Assignment 2   
Introduction to Information Technology

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**Personal Information**  
Daniel Blake  
I’m Daniel Blake (s3910924) of UMI. I’m from an English background but moved to Australia at a young age. I love AFL and the west coast Eagles. I also spend a lot of time camping, fishing, and at the beach. My professional background is in Operational Technology and Vehicle Automation specific to the resources sector. My interest in IT is to expand my knowledge and career opportunities in mining or other industrial technology fields. Go TBD!!!

Nicholas Drinkwater   
Hey! I’m Nick Drinkwater (s3508178) of UMI. I was born in Sydney but grew up in Melbourne. Whilst I don’t have any formal IT experience, I actually previously started this degree back in 2015. After completing half a year, I left to go traveling, spending 2 years living in Edinburgh, Scotland.

With Coronavirus and being unable to travel, I decided to use this time to return and finish my degree! I love traveling, film, and baseball. My interests in IT include programming, building IT systems, and hardware. I hope to learn the necessary skills and knowledge to help me enter the IT industry in my career, as well as exposure to inspiring topics and fields of IT that I haven’t seen or encountered before.

Abby Durbridge  
I’m Abby Durbridge (s3794613) of UMI– a Melbourne resident living in the heart of Southbank and loving every moment.  My passions lie in creative arts and languages and use most of my spare time growing my skills in each. Historically, I’ve worked with an Engineering firm before transitioning into a SaaS company within the Childcare Industry. A hefty lockdown saw me trying to develop new skills and interests and evidently picking up another degree. My interest in IT hasn’t been at the forefront of my life but rather a natural necessity, and it wasn’t until I began to think of developing my own software or being able to work remotely for any company that I pursued IT professionally.

Mathew Dwyer  
My name is Mathew Dwyer (sS3807459) of UMI. I’m 27 years old and based in Newcastle, NSW. English is my primary language, however I’m in the process of learning German. Previously, I’ve completed 3 semesters of a Bachelor of Communications at University of Newcastle, as well as partially completed a video game course through TAFE. I love playing with electronics and am currently expanding my skills with 3D printing, 3D modelling and CAD to facilitate the printing of miniatures and terrain for my DnD games.

My experience in IT is specific to web development and electronics, having played an integral role in the development and ongoing maintenance of the website of a retail store I worked for. Additionally, I’ve had involvement in video game development and have created several small games for various competitions. Software development, automation and cybersecurity are all areas I’d like to explore during the course of my education and career.

Erin Paton

I’m Erin (s3910930) of UMI. Originally from Sydney, I relocated to Byron Bay for a change of pace and to get closer to nature - most of my weekends are now spent hiking, exploring waterfalls, or at the beach. Currently, I’m fluent in English but I have a passion for French culture and intend to study the language up to C-level (only after I’ve knocked over a few programming languages!).

My experience with IT is specific to marketing technology, and the software used to implement it. Art, Design, Psychology, Health & Wellness, and Sexual Education are all areas that are important to me and while I don’t have plans to further my education in these fields, the possibility of exploring their convergence with emerging technologies is something that excites me. I’d love to play a role in increasing the accessibility and interoperability of these spaces in some way throughout the course of my career.

Harrison Tang  
My name is Harrison Tang, s3908223 of Team UMI. Born to migrant Chinese parents, I am a second-generation Australian and denizen of Brisbane Town/Meanjin. Whilst not possessing an extensive background in IT, I grew up in the 1990’s and 2000’s playing video games and exploring the internet. Eventually, technologies would play a crucial part in my life in staying connected with friends and family, discovering art and music, educating and expressing myself, and seeking new employment and career opportunities. Recent work performing administration and data collection for an infrastructure company prompted an exploration into avenues in programming, cloud services, and app and web design leading to pursuing a formal education in IT. Currently, I play guitar as part of the ‘strings’ section in a ten-member pop-punk cover band/orchestra and occasionally travel interstate to perform.

**Team Profile**

Daniel Blake  
**Myers-Briggs**Results show I’m an INTJ-A, an Assertive Architect. This means, for me, that I can use rational thought and ingenuity to bring a project to fruition.

**Learning styles test**Found online at [http://www.educationplanner.org](http://www.educationplanner.org/).The results of the test say that I’m a 50% tactile learner.

**Productivity Test**   
Found at<https://hbr.org/2018/08/assessment-how-productive-are-you>. The results show that I am 95% productive.

**Discussion**

In a group environment, being a productive member is incredibly important to me as demonstrated by by 95% productive result. Being able to be relied on by my teammates is something that I would pride myself on and I hope that this level of productivity is emulated by my team. The key to success for me would be by effectively organising communications and assigning tasks efficiently and productively, through my rational thought and ingenuity, which would provide an easier road to success.

When forming a team, it’s best to find people who are also organised and productive. I think trying to maintain a high level of organisation with someone who works in an ad-hoc manner would be frustrating and would lead to friction within the group.

Nicholas Drinkwater   
**Myers-Briggs**

My Myers-Briggs test indicated that I’m an INFP-T, which is a Turbulent Mediator. This means that I am thoughtful, open-minded and empathetic but can also overly self-critical and idealistic.

**Honey and Mumford**

My Honey and Mumford score indicated that I have a Reflector learning style, which is someone who learns by observing and considering what happened and someone who likes to consider all the possibilities and implications.

**Big 5 Personality Test**

My third test was the Big 5 Personality test that indicated that I am primarily good natured, courteous and supportive but I can also be shy and tend to worry about things.

**Discussion**I believe that these test results put me in a really good position for working within a team! My strengths will mesh really well within a team as I'm always respectful and open to any ideas that my teammates may have! My results show I’m passionate, generous and dedicated which I will use to ensure that I fit in and work well within the team.

Abby Durbridge  
**Myers-Briggs**

As an ENFP-A (Extraverted, Intuitive, Feeling, Perceiving), I bring a warm and inviting energy to any team through my charisma and abundance of people skills. I have the ability to adapt seamlessly to change-making me a superb choice for roles within dynamic, stimulating environments.

**DISC**

The test states my adapted behavioural style is a mixture of the Conscientious and Dominance style while my natural behavioural style is very skewed towards the Influence style. What I find interesting about the DISC test is that it is that you can set your focus thus the report was geared towards my working style within a workplace environment, while also providing insight into your natural style and comparing the two.. The test deemed my behavioural style as the Networker often meaning I have great verbal skills, well-networked, and high levels of energy in social settings. In organisations, I have the ability to find the right person for the job through my wide net of connections and ease into group collaborative work effortlessly.

**5 Voices**

As a Pioneer - Connector, I love to dream big and share those ideas with people. I find myself to be multi-talented, very resourceful and love challenges. I do challenge the status quo which can be confronting to some people and may be intimidating. I believe I can be a great addition to an organisation who gives me autonomy and believes in me, my capabilities and my vision.

Mathew Dwyer

**Myers-Briggs**

ISTP (Introversion, Sensing, Thinking, Perceiving)

**Learning Styles Test**

Visual Learner

**Myers-Briggs**

OSPP 4 Temperament Test - Phlegmatic

**Discussion**

Together, these results seem to indicate I am someone who stops to think before making decisions. I am also quite introverted and not particularly social. It also indicates that I am someone who learns more through seeing something be done rather than being instructed.

They help to point that in a group, I am better at being a decision maker because I will carefully consider all options before coming to a conclusion. But it also says that I will not likely speak up very much due to my introverted nature.

This should be taken into account when forming a team by considering what the other members advantages and disadvantages within their personality are, and using them to decide what roles within the group suit each member the best.

Erin Paton

**Myers-Briggs**

INFP - My results indicate introversion, an intuitive information-gathering style, emotion-based decision making, and a preference for structure and organisation in my environment. Dubbed “The Advocate”, 16 Personalities describes individuals of this combination as creative problem-solvers with the ability to accurately read people’s true feelings through compassion and keen intuition. Advocates are inspiring communicators who speak and write with a conviction that can be quite persuasive. They prefer to succeed to the benefit of those around them, never to the detriment of others. Some weaknesses of the Advocate profile are a sensitivity to criticism, difficulty opening up and asking for help, and a sometimes-debilitating perfectionism.

**VARK**

AK Type Two - My results show a multimodal inclination towards auditory and kinaesthetic learning styles. Auditory learners digest information that is heard or spoken with a preference for group discussions, lectures, talking things over, as well as some informal writing methods that are formatted colloquially. Kinaesthetic learners value implementation that is connected to reality, favouring demonstrations and simulations. VARK Type Two individuals work best when they’ve gathered information from both of their preferred learning modalities and often take more time exploring subject matter which can appear as procrastination or inefficiency but generally leads to a more in-depth comprehension of the material.

**DISC**

Type S - My results indicate a strong egalitarian inclination and a desire to cultivate a supportive, inclusive environment for teammates to flourish in. Type S individuals are dependable, reliable, strong communicators who utilise compassion and diplomacy in adversity and prefer to diffuse conflict with patience and understanding. They’re natural collaborators and strive for the overall success of the team rather than advancing their individual endeavours. These types can be indecisive and over-accommodating, often to their own and the team’s detriment, which can ultimately have the opposite effect of their intentions if not kept in check. Being extremely empathetic people, they often gloss over problems and avoid calling out the inadequacies of their colleagues in an attempt to keep the peace, leading to setbacks down the line.

Harrison Tang

**Myer-Briggs**

My scores on this test returned an INFJ result. Referred to as ‘The Advocate’, ‘16Personalities.com’ describe this personality type as principled in nature, empathetically sensitive and altruistically driven with a strong sense of egalitarianism. However, this idealism can evoke perfectionist and reserved tendencies in Advocates, exacerbated by a lack of self-care and often leading to burnout.

**Learning Styles Test**

Auditory, Kinaesthetic, Interpersonal **-** Results from this test suggested an aptitude for physical, aural, and social learning. These types of learners typically benefit most from hands-on group activities and discussion through problems. Physical and aural learners absorb information through sensory experiences, such as touch and rhythm, while social learners excel through interaction and feedback.

**Big Five Personality Test**

The Big Five Personality Test measures five major dimensions of personality: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (OCEAN). According to results, I possess an accent towards Openness and Agreeableness while Neuroticism scored lowest. Many aspects of this summation mirror certain characteristics of the Advocate personality type, such as a tendency towards helping others, collaboration, emotional intuition, and an aversion towards following traditional paths.

**Discussion**

The depths of these varying results indicate that people of various personality types share certain characteristics that express themselves in a variety of ways. For example, the concept of ‘leadership’ does not necessarily require an extraverted personality, but rather an observance of a particular leadership style that is comfortable and productive for a team as a whole. These test results suggest I am strongly capable of collaboration and productive in environments aimed towards helping others, benefiting greatly through physical and social experiences. I aim to always be respectful, positive, committed and inclusive, as I typically learn more through active discussion and debate about ideas and solutions.

**Ideal Jobs**

**Tools**

**Industry Data**

**IT Work**

**IT Technologies**

Autonomous Vehicles

Cryptocurrency and Blockchain

Natural Language Processing

Raspberry Pi’s

**Project**

**Reflection**

Reference Library —

**IT Technologies**

**Autonomous Vehicles**

1. ASI n.d., *Experience the new Mobius*, ASI Robotics, viewed 1 April 2021 <https://asirobots.com/platforms/mobius/>.
2. ASI Robots n.d., *This is how we drive*, ASI Robotics, viewed 9 April 2021<https://asirobots.com/platforms/vehicle-control-unit/>.
3. Ayres, A 2017, *Considerations when implementing autonomous haulage in open cut mining*, AMC Consulting, viewed 3 April 2021 <https://amcconsultants.com/experience/dd-considerations-autonomous-haulage-open-cut-mining/>.
4. Bonilla, C & Navarez, E 2018, *Handover Algorithms in LTE Networks for Massive Means of Transport*, Universidad ICESI, viewed 3 April 2021 <https://www.redalyc.org/jatsRepo/4115/411556117002/html/index.html>.
5. Cablefree 2017, *History of WiFi: 1971 to today*, Cablefree, viewed 3 April 2021 <https://www.cablefree.net/wireless-technology/history-of-wifi-technology>.
6. Canadian Mining Journal Staff 2020, *ASI to supply Roy Hill mine with autonomous truck solution*, Mining.com, viewed 1 April 2021, <https://www.mining.com/asi-to-supply-roy-hill-mine-with-autonomous-truck-solution/>.
7. Department of mine and petroleum 2015, *Safe mobile autonomous*

*mining in Western Australia*, Western Australian government, viewed 9 April 2021

<http://www.dmp.wa.gov.au/Documents/Safety/MSH\_COP\_SafeMobileAutonomousMiningWA.pdf>

1. Francis S 2018, *Komatsu autonomous trucks ‘increase productivity by 34 percent’ at Rio Tinto*, Robotics and automation news, viewed 3 April 2021 <https://roboticsandautomationnews.com/2018/09/10/komatsu-autonomous-trucks-increase-productivity-by-34-percent-says-rio-tinto/19069>.
2. Frangoul, A 2020, *Mining looks to electric, autonomous vehicles to reduce costs and improve efficiency*, CNBC, viewed 1 April 2021, <https://www.cnbc.com/2020/07/16/mining-looks-to-electric-autonomous-vehicles-to-improve-efficiency.html>/.
3. Miller, B 2019, *Worldwide Autonomous Haulage System (AHS) Deployment (Part 2 of 4)*, Linkedin, viewed 3 April 2021, <https://www.linkedin.com/pulse/worldwide-autonomous-haulage-system-ahs-deployment-part-miller/>.
4. NERA &METS Ignited 2018 *Staying-Ahead-of-the-Game-Final-Report* Page 28, <https://metsignited.org/wp-content/uploads/2019/11/Staying-Ahead-of-the-Game-Final-Report-WEB.pdf>
5. Newell, D 2018, *‘Driver dies at Rio Tinto Paraburdoo mine after haul pack veers off road’*, The West Australian, 16 August, viewed 4 April 2021 <https://thewest.com.au/business/mining/worker-fatality-at-rio-mine-in-the-pilbara-ng-b88929953z>
6. Peters, J 2019, *The future of autonomous vehicles runs off roads and on to farms, construction sites and mines*, Tech crunch, viewed 2 April 2021, <https://techcrunch.com/2019/07/10/autonomous-vehicle-startups-are-dead-long-live-autonomous-vehicle-startups/>
7. Truecar Adviser 2018, *The 5 Levels of Autonomous Vehicles*, Truecar Adviser 2018, viewed 1 April 2021, <https://www.Truecar Adviser 2018/blog/5-levels-autonomous-vehicles/>.

**Blockchain and Cryptocurrencies**

1. Aratani, L 2021, *Electricity needed to mine bitcoin is more than used by 'entire countries'*, The Guardian, viewed 9 April 2021 <https://www.theguardian.com/technology/2021/feb/27/bitcoin-mining-electricity-use-environmental-impact>.
2. Barbiroglio, E 2019, *Generation Z Fears Climate Change More Than Anything Else*, Forbes, viewed 10 April 2021 <https://www.forbes.com/sites/emanuelabarbiroglio/2019/12/09/generation-z-fears-climate-change-more-than-anything-else/?sh=5ed367a6501b>.
3. Boukhalfa, S 2019, *What are the disadvantages of cryptocurrencies?*, Prescouter, viewed 9 April 2021 <https://www.prescouter.com/2019/11/disadvantages-of-cryptocurrencies/>.
4. Climate Council 2018, *Point of no Return: Crossing a Climate Threshold*, Climate Council, viewed 9 April 2021 <https://www.climatecouncil.org.au/resources/point-of-no-return-crossing-a-climate-threshold/>.
5. de Vries, A 2020, 'Bitcoin’s energy consumption is underestimated: A market dynamics approach', *Energy Research & Social Science*, vol. 70, pp. 1-6.
6. Hatzis, I 2019, *Is Cryptocurrency the Future of Money*?, Finyear, viewed 8 April 2021, <https://www.finyear.com/Is-Cryptocurrency-the-Future-of-Money\_a41914.html>.
7. IBM n.d*, IBM Food Trust A new era for the world’s food supply.*, IBM, viewed 8 April 2021 <https://www.ibm.com/au-en/blockchain/solutions/food-trust>.
8. Partington, R 2021, *What is bitcoin and why are so many people looking to buy it?*, The Guardian, viewed 8 April 2021 <https://www.theguardian.com/technology/2021/jan/11/what-bitcoin-why-many-people-buy-cryptocurrency-financial-regulator>.
9. Reiff, N 2020, *What Are the Advantages of Paying With Bitcoin?*, Investopedia, viewed 9 April 2021 <https://www.investopedia.com/ask/answers/100314/what-are-advantages-paying-bitcoin.asp>.
10. Rogers, A 2017, *The Hard Math Behind Bitcoin's Global Warming Problem*, Wired, viewed 9 April 2021 <https://www.wired.com/story/bitcoin-global-warming/>.
11. Williams, S 2018, *The Basics of Mined vs. Non-Mined Cryptocurrency, Explained in Plain English*, The Motley Fool, viewed 10 April 2021 <https://www.fool.com/investing/2018/03/26/the-basics-of-mined-vs-non-mined-cryptocurrency-ex.aspx>.
12. Zhao, D 2018, *The Rise of Bitcoin & Blockchain: A Growing Demand for Talent*, Glassdoor, viewed 10 April 2021 <https://www.glassdoor.com/research/rise-in-bitcoin-jobs/>.
13. Zile, K & Strazdiņa, R 2018, 'Blockchain Use Cases and Their Feasibility', *Applied Computer Systems*, Vol.23, no.1, p.12-20

**Natural Language Processing**

**Raspberry Pi's**