 5 years ago.

As I don't have a lot of money behind me, being able to use cryptocurrencies as a way of payment and as a way of saving money will have a great impact on my wallet. In the future if cryptocurrencies and blockchain become a widespread use I will have some money already behind me that I am able to use to buy things. This will allow me to buy more groceries, and the smaller things that I sometimes do not have the money to buy.

With the mobile app that I referenced in my first assignment I can also use cryptocurrencies as a way to help pay for things I may need to create and maintain this app. I have not done much research in how this could be applied or used, however my general idea is that I will

be able to use Bitcoin to help support the app and allow users to donate small amounts to keep the app going without needing any kind of actual payment.

Another way blockchain and cryptocurrencies could potentially help me is through the payment of medications. I am a carer for my mother who requires many different medications and sometimes we don't have enough money to purchase these. By using cryptocurrencies such as Bitcoin that is placed on blockchain rather than the government it could make it cheaper and more affordable for us.

IT Technologies - Clouds, Services and Servers

What does it do?

The term "Cloud" basically refers to the several servers connected to the internet that are linked together to share the load and can be leased as part of a software or application service. Its improved accessibility, scalability, flexibility, lower costs and less maintenance, make it a popular choice for organisations to move into this service. Instead of using one single powerful machine, complex processes can be distributed across multiple smaller computers to share the load. Organizations use an infrastructure-as-a-service (IaaS) model to process workloads and store information. They can access virtual server functions remotely through an online interface. A cloud server is a virtual server or a physical server running in a cloud computing environment. It is built, hosted, and delivered via a cloud computing platform via the internet, and can be accessed remotely. It has all the software they require to run and can function as independent units. Cloud services, like web hosting, data hosting and sharing, and software or application use, are infrastructure, platforms, or software maintained by third-party providers and made available to consumers via the internet. It allows user data to flow from front-end clients such as servers, tablets, desktops, laptops, and anything else on the users' end, to the internet, to the provider's systems, and back. It can be accessed using only a computer, operating system, and internet or virtual private network connectivity (VPN).

As cloud technologies evolve and more companies move to cloud-based services, there are a number of changes or emerging trends accepted in the coming years but we are only going to discuss two of those trends.

1. **Serverless Computing:** This service removes the need for software developers to continuously manage and maintain network servers and become more productive, focusing on development and helping the front-end teams optimize workflow. This is quite a new cloud offering but its demand is predicted to grow by 25 per cent by 2025.
2. **Multi-Cloud Strategy:** Another change in the cloud is adopting a multi-cloud strategy. It allows businesses to use more than two cloud services from several vendors and avoid vendor lock-in while taking advantage of the best offerings each vendor offers. This means in the future organisations are more likely to develop multi-cloud strategies with little to no dependence on a specific provider. Microsoft and Oracle, rivals in the cloud space, have already made this strategic move, linking their cloud services and allowing customers to run enterprise applications across Oracle Cloud and Microsoft Azure.

One weak point of current cloud computing is that it's handled by a limited number of providers who dominate the space. These large, centralized data-processing centres tie computing and storage ability to the proximity, bandwidth and resources provided. With 127 new IoT devices connecting to the Internet every second, issues of latency, bandwidth, and security are inevitable. Edge computing is an emerging cloud trend that involves building localized data centres for computation and storage at or near where they are needed. This offsets the load on the cloud and improves the deployment and running of a wide array of applications. 2020 has been a pivotal year for the cloud as it played a lead role in facilitating remote work solutions. It allowed organizations to fuse existing organizational processes with novel cloud technologies to allow for greater flexibility during these uncertain times. COVID-19 has facilitated a focus on cloud capabilities as companies compete to thrive in

this new remote work environment. The cloud has become an essential part of continuing business and is the key to unlocking organizational growth. Artificial intelligence is becoming more relevant in the workplace to streamline business processes with activities such as payroll automation, budget forecasting, and compliance and eliminate manual tasks. AI is expected to continue to grow with the market exceeding \$300 billion by 2024. Technologies like AI and robotics require greater speed and processing power and edge computing is the answer to capitalizing on these advancements and shaping them in the years ahead. With these advancements in technologies, cybersecurity plays an equally important role to protect sensitive data in the air.

What is the likely impact?

Servers have been an essential part of the computing architecture but with the development of cloud computing, moving to serverless infrastructure has been inevitable. While serverless architectures offer greater scalability, more flexibility, and quicker time to release, all at a reduced cost, there are some disadvantages like testing, debugging and some security concerns. As developers do not have visibility into backend processes, debugging can become more complicated as well as testing. And it may not be possible to fully secure personal and sensitive data.

Likewise having multiple clouds in an organisation can lower costs, increase flexibility and improve overall performance by strategizing based upon the requirements and demands of a company. But as most cloud engineers are moving towards specialising one major cloud rather than several cloud providers to differentiate themselves. So, these multiple clouds may require organisations to seek individuals with deep technical and specialist talent in a single cloud to maximise efficiency and engineering depth.

Nonetheless, if a company is choosing cloud services, there will likely be organisational changes. When cloud is adopted, some of the people who previously looked after those jobs might actually get disrupted on those workflows and ultimately either be job change or job loss. In a study by the Centre for Business and Economic Research at Ball State University, 85 percent of 5.6 million jobs in the US from 2000-2010 were lost due to technological change and the majority of them were from automation. This job loss will more likely be across many other industries as robots, cloud services, and other forms of automation will do the work instead of the human resources. For instance, drones or self-driving vehicles will cut down delivery, taxi or any driving jobs and machine learning and AI systems will reduce many white-collar jobs like accountants, financial planners and so on.

How will this affect you?

It is so amazing when you come to realise how much cloud services have impacted our daily lives without even knowing. Cloud computing has such a significant role in our everyday activities be it iCloud storage or OneDrive or Dropbox to store our files or your Facebook post or Instagram feed. We have been using the cloud services without even realising that we have been using it.

After the pandemic we have all been advised to stay-at-home orders by the government at one time or the other to avoid the spread of Coronavirus, which made us students to study from the comfort of our home. And cloud computing has enabled us to access data

anywhere and at any time. We can enrol online, participate in online learning activities and access study materials, journals, articles and many more. And it has allowed educational institutions to use the storage cloud to store huge amounts of data securely without complicated or expensive infrastructure. When we are using Netflix to watch our favourite movies, we are using the cloud. Also, it has enabled businesses to access sophisticated analysis that gives detailed insights on customers and potential services. In the hospitals or clinics or medical centres, the use of cloud helps manage and share patient data to reduce operational costs and also if we want to access our medical records we can do so in our mobiles.

Online shopping platforms, pre pre-installed navigation programs are also other areas where this cloud services have affected. Thanks to social media and the cloud computing, we are able to stay connected with our families and friends in this pandemic and with those who are staying far away from us.

IT Technologies - Machine Learning

What does it do?

It is the development of computer systems that are adaptable and learn by using statistical modelling and algorithms to identify patterns in data without the need to be supplied specific instructions to do so by humans. It is present in application features such as predictive text, language translation, automated vehicles and widely used in businesses to identify opportunities to boost efficiency and add value. "Machine learning is changing, or will change, every industry, and leaders need to understand the basic principles, the potential, and the limitations" (Brown 2021) Machine learning has been described as a subfield of artificial intelligence and the two subjects often accompany one-another.

Machine learning involves data, including numbers, text or photos, records, transactions and even reports. The more data that is collected and used as training data for building a machine learning model, ultimately results in a better program being made. IT can be described as "applying statistics over observed data to generate some process that can achieve some task" (Casey 2020) Data is held outside of the training data to act as evaluation data, which can then be used to determine how accurate a machine learning model is when faced with new data. This ensures a model can be used against future data sets. (Brown 2021)

What is the likely impact?

Machine learning has many potentials to change the manufacturing, retail and other mainstream industry, understanding its potential, and the basic functions and limitations. Machine learning is fast growing and it's all around us, big or small. It is a positive step that the industry is eager to look further into. There are many pros and no doubt many cons when it comes to integrating it into the workplace. Many of the pros include significantly cut employment rates, boost efficiency in workspace, discover patterns and connections. As with many IT systems, none of which are perfect, errors will occur and problems that can't be controlled will play a massive role in machine learning.

Changes in ML have significantly become more apparent in many industries. It is changing the way companies operate and even the main core of some entertaining companies like Google's search engine, and Netflix's suggestion algorithm. Some companies are still trying to integrate ML to the operation process but struggle to find problems that ML can solve. Recommendation algorithms are mainly used in many network spaces like social media space, and in many search engines like YouTube, Ebay, Amazon and other apps. See significant changes in medical imaging and diagnostics that can analyse images and detect problems within the image, a process that usually takes 2-3 business days to minutes.

Furthermore, machine learning affects many areas of workplace operations and it continues to improve as days go by with problems that occur in the workplace as more demands are starting to appear. Ultimately machine learning will not likely to cut down employments but reduce workload instead and boost operation efficiency. Matter a fact it creates more jobs, more technologies that have to be developed and engineers to complete a certain jobs like the self driving cars, Google Cloud AutoML and many more.

How will this affect you?

Machine learning has massively impacted my family daily life, especially having family who live overseas and interstate. Smartphone and computer applications allow us to be able to connect and communicate to one and another in real time. With the current situation we rely on technology more than ever to stay connected. I know that the past couple of years my family and I travel a lot to and from work, and flying to and from states. We rely on google's maps, riding apps, to work out the estimated commute time and distance. Having a family member who works in the aviation space is fascinating as they spend time operation taking off and landing but autopilot the rest of the flight which amazes me. Previously I operated a CNC machine which adopted a machine learning process to help workers manufacture parts repetitively and efficiently. I find that manufacturing parts using a CNC machine allows me to use my time on the next tasks. To me, machine learning will always improve our everyday life as there are current problems that can be solved using machine learning which have already been seen in transportation space and generally work places that I have worked at. Therefore "Machine learning and artificial intelligence have changed our life by making it easier, also with some of AI and ML trends we are expecting more growth in technologies" (Neelam Tyagi)

Reference list

Brown, S 2021, "Machine learning, explained," *MIT Sloan*, viewed 14 October 2021, <<https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained>>.

Casey, K 2020, "How to explain machine learning in plain English," *enterprisersproject.com*, viewed 14 October 2021, <<https://enterprisersproject.com/article/2019/7/machine-learning-explained-plain-english>>.

Jun Wu 2019, "AI, Machine Learning, Deep Learning Explained Simply," *Medium*, viewed 14 October 2021, <<https://towardsdatascience.com/ai-machine-learning-deep-learning-explained-simply-7b553da5b960>>.

Shivashish Thakur, Mar 14, 2020 "Top 15 Most Used Machine Learning Tools By Experts!!" <<https://medium.com/@shivashishdf.thakur/top-15-most-used-machine-learning-tools-by-experts-d6602f1ac14c>>

Neelam Tyagi, Apr 21, 2020, "Machine Learning" <<https://www.analyticssteps.com/blogs/7-popular-applications-machine-learning-daily-life>>

Project Idea - Puberty App

Brief description of what your project idea is: The following is a project idea formulated and discussed by Team8.

Overview

An application for support during puberty. The application is aimed at anyone going through puberty and the unknown areas regarding the topic and other areas of support.

The project is an application for the mobile market and is a progressional step towards puberty as the target audience will always be there and the requirement for this area is becoming more progressively mainstream but due to the fact that this area of growing up still holds some social stigmas persons of the age group may find puberty confusing and may seek guidance that isn't necessarily there or the persons may be in a remote location without access to services to answer questions. This project is formed around the familiar generational technological environment that the target audience is drawn towards.

The application shall include support and information for people who are having a hard time or otherwise cannot find the required information from other sources. The Application will have an incognito mode that allows for the application to be exited when the user requires a fast exit. The application will also allow for the update of information via a database on a cloud server, this gives the application the added benefit of being able to be current with trends.

Motivation

Information relating to puberty and other related health matters for many people can be hard to find, incomplete or simply non-existent. There are many people that find they have questions that they are often too embarrassed to ask, find it difficult to raise with family members or avoid asking for fear of ridicule or ill treatment. This app aims to provide information and cover a broad range of puberty related topics for people of all ages, genders and sexual orientations in a single complete reference platform. Many of us have experienced limited knowledge of what lies ahead with regard to puberty and adulthood, most of us have learnt and gained experience by having to learn the hard way, or spend a lot of time researching or simply doing things wrong.

All of us at one time or another would've appreciated having the information at a point in our lives and having it all in one place and easy to access would be advantageous for many. Helping to path the direction of the culture of adults who are informed can shape the way society as a whole will function in future generations to come knowledge is power the motivation it to help.

Description

Within the program of this 'Puberty App' key activities, facts and tips will be included; this describes the transformation that happens with estrogen, testosterone, gender transforming surgeries, sexual health and any other needs that come in later updates with the server based cloud idea of the project.

As a basics this application is a source of information for all kinds of people who are going through puberty or who just need the information by itself. There will be a homepage with an option to create an account and save the different pages that they will want to access later on. This account will be saved to the cloud so it can be accessed from other devices, for the moment it will just be mobiles, however, it will eventually expand to websites as well.

Once the account has been created (or they login as guest) there will be spaces to add in their age, gender identification, sexual orientation and specific pronouns. These details will help to give options and suggest reading articles for the user. Each section will give the details in a fun and interactive manner so it is easier for neurodivergent people to read and take in.

The sections will be as followed:

For anyone undergoing transformation through estrogen (whether that be cisgender or transfeminine) there will be information on:

- Bras; sizing, different types (Underwired, push-up, balconette, bralette, strapless, tube, sports, t-shirt, beginner's, transparent, bridal, multiway, plunge, cage, halter, nursing, stick-on, full figure, padded, minimizer and racerback)
- Sexual health care; birth control (both the pill and the rod), condoms (why they're important and how to use one)
- Periods; how they work and what they do, pads and tampons (the pros and cons for both and the different brands)
- Mood swings; the most common moods associated with estrogen.

Anyone undergoing transformation through testosterone (whether that be cisgender or transmasculine) there will be information on:

- Development of testicles "balls dropping".
- Wet dreams.
- Erections; their function and general information.
- Sexual health care; vasectomy (function and information) and condoms (how and when to use and what they do).
- Voice breaks.
- Mood swings; the most common moods associated with testosterone.

For both estrogen and testosterone there will also be information on:

- Shaving; face, legs, under arms and chest (razors information, how-to videos, and step-by-step instructions), hair removal (waxing, cream, shaving cream, laser, epilators, plucking).
- Skin care routines; creams, moisturizers, anti-acne etc. (different brands and uses).

The LGBTQIA+ area will include information for both transfeminine and transmasculine.

For transfeminine it will include:

- Padding; sizing and how-to (padded bras and underwear)
- Body shaping; types (control top pantyhose, camisole, waist cincher)
- Gaffs; types (underwear, adhesive tape)

- Hormone effects (changes to face, increase in chest, decrease in genitals, changing of body shape, voice, mood swings)
- Surgeries; top surgery (breast implants), bottom surgery (Penile inversion, rectosigmoid or colon graft, non-penile inversion vaginoplasty).

For transmasculine it will include:

- Binders; sizing and types (half, full, t-shirt, singlet, swimming)
- Packers; sizing and types (STP, soft, hard)
- Hormone effects (changes to face, reduction of chest, changing of body shape, voice, bottom growth, mood swings)
- Surgeries; top surgery (Buttonhole, double incision, inverted-T/T-anchor, peri-areolar, keyhole, minimal scar), bottom surgery (Metoidioplasty, phalloplasty).

For both gender identification and sexual orientation there will be information on:

- Different types of gender identification (Cisgender, transgender, gender nonconforming, nonbinary, genderqueer, genderfluid, gender-neutral, intersex)
- Different types of sexual orientation (Straight, gay, lesbian, bisexual, pansexual, asexual, demisexual, graysexual)
- How to come out to your parents.
- What to do if your parents don't accept what you say.
- LGBTQIA+ lines.

Another part of this app will be the quick exit button somewhere on the page (in a corner) for anyone who does not want to be 'caught' on the app or reading something not allowed. This button will either completely close down the app or will switch the user's mobile over to another app (chosen by the user). A feature like this allows for a quick exit in case of emergency such as; parents or guardians who do not want their children looking into LGBTQIA+ activities, almost being caught by a partner when the user does not want them to know etc. The quick exit button is for any user who does not wish for anyone to know they are looking at any of this information to protect their privacy.

Tools and Technologies

Tools and technologies to be considered would be tools for the development of a mobile applications for the framework, web based services for cloud services logins and updates for information relating to the mobile app as well the local device will require a SQL database for the applications information that can be stored or updated via the cloud services syncing data.

The proposed development tools such as Android Studio for the mobile application is considered and cross platform tools such as Xamarin would be considered but would rely on the code to be converted to another programming language opposed to that of Java within Android studio.

SQL database is part of android but if the system required a cross platform approach this will need to be more flexible to how xamarin would utilise this sort of Databasing.

Cloud based server for data storage would greatly increase the use of newer updated trends in the applications target audience; this not only can add features but also remove or add new information that may be misleading or deemed obsolete. Cloud Based services would work as a log in server to allow for authorisation.

Technologies to use are mobile devices for the particulars of client privacy.

Skills Required

The following skills are required for this sort of project and are listed as to what skills are beneficial for the success of the project.

- Programming
- Software development
- Knowledge Base/Research
- Graphic design..

Programming skills - These are required for the basics of creating an application. The application is heavily driven by this aspect and will need to be planned and all code programmed for the different features of the application such as the main GUI, user experience and information areas to access databases it will all go into the application via the programming code and this will all connect to the rest of the skills required.

Software development - As the project is a software based idea this is a skill to allow for the development and planning of the application this would entitle a SRS (Software Requirement Specification) with target audience inclusions, design, deliverables time frames as well as testing and expectation guidelines this will allow for the application to be tested under different devices and circumstance with a plan.

Knowledge Base - A knowledgebase of the topic is required without this knowledge the data will not be comprehensive and may lead to a failure in the product. Knowledge and sources of information are key and will be required for research in the way of getting the correct question to ask on the topic to enhance the information.

Graphic Design - Not the highest ranked skill but one that would help with the user experience of an application that would aid in easier function and allow for more user interaction within the product. Graphic design skills work with UI and UX design.

Outcome

Upon the successful creation of this project 'Puberty App', it will give people of all gender orientation, sexual identity and backgrounds of abuse. We hope to normalise the information relating to puberty and all other related matters for young people. We want to keep all this information out there for them to have the liberty to approach and learn on their own. They will never have to worry about learning things that should have been taught to them at a

young age. It might not solve the problem of neglect and abuse that goes on, but it will help educate these people in areas where their parents or guardians might have failed or not educated themselves on. We are hopeful that the impact of this project will one be the education and validation on the people who need it and seek it out and the other is to get more ideas and suggestions from people who use this app. This can be added again for continuous improvement of the app and give everyone and anyone the best chance possible for input.

Group reflection

Rukshana

I had fun doing this group assignment. Everyone was proactive, friendly, helpful and cheerful. From the very first day I liked that everyone was on the same page, and we helped each other with the assignment. I believe our work coordination went really well. If one initiated setting up MS-Teams while creating and setting up documents in google docs and other set up GitHub page and so on. Each individual was initiated to take over their tasks and informed the team what they were working on so others could work on other tasks. The other thing is I had this issue with the website which I was not able to figure out myself on what went wrong. But we all worked together on this one session and fixed it up for which I am very thankful for. Everything went perfectly so I don't think there is anything that could be improved except for the fact that there was a time limit. From this group project, I learnt the importance of an individual contribution towards teamwork. It helped us complete the assignment smoothly. And everyone was very understanding of each other's situation. GitHub was set up amazingly by Ashton and I loved how it looked on the website.

Ashton

The task looked straight forward and required little direction to set up the group project dynamics. The team met up with one another as complete strangers and have found many ways to collaborate to get the end goal within communication. The team was open for suggestions and helped one another out to ensure we met the guidelines set out in the assignment PDF. The one thing that was slightly overwhelming was that we were required to get a plan of action and this wasn't always the most forward thinking plan at first. It wasn't until we got halfway that we were able to engage the tasks and move forward at a pace.

I found the dynamics to be effective and the leadership shown by Elijah was motivating to get the meeting on a roll and start the tasks. Mark was awesome at his brainstorming skills, Rukshana was progressive at setting up the GitHub repository and added her involvement into all the tasks. Susan was very on point with her tasks as well as the group task and her written work was very well structured. Every member was great to work with and the team had many different walks of life rolled into one making it a fun experience that would recommend this team a 5/5 stars great team!

Elijah

This team as a whole worked together quite well as the communication between the five of us was absolutely brilliant. None of us were scared to ask a question or communicate something we were thinking and we were most often on the same page with everything.

There were very minimal problems to solve and any that did arise was something that could be solved within a few minutes at most.

The start of the group meetings was slow, all of us trying to find our feet within the group and seeing who would be the lead. This meant that we got slightly behind in our assignment and weren't entirely sure what we were supposed to be doing. In saying that, as soon as we figured out the tasks at hand and started our shared google document everything went into full swing. We created a Facebook group chat, had our meetings all planned out (every Monday and Thursday at 6.00pm Melbourne time) and our repository was created.

Each person dedicated an amazing amount of effort and commitment to this group and this assignment and it is shown in the work we have submitted.

The webpage Ashton set up and did almost all of the planning for, he took great care in the programming of the HTML and as such has been able to showcase our ideas in an interesting manner.

Rukshana created our GitHub Repository and set it all up for us to use, she explained to us where she was faltering and allowed us all to help her and as a team we were able to talk her through things to do with GitHub which allowed us to strength in the group.

Mark had a great hand in the Project Idea and setting up how that would look and what areas needed to be completed when, within the meetings he displayed great leadership and was able to direct the conversation to the areas of the assignment that needed to be addressed.

Susan was brilliant in her knowledge and contribution, when discussing tasks and what areas each person needed to do she was more than willing to take on whatever part was necessary and as such created a safe space where everyone was comfortable with the tasks.

Mark

This assignment was fun to be a part of. We were nervous at first as meeting and working with new people is, but we slowly began working our way towards a finished product. Elijah is a wonderful person who had a brilliant project idea that we all related to one way or another and we were very quick to decide the project idea that we were going to pursue. We struggled at first to get a foothold on what work we had to achieve and when, but after entering our first large paragraphs of content each in the document, the work began to flood in.

I believe we were very lucky to have such a diverse group of people with very easy going and professional mannerisms that made putting this all together relatively simple. We had a sixth member of the group initially but that person wasn't heard from again and the group moved forward with the members we had. I think everybody put in a stellar effort at one point or another when it was needed and I'm very happy to see our assignment come together as well as it has. Well done Team8! It would be good to work with this group again.

Susan

Team8 as a whole have worked very well together for the past couple of weeks and we came across many challenges but had always found ways to solve the problems as a unit straight away. It was an amazing experience to be apart of and I wouldn't want to have any other way. We have variety of cultures and background, personality traits which makes the Microsoft Teams environment that much more fun to work and share ideas in. Everyone was very upstanding but also was very professional about it. First meeting was pretty much just getting to know each other and work out who would lead the group. We didn't really assign anyone to lead but in saying that, I thought that everyone knew what was needed and had high expectations for themselves and the team to get things to start and finish tasks with quality. I thought personally we started off slow but once we have set goals and accomplishment we work cohesively well at a reasonable past.

Everyone has put max effort into the assignment and worked really hard to manage time, considering we are all at a different stage of our lives.

At the beginning Elijah stepped up to the leader role and assigned tasks for each member to get us rolling on with the assignment. Shown great decision making, and great leadership. Rukshana works brilliantly well getting assigned tasks done with great professionalism and displays high quality work throughout.

Ashton was amazing with the HTML/CSS side, the website that was planned and constructed by him was very professional in terms of layouts and have chosen colour palettes that work really well.

Mark had displayed great leadership in team meetings, he was able to point out areas that needed attention and was able to address actions needed to be taken with a well understanding of the criteria.

Overall, I thought we all display high standard professionalism within the work and put max effort into the assignment. We worked really well considering the time that was given and the different situations that everyone faces.

Group As A Whole

Group worked together as an amazing team that was able to undergo the challenges of the time required to put together the following report. The team worked together to achieve an end goal and to keep each other focused on the goal. When we didn't understand a section the group called on one another to support the idea of how to approach the task. If the task was difficult we tried to help one another. We worked tiresome on getting the most out of our meetings and to get to know one another's quirks and styles of ascertaining information.

Team 8 was a surprised mix of all aspects of knowledge and general life skills. We had programming and communication as well as creative writing skills in the team. This led to the project idea and the other formats of how we did the assignment to come to life. We all had busy lives but were able to work together to push the assignment to its needs and work with any missing attributes that each did not know or had limited knowledge on. The surprise was

that a group of strangers could work together to obtain the goals set out by the personalities in our team where very well received by one another.

Strangers who walks in a different parts of life, but has a common interest in IT was able to worked brilliantly to put out a high quality report and shown a great professionalism throughout. There was not one person who missed out on content as we all have good intentions for each other and was helpful when a member was struggle. Each and everyone of us brings many experiences in different areas and was able to integrate to the team which was helpful. Overall the team dynamic was a success, as we completed the task to the best of our ability and most importantly managed to overcome obstacles together as a team.

Ashton mentions “Improvement we would see is the planning stage in our actions”. The actions were reflected well and we did have some form of ideas but we think next time around we would add more actions to allow for the time frame to have more of a buffer. The planning stage was the hardest but once we had worked on this we had a plan and took off from there. Everyone had an idea it made it more smoother to contribute and get on with the project.