

# Study skills Assignment - Quinn Dunbar

*by* Quinn Dunbar

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**ACDB4010 – Study Skills  
Assignment**

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## Section 1: Presentation Review

### 1.1 – Presentation overview

The goal of the presentation was for the presenter to describe themselves briefly, as an introduction to their course-mates. The presentation was to contain the following standard points: their likes and dislikes, hobbies, interests, strengths and weaknesses, hometown, and goals. This was to be delivered in a five-minute timeframe.

The presentation contained limited information answering these points, as can be seen in a sample of the slides shown in Appendix A. The presenter's likes include music and LEGO whilst they dislike other genres of music. They consider a lack of introspection to be a weakness, a point that will be explored in the next section.

### 1.2 – Presentation reflection

The presentation suffered from numerous weaknesses as mentioned in the feedback in Appendix B. The presentation itself was poorly designed, with few images and small text, making it unpleasant to look at for the viewers. The direction taken was different to the brief, with additional background information on the presenter given, giving some novelty to the presentation. It was clear the presentation had not been practiced or optimised, evident from the short run time and lack of elaboration upon the very short points on the slides. The presentation overall seemed rushed both in preparation and delivery. The requirements of the brief suffered due to the inclusion of the additional points in the introduction, with the presenter claiming a lack of introspection that was made clear by the lack of information both on the slides, and lack of any elaboration upon these points by the presenter.

### 1.3 – Possible improvements

In future, more time needs to be given to the writing of the presentation, with both the slides and a script being written. This will allow for better time management and highlight any obvious lack of detail in the presentation. More thought needs to be put into the design of the slides, so that pictures are not just on the occasional side, and slides are laid out in a manner that is easy for the audience to follow, to enhance the presentation rather than being barebones. The presenter should also take their time when delivering the presentation, to not rush and clearly deliver the whole presentation.

## Section 2: Skills evaluation

### 2.1 – Higher education skills

The transfer to higher education can be difficult, as it requires students to develop a new skill set and attitude to learning. The most important of these being time management [1], as they are now responsible for their own time, rather than being managed by a school. Linked to this is organisational skills, which are required to manage deadlines and independent learning around other commitments. There is also the requirement to develop skills related to effective study, and independent working [2], again due to these no longer being enforced by a school. Key to these is learning effective note-taking techniques in a way that is efficient and well structured, to allow for use as revision material.

### 2.2 – Transferable skills

There are a multitude of skills that are required at university that are desirable by employers [1]. Perhaps the most pertinent of these being networking and communication skills [2], these are fundamental to efficiency in a workplace, as nobody does everything, and will require someone else's help at some point. Another skill that is important to both university and employment, is the ability to research and write a report [1] on a given subject, by developing this through continuous improvement in coursework, students should be capable of writing reports for projects in their employment.

### 2.3 – Self evaluation

Self-evaluation quizzes can be used to try and breakdown a personality into parts to try and encourage growth and identify strengths and weaknesses. Whilst the Myers-Briggs personality scale is largely considered to be inaccurate [3] given the complexities of people, it can be used to assess one's personality – see Appendix C. A number of personality tests were performed, and all agree on creativity and mental visualisation as being a strong point, with interactions with people being a weakness/ difficulty. Self-assessment quizzes tend to agree with the user's conceptions of themselves, as they are the ones entering the answers, so nothing new or unexpected is discovered. As mentioned above, interpersonal skills are important for both education and employment environments, so a weakness in that area will need to be addressed to ensure success.

### 2.4 – Goals

Short term goals: complete present projects at work, prepare for and pass upcoming maths exams, address money situation



Long term goals: Find a position within my company that suits me, complete and pass with at least a 2.1 this degree, move into a larger residence.

### 2.5 – Action Plan

Goal 1: Increase the network of contacts from zero in other departments within the workplace by the end of the academic year

Goal 2: Have present work projects in a state to be reviewed before February

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Goal 3: Work with 4 departments in the workplace, to find a compelling job role to move into at the end of the apprenticeship.

Goal 4: Practice maths problems weekly, to pass the exams in January 2023.

Goal 5: Live in a house rather than a flat before the end of the apprenticeship.

### Section 3 – Application

#### 3.1 – Backup Strategy

##### 3.1.1 - Backup theory

During university education, there is the need to complete several coursework tasks. In the modern age this often relies on write ups done on computers. Therefore, it is important data is protected to prevent loss of potentially weeks' worth of work. It is important to implement a regular backup strategy, with in-progress files being backed up each time they are edited to an easily accessible back-up, usually cloud based. Differential backups can be completed less frequently but should still occur regularly. These allow for the bulk restoration of files, should the need to restore a system to an earlier point be required. However, differential backups can lead to slow recovery, as they are only stopgaps between whole system backups – these should occur this least regularly, on the order of months as they are very slow to perform and take up large amounts of storage, they do, however, allow for the recovery of an entire computer, with differential backups to bring the restored data up to date.

##### 3.1.2 – the 3-location rule

To ensure backups are not lost in the case of damage to a system, 3 sets of backups should be made and each stored in a different place. The first, and most up to date backup drive is kept with the main device itself, where it can be used to quickly restore any lost data. The second backup drive, that is composed mainly of differential backups, is kept in the same house/ institution as the device is usually, but in a different area from it. This provides convenient backup should the first backup drive also be compromised. Finally, the third backup drive should be kept in a different location entirely, whether another building within a business, or a friend's house for personal backups. Due to its distant from the main system, this will be the least up to date backup, consisting almost entirely of system backups. A quasi-fourth location, the cloud, should also be used, for very important, or presently in use files, this provides easy access to the files, if necessary and can be more robust than local backups. It cannot be treated as a true backup location though, because there are usually strict limitations on upload sizes.

#### 3.2 – Threats to data

There are numerous scenarios that can result in loss of a system's primary drive, when backups would be important to recover what has been lost.

- Theft: this applies mostly to laptops, and if the primary backup hard drive is kept with the laptop, it is likely this will have been taken with it. The second backup drive kept at home or within the institute can be used to restore files to a new system, with the cloud backup of the most used files providing more up to date versions.
- Hard drive failure: this prevents the system from working and will need replacing. The primary backup can be used as it will be convenient and will hold all recent changes and

a backup of the system, though the full restore procedure is likely to take time as there will be many partial backups to work through.

- Fire/flood: this is likely to damage the system and both the primary and secondary backups that are kept in the same place as it. Therefore, the third backup drive would have to be used, however as this is updated the least often, it relies on cloud backup of important and recent files, otherwise there is the risk of losing any changes made after the last backup date.
- Accidental deletion: files can be wiped by accident, due to misnaming, accidentally selecting them when trying to delete something else or during defragmentation or decluttering of a hard drive. In this case, the primary drive, or cloud back up can be used to restore the file, as they are both convenient, and should have been updated the last time the file was changed.
- File corruption: this can happen when transferring files, if the system powers down during saving, or if the hard drive is reaching the end of its life. In this instant the most recent copies saved to the primary hard drive or cloud backup may also be corrupted, if the file's state was not realised before it was backed up. This will then really rely on the secondary backup drive's version of the file. This will lead to loss of progress, as the secondary drive does not feature as recent backups as the primary drive.
- Malware: malware, such as viruses, can delete or corrupt files [4]. Another threat is ransomware, which will encrypt users' files and demand a ransom to decrypt them [4]. The system will need to be remedied of the infection before a backup can be used, for risk of infecting the backup drive too. Because of this, it is possible the primary backup drive will also be compromised, as malware will seek to infect connected drives too. In this case it may be necessary to rely on the secondary backup drive, and any cloud backups of recent files, again with possible loss of progress.

### 3.3 – Time management

Time management is important to being productive. By assigning time to specific tasks, productivity can be maximised, and workload can be reduced as things are not left to the last minute. Sorting a day into blocks allows for discrete work patterns and ensures tasks are performed, see example in Appendix F. A Gantt chart, as shown in Appendix F, assists in creating a discrete work pattern by splitting a task into individual smaller sub-tasks, to which time can then be allocated. This approach can be inflexible though, as it does not allow for overruns.

### 3.4 – e-Portfolio

An e-Portfolio can be used as a development plan to track achievements of an individual, and for them to set and measure goals within. It can be split into three sections, academic, career and personal. An e-Portfolio could be online, or located on the local drive for convenience, but must be backed up regularly.

#### Section 4 – Conclusions

This assignment highlights the lessons learnt from Study Skills. This dictates a need for strong personal discipline and responsibility. Skills need to be developed and documented in the interest of achieving career goals after university. Data must be backed-up and protected. Time must be managed to allow high productivity. It is important to continue to develop on these points by gaining more understanding into the nature of productivity and finding personal career goals that can then be researched to allow one to tailor their projects to give experience in a desired field.

## Appendix A – Samples of presentation slides

**Quinn**  
(i.e. Me)



### Q is for...

|                                                                                   |                            |                                                                                   |
|-----------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------|
|  | Queer                      |  |
|                                                                                   | They / Them                |                                                                                   |
| Non-binary flag                                                                   |                            | Asexual flag                                                                      |
| Gender:                                                                           |                            | I'm just not in to that                                                           |
| <input type="checkbox"/> M                                                        | <input type="checkbox"/> F | <input checked="" type="checkbox"/> ?                                             |

### What is Quinn (in to doing)?

- Sewing
  - Though nothing good enough to show
- Live music
  - Go to gigs several times a year
  - Arctic monkeys next

### Weaknesses

- Not introspective
  - Thinking of things to put on this powerpoint was way too hard
- Leave everything until the deadline
  - If you leave it until the last 5 minutes, it only takes 5 minutes to do

## Appendix B – Presentation feedback

### 6. QUINN DUNBAR

Presentation: Great introduction.

Very interesting approach to self-presentation with the questions who, where, when and how.

Minimalistic style, text poorly distributed.

Larger font would make the text easier to read and fit the space in slides.

Pictures, if used, would help to fill the space in the slides as well and keep the audience more engaged.

Bullet-point text and bullet-point talk. Not practiced enough

Statements shown in slides not really developed in the speech; no story; no good connections between slides.

Too loud mouse clicks; distracting.

Presenter: Confident.

Good control over the voice, proper intonation and tone.

Rushed too much, poor time management (could be significantly improved if the presentation was practiced more).

## Appendix C – Self-evaluation results

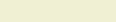
### Results summary

Your results from the IPIP Big Five Factor Markers are in the table below. The table contains a raw score and also a percentile, what percent of other people who have taken this test that you score higher than.

| Factor | Factor label                 | Raw score                                                                         | Score percentile |
|--------|------------------------------|-----------------------------------------------------------------------------------|------------------|
| I      | <b>Extroversion</b>          |  | 25               |
| II     | <b>Emotional stability</b>   |  | 30               |
| III    | <b>Agreeableness</b>         |  | 25               |
| IV     | <b>Conscientiousness</b>     |  | 18               |
| V      | <b>Intellect/Imagination</b> |  | 59               |

Big five personality trait scores calculated by [openpsychometrics.org](https://openpsychometrics.org)

Big 5 personality test from [openpsychometrics.org](https://openpsychometrics.org)

|                                                                                                                                                                                                                                                                                           |                                                                                   |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|
| <b>Introversion (I)</b>                                                                                                                                                                                                                                                                   |  | <b>Extroversion (E)</b> |
| Introversion-Extroversion is your cognitive orientation. Introverts centre themselves inside their bodies. Extroverts centre their attention outside their bodies. <a href="#">[more]</a>                                                                                                 |                                                                                   |                         |
| <b>Sensing (S)</b>                                                                                                                                                                                                                                                                        |  | <b>Intuition (N)</b>    |
| Sensing-Intuition is the first pair of cognitive functions and the preference for how you prefer to be served information; through the five senses or from the subconscious. <a href="#">[more]</a>                                                                                       |                                                                                   |                         |
| <b>Feeling (F)</b>                                                                                                                                                                                                                                                                        |  | <b>Thinking (T)</b>     |
| Feeling-Thinking is the second pair of cognitive functions, the judging functions, which are used to evaluate goals; either through personal values or objective principles. <a href="#">[more]</a>                                                                                       |                                                                                   |                         |
| <b>Judging (J)</b>                                                                                                                                                                                                                                                                        |  | <b>Perceiving (P)</b>   |
| Judging-Perceiving is what pair of cognitive functions you prefer to use; Judging is a preference for a structured lifestyle and the use of feeling and thinking while perceiving is the preference for a flexible lifestyle and the use of sensing and intuition. <a href="#">[more]</a> |                                                                                   |                         |

Myers-Briggs/Jung test from [openpsychometrics.org](https://openpsychometrics.org)

INTP

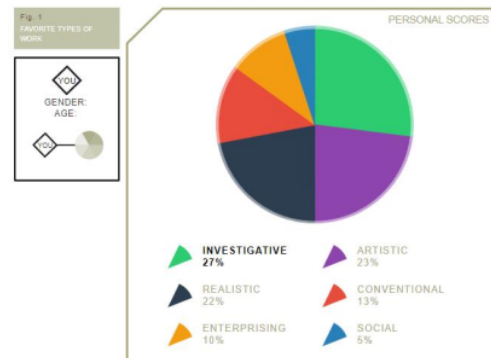
### Your Jung personality type

The descriptions you chose about your behavior indicate that the Personality Type that most accurately describes you is: **Introvert-iNtuitive-Thinker-Perceiver**

- Introverts tend to be reflective, reserved and private. A popular misconception is that Introverts are shy - this is not necessarily so. They draw their energy from their own thoughts and the time they spend alone. Introverts do not need people around them all the time.
- iNtuitives pay more attention to information that is imaginative and original. iNtuitives focus on the future.
- Thinkers make decisions using logic and impersonal analysis. They think with their heads rather than their hearts.
- Perceivers prefer a lifestyle that is spontaneous, flexible and adaptable. They like an environment that is unstructured, and like to keep their options open.

Jung personality test from [www.123test.com](https://www.123test.com)

You preferred 'Investigative' the most, followed by 'Artistic' and 'Realistic'. Your six letter personality type is 'IARCES'.  
Your personal preference is also shown in a graph below.



Career aptitude test from [www.123test.com](http://www.123test.com)

Your scores:

Hands-on: 15

Your ideal work is mainly about engaging with the physical world, for example building, cooking, craft, DIY, working with animals, plants and machines, sports and hands-on therapy. Example jobs include: sports coach, physiotherapist, engineer, LGV driver, builder, mechanic, veterinary nurse.

Information and research, processes and systems: 11

Your ideal work is mainly about researching or managing information. This will include analysis, cataloguing and database management, but may include investigating topics in depth, IT, science, maths, quality control, systems and regulations. Example jobs include: accountant, scientific researcher, investigative journalist, legal assistant, book-keeper, health and safety officer, purchasing professional.

Influencing, negotiating, communicating: 4

Your ideal work is mainly about persuading other people to do something, buy something or believe in your cause. This includes driving others, influencing, persuading, lobbying, motivating, selling. Example jobs include: sales person, recruiter, fundraiser, event manager, estate agent, public speaker.

Creative use of ideas, materials or situations: 13

Your ideal work is mainly about working imaginatively with ideas or designs. This includes jobs in the arts, performing, creative writing, and also visual design, lateral thinking, business creativity, adapting or coming up with new ideas, working in situations where no rulebook exists. Example jobs include: graphic designer, training consultant, wedding planner, public relations.

Supporting people: 4

Your ideal work is mainly about working with people, with their wellbeing and development as the main focus of your work. Example jobs include: teacher, life coach, therapist, nurse, learning and development, career coach.

Making new things happen: 6

Your ideal work is mainly about achieving things with and through other people. This may involve organisational change, planning, managing projects, leadership, creating a new business, shaping teams, getting results. Example jobs include: project manager, team leader, operations manager, sales manager, business developer.

What job would make you happiest? From [www.theguardian.com](http://www.theguardian.com)

## Your Top 5 Strengths Are:

### Innovation (69%):



- \* Actively seek out positions where your ideas will be valued and encouraged.
- \* Be a designer, sales strategies, marketing guru, or customer service rep for new products and ideas.
- \* Search out and request ideas from others to stimulate your thinking.
- \* Constantly think of ideas that can improve businesses and the lives of others.
- \* You enjoy the power of words; punchy ideas stimulate your thinking - focus and play with this fact.
- \* For decisions, you need to know that everything fits together. Be aware and plan for decisions.
- \* If a decision seems to stand out as particularly bothersome, then check if it is an exception before worrying about it.

### Visionary (63%):



- \* Seek to share your visions of the future with others and hear others' ideas, too.
- \* Seek to share your perspectives on company news, meetings, and projects.
- \* Look for (and digest!) news and articles that cover the future plans of things.
- \* Work with or on a planning committee and keep up or review its progress.
- \* Look for roles where you will be pushed to see the future as vividly as possible.
- \* Actively help others to rise above the present and be excited about the future.

### Integrity (56%):



- \* You identify with your ability to keep your commitments - stick to your programs!
- \* Stay off teams that have slackers on board as they will sap your energy.
- \* Do not be forced to rush and sacrifice quality - you value quality first. Help others understand.
- \* You are a self-starter and require little supervision - be sure your supervisors know this.
- \* You excel in positions that require unimpeachable ethics - seek them out.
- \* Continue to ask yourself what new responsibilities you want to assume.
- \* Protect yourself from taking on too much - build up self-discipline and the ability to say 'no'!
- \* Be careful about moving to management - you may prefer to do it yourself and be overwhelmed.

### Teamwork (63%):



- \* You organize your life around your close relationships and should keep them in planning exercises.
- \* Don't move around too much - you enjoy close, strong, genuine bonds and could be shaken up otherwise.
- \* Knowing people's goals helps you bond with them - seek to find out more about the people you meet.
- \* You are loyal, place a high value on trust, and will not betray people - be the person people can come to.
- \* Build genuine trusting relationships with critical people you want around.
- \* Generosity is a strength - be aware, get noticed, and keep it up.

### Faith (63%):



- \* Make efforts to discover your true passion and tie it to your work, no matter what you do.
- \* Align, but don't compromise, your values to that of your organization.
- \* You respect others for learning about your family and community - give them the opportunity.
- \* You give more value to greater levels of service than more money - let others know this.
- \* People may not share your beliefs, but you feel they need to understand & respect - let them.

## Your Bottom 1 Weakness Is:

### Salesmanship (25%):



- \* Make it a point to meet new people every day - strangers energize you.
- \* Be the initial point of contact for groups, organizations, and teams.
- \* Continually work on your system for remembering names and faces.
- \* You prefer to meet, win over, and move on - stick to broad relationships in work. Quantity not quality.
- \* Be careful that your salesmanship doesn't cloud the vision of others - too much influence can be dangerous.
- \* Consistently be a builder of goodwill for your groups, community, or organization.

## Aptitude – Strengths and weakness test from richardstep.com

| Activist | Reflector | Theorist | Pragmatist |
|----------|-----------|----------|------------|
| 2        | 11 1      | 1 1      | 4          |
| 5        | 12 1      | 3 1      | 7 1        |
| 8        | 16 1      | 6        | 9          |
| 15       | 18        | 10       | 14 1       |
| 19       | 21 1      | 13 1     | 20 1       |
| 23       | 25 1      | 17 1     | 24         |
| 26       | 29        | 22 1     | 27         |
| 35       | 30 1      | 28 1     | 31 1       |
| 36       | 32 1      | 38 1     | 34 1       |
| 40       | 33 1      | 39 1     | 37         |
| Total: 0 | Total: 8  | Total: 8 | Total: 5   |

From the Honey – Mumford Learning Style Questionnaire

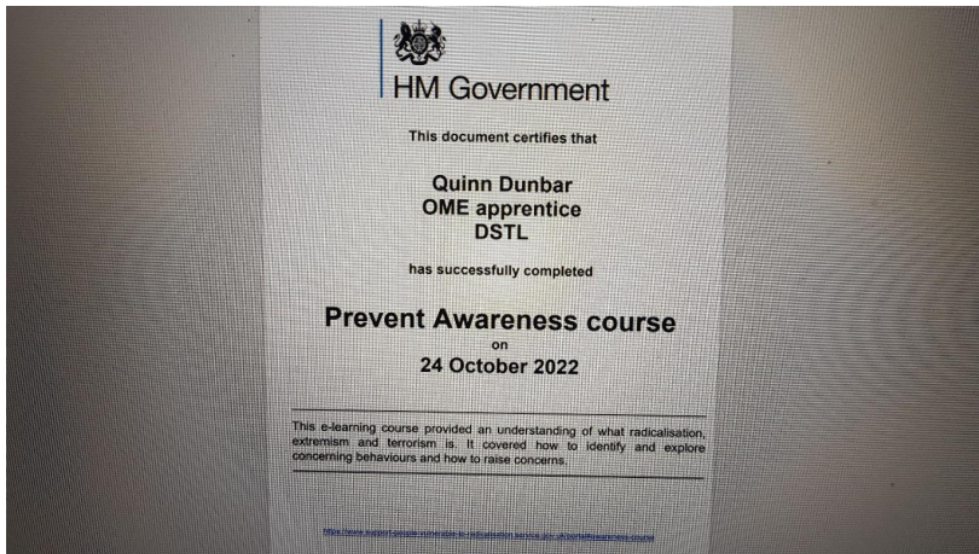
### Self Evaluation of Academic Skills

Thinking about yourself, read and mark each statement out of 5, with 5 being 'Totally Agree' and 1 being 'Totally Disagree'. If a statement doesn't apply to you, leave it blank

| Skill                                                                                           |  |   |   |   |  |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|---|---|-------------------------------------------------------------------------------------|
|                                                                                                 | 5                                                                                 | 4 | 3 | 2 | 1                                                                                   |
| I have the confidence to try new things and express my ideas                                    |                                                                                   |   | X |   |                                                                                     |
| I am self motivated and will persevere with difficult tasks                                     |                                                                                   |   | X |   |                                                                                     |
| I am organised and can meet set deadlines                                                       |                                                                                   |   |   | X |                                                                                     |
| I am able to find information from different resources easily                                   |                                                                                   |   |   | X |                                                                                     |
| I can read complicated texts and understand the general meaning                                 |                                                                                   | X |   |   |                                                                                     |
| I am able to select what is relevant and what is irrelevant in text                             |                                                                                   |   |   | X |                                                                                     |
| I can compare different opinions and decide what are the best grounds for deciding who is right |                                                                                   |   |   | X |                                                                                     |
| I can write things in my own words                                                              | X                                                                                 |   |   |   |                                                                                     |
| I am able to reflect and evaluate my own work                                                   |                                                                                   | X |   |   |                                                                                     |
| I have good strategies for starting a new task/assignment                                       |                                                                                   |   |   |   | X                                                                                   |
| I have good time management skills and can organise my workload effectively                     |                                                                                   |   |   |   | X                                                                                   |
| I am able to make, store and find my notes                                                      |                                                                                   |   | X |   |                                                                                     |
| I am able to manage a range of writing skills appropriately                                     |                                                                                   | X |   |   |                                                                                     |
| I am able to think critically and analytically, and evaluate arguments                          |                                                                                   | X |   |   |                                                                                     |
| I have good memory strategies                                                                   |                                                                                   |   | X |   |                                                                                     |
| I know how to use IT to help academic study                                                     |                                                                                   | X |   |   |                                                                                     |
| I am confident at preparing and delivering oral presentations                                   |                                                                                   |   |   |   | X                                                                                   |

From the academic skills self-assessment

## Appendix D – PREVENT



## **Appendix E – Cryptowall Report**

### **A Brief Discussion on Ransomware**

**Quinn Dunbar**

### Abstract

Ransomware is a method by which cybercriminals intend to extort money out of businesses and individuals. They send legitimate-appearing emails with attachments hiding ransomware Trojans and use these to encrypt a system's data. In order to defend from these users must be aware of how to identify malicious websites and emails, and data must be regularly backed up to prevent serious loss of data in the case of a ransomware infection.

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3.1.2 Targets

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3.3. Should you pay?

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#### Section 5 – Conclusions

References - in main Reference section of assignment

## Section 1 – Introduction

Ransomware is a form of malware that encrypts a system's files. It has been in the news a lot in the last few years, with big name attacks such as the WannaCry attack on the NHS in 2017 [4]. They can cost businesses millions, whether in ransoms, lost productivity, or fines for insecure IT systems. Once ransomware takes over a system, it is likely impossible to recover the encrypted files. However, an awareness of how ransomware (and other malware) attacks originate can prevent the infection from ever starting.

## Section 2 – Malware types

### 2.1 – Viruses

A computer virus is a category of malware that can be hidden within another file and “can replicate and spread after a person first runs it on their system” [5]. Due to the structure of computer viruses, they require a host program to run and require user intervention in order to spread and infect systems. Viruses can cause numerous negative effects on an infected computer such as “destroy data, slow down system resources, and log keystrokes” [5].

### 2.2 – Trojans

A Trojan (or Trojan Horse) is a type of malware, that like its namesake, is disguised as something else, in this case a legitimate file or program. It is through deceiving the user that a Trojan is installed on a computer. Once it has been installed, Trojans can perform a number of operations on the device, most commonly providing backdoors to allow further access by cybercriminals or downloading further pieces of malware to control a device or steal user data [6].

### 2.3 – Ransomware

Ransomware, unlike some other types of malware, is used by cyber criminals to elicit direct payment from the affected user, therefore they tend to target businesses. It leverages the user into making these payments by a number of means, with the most common being by encrypting the users files and requiring payment to decrypt them. Other methods include screen blocking, wherein a full screen pop-up prevents the user from using their computer and can masquerade as a law enforcement agency that has locked a computer due to a committed crime and will require a fine to unlock. Ransomware is usually delivered in Trojan attacks, but can also be installed via “Malvertising, or malicious advertising, is the use of online advertising to distribute malware with little to no user interaction required” [7].

## Section 3 – The Cryptowall Trojan

### 3.1 – Anatomy of Cryptowall

#### 3.1.1 – Infection vectors

Cryptowall, like all Trojans, starts its infection by tricking the user not thinking it is a legitimate file. This is then placed in a Zip-folder attachment to an email that is sent in the guise of a legitimate message. The Cryptowall executable appears as a PDF, and will appear to be “invoices, purchase orders, bills, complaints, or other business communications” [8]. Once the user attempts to open the PDF, the executable will run, searching all connected drives and encrypting the data it finds.

#### 3.1.2 – Targets

Cryptowall, like other ransomwares, targets small and medium business primarily [9], as these are more likely to pay out, given the loss in operation that file encryption can cause. Using phishing emails or other social engineered attacks, the criminals will target members of the business with access to its IT systems, into which the file will run and encrypt the data within.

### 3.2 – Removal of Cryptowall

Although difficult, it can be possible to stop Cryptowall once it has been downloaded onto a computer. By booting your computer into Safe Mode and running an antivirus scan [7], the Trojan can be picked up before it has a chance to activate. Another method involves disconnecting the machine from the internet, as many ransomwares relay information and receive instructions from a remote server, so instructions can be sent to the victim. Severing this connection can stop the program receiving instructions, and hence prevent it executing. Many families of ransomware have decrypter tools made by security companies available on the internet. However, Cryptowall is not one of these families, so the only Decrypter Tool is the one provided[8] – the method by which money is sent to the gang.

### 3.3 – Should you pay

Whilst paying seems like the simplest solution and may even appear low-cost compared to the loss of productivity ransomware can cause, victims should not pay the ransom. As the FBI said in a statement in 2016 "Paying a ransom doesn't guarantee an organization that it will get its data back—we've seen cases where organizations never got a decryption key after having paid the ransom" [10]. There is also the possibility that paying the ransom will mark a business as a good target, and they will be targeted by more malware as time goes on.

## Section 4 – Ransomware Prevention

### 4.1 – Prevention

As discussed in the section 2, malvertising is a difficult to spot transmission vector for ransomware. Cybercriminals also utilise social engineering to make ransomware appear legitimate. Therefore, the main way to prevent a ransomware attack is for the user to be vigilant. This may require training on how to spot phishing emails for example, or suspicious websites. This can involve things such as checking the domain name of websites to see if they are the same as known official sites, this holds true for senders of emails too. Antivirus software can also provide defence against ransomware, as it can block suspicious downloads and websites or stop unauthorised programs from executing.

### 4.2 – File recovery

Once the ransomware attack has begun, it is then too late to recover data, so performing frequent backups of files is the most important form of protection from ransomware, as even if the user were to pay the ransom, there is no guarantee their files will be decrypted. Therefore, the best defence against Cryptowall and other ransomwares is a regular and frequent backup regimen, to minimise files lost.

## Section 5 – Conclusions

Ransomware poses a serious threat to small and medium businesses, where the main cost of an attack comes from loss of productivity and recovery after the attack. Whilst user vigilance is the best way to stop an attack from occurring, the best way to prevent ransomware crippling a business is to ensure backups are made regularly and stored securely away from the main server.

Appendix F – Digital calendar and Gantt chart



| Cryptowall Report Time plan |           |           |           |           |           |           |           |           |             |           |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|
| Task                        | 0:00-0:10 | 0:10-0:25 | 0:25-0:30 | 0:30-0:35 | 0:35-0:40 | 0:40-0:45 | 0:45-0:55 | 0:55-1:00 | 1:00 - 1:10 | 1:10-1:20 |
| Find Sources                |           |           |           |           |           |           |           |           |             |           |
| Read Sources                |           |           |           |           |           |           |           |           |             |           |
| Write 1st section           |           |           |           |           |           |           |           |           |             |           |
| Write 2nd section           |           |           |           |           |           |           |           |           |             |           |
| Write 3rd section           |           |           |           |           |           |           |           |           |             |           |
| Write 4th section           |           |           |           |           |           |           |           |           |             |           |
| Proof read sections         |           |           |           |           |           |           |           |           |             |           |
| Write conclusions           |           |           |           |           |           |           |           |           |             |           |
| Add references              |           |           |           |           |           |           |           |           |             |           |
| Final Proofread             |           |           |           |           |           |           |           |           |             |           |

## Appendix G – e-Portfolio

This PC > Documents > Development Plan

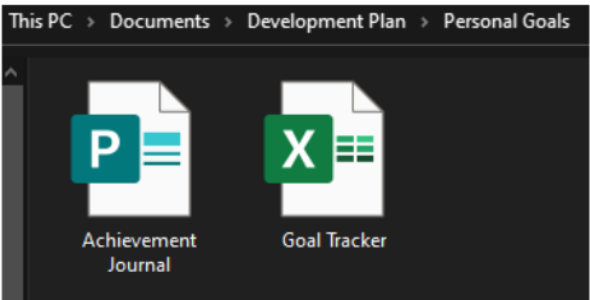
| Name                  | Date modified    | Type        |
|-----------------------|------------------|-------------|
| Academic Achievements | 14/12/2022 16:48 | File folder |
| Employment Files      | 14/12/2022 16:49 | File folder |
| Personal Goals        | 14/12/2022 16:52 | File folder |

This PC > Documents > Development Plan > Academic Achievements

| Name               | Date modified    | Type        |
|--------------------|------------------|-------------|
| Certificates       | 14/12/2022 16:48 | File folder |
| Log of Uni modules | 14/12/2022 16:48 | File folder |

This PC > Documents > Development Plan > Employment Files

| Name                    | Date modified    | Type        |
|-------------------------|------------------|-------------|
| Completed Project Notes | 14/12/2022 16:49 | File folder |
| CV etc                  | 14/12/2022 16:48 | File folder |
| Record of Competencies  | 14/12/2022 16:49 | File folder |



## Appendix H – notes from journal reading

|                                                                                                                                                                                                                                      |                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Complete citation:</b> Author(s), Date of publication, Title, Journal, Volume #, Issue #, pages <i>(is the title clear, accurate and unambiguous?)</i>                                                                            | R. Matyas, J. Selesovsky, T. Musil, 3 February 2012, "Sensitivity to friction for primary explosives", Journal of Hazardous Materials, Vol 213-214 |
| <b>Key Words:</b>                                                                                                                                                                                                                    | Friction, explosive, primary, sensitivity, EOD,                                                                                                    |
| <b>New Words:</b>                                                                                                                                                                                                                    | N/A                                                                                                                                                |
| <b>General subject:</b>                                                                                                                                                                                                              | Looking at sensitivity of primary explosives to friction stimulus                                                                                  |
| <b>Specific subject:</b>                                                                                                                                                                                                             | Testing common improvised and industrial primary explosives for sensitivity to friction when handled.                                              |
| <b>Hypothesis or claim</b> <i>(what the authors say they are presenting that is new?)</i>                                                                                                                                            | A new dataset of friction sensitivity of primary explosives, using the same apparatus, so comparable.                                              |
| <b>Methodology:</b> <i>(Sample number, conditions)</i>                                                                                                                                                                               | All samples prepared then tested in the same apparatus, FSKM-PEX. Friction tester, 15 samples, no repeats.                                         |
| <b>Result(s):</b>                                                                                                                                                                                                                    | A friction sensitivity curve for each substance                                                                                                    |
| <b>Basic conclusions:</b> <i>(what conclusions do the authors draw? Separate fact from their opinion / interpretation; describe for yourself why these data are significant: does it contribute to knowledge or correct errors?)</i> | The explosives could be grouped into 5 sets by sensitivity.                                                                                        |
| <b>Context</b> <i>(how this article relates to other work in the field; how it ties in with key issues and findings by others):</i>                                                                                                  | Allows for comparison of friction sensitivity of explosives, due to standardized test being performed on all.                                      |
| <b>Significance</b> <i>(what does it contribute to the field?):</i>                                                                                                                                                                  | Significant as most measures of sensitivity are incomparable due to being measured using different methods.                                        |
| <b>Important Figures and/or Tables</b> <i>(brief description of the procedure, question it sought to answer, the results and conclusion, your opinion)</i>                                                                           | 3 graphs have been produced showing the sensitivity curves of the explosives at different scales of magnitude.                                     |
| <b>Cited References to follow up on</b> <i>(cite those obviously related to your topic AND any papers frequently cited by others because those works may well prove to be essential as you develop your own work):</i>               | 1] M. Suceca, ' Test Methods for Explosives, 1st edition, Springer-Verlag, NewYork, 1995.                                                          |

|                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                   | [2] F.P. Bowden, K. Singh, Size effects in the initiation and growth of explosion, <i>Nature</i> 172 (1953) 378–380.                                                                                             |
| <b>Writing style and overall structure</b> <i>(is this article well written? is it structured to make it easy to follow?)</i>                                                                                                                                                     | The article is written clearly, with clear sections relating to different parts of the procedure, making extracting the desired information easier.                                                              |
| <b>Other Comments</b> <i>(For example, does the paper clearly identify its contribution to the field? Is the method used an appropriate one? Do the results match the claim? Is the evidence sufficient and convincing? What flaws do you see in the paper? What strengths?):</i> | The authors succeed in performing a standard test across all samples, though they mention the need for uniformity in the crystal structure and granule size of the explosives, but do not actually achieve this. |

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# Study skills Assignment - Quinn Dunbar

## GRADEMARK REPORT

FINAL GRADE

GENERAL COMMENTS

63/100

### Instructor

To prepare for any further assignment, make sure that you read the brief very carefully and follow the instructions/guidance/hints within.

If you addressed all points from the assignment brief and supported your writing with literature the mark would be higher as in what you have submitted I can see skills and capability.

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### Comment 1

avoid 1st person writing

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GRADING FORM: ACDB4011 STUDY SKILLS

QUINN DUNBAR

63

### CRITERIA 1

*(20%) Engagement with Literature Skills*



Literature sources limited to websites. Only two references for skill evaluation. IEEE correctly applied. What is reference 4?

11

### CRITERIA 2

### *(20%) Knowledge and Understanding Skills*



Solid list of HE and employability skills but poor understanding of the scope of this exercise; Student was expected to perform extensive literature search and comment on the findings. Although important skills are described, they are supported by two literature sources. The importance of data backup and potential threats are well understood but no personalised plan for protection of own data is provided.

**13**

#### **CRITERIA 3**

### *(20%) Cognitive and Intellectual Skill*



Professional reflection on ppt. Very good connection between self-evaluation and transferable skills. Self-evaluation not performed with detail.

**12**

#### **CRITERIA 4**

### *(20%) Practical Application Skills*



Presentation, report writing, and note taking skills clearly demonstrated. Good action plan but no SMART analysis of the goals. Sound demonstration of time management and self-organisation skills.

**13**

#### **CRITERIA 5**

### *(20%) Transferable Skills for Life and Professional Practice*



TOC properly structured. No abstract, nor Introduction. Perfect word count. Great attempt to use passive voice and 3rd person writing

**14**