In collaboration with Staffordshire University

Module Title:	Networking Concepts and Cyber Security
Module Code:	COMP40002
Attempt:	First Sit
Group or Individual:	Group Assignment
Assignment Number:	2 of 2
Assignment valid until:	Oct 2023
Assignment Title:	Cyber Security
Weighting:	50%
Assignment set by:	Dr. Anchit Bijalwan
Assignment verified by:	Dr. Hamza Mutaher
Word Limit:	3000

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Date Issued to Students:	TBA
Submission Date and Time:	See Canvas module homepage for submission date
Method of Submission:	Canvas Submission

Learning Outcomes to be assessed:

4. Undertake security risk assessment for a simple IT system and propose resolution advice, being able to identify, analyse and evaluate security threats and hazards to planned and installed information systems or services (e.g., cloud services).

Assessment Brief:

Cyber Security

Problem Scenario:

Security and disaster training is identified as a top Information Technology (IT) required skill that needs to be taught in Information Systems (IS) curriculums. Accordingly, information security and privacy have become core concepts in information system education. Providing IT security on a shoestring budget is always difficult and many small universities are challenged with balancing cost and effectiveness. Many colleges and universities have additional security challenges, such as relaxed working environments, less formalized policies and procedures, and employees that "wear many hats." Therefore, it is not surprising to note that majority of data breaches and other vulnerabilities since 2005 occur in educational settings. So, it is imperative that this segment (i.e., educational settings) be represented in classroom discussions to prepare future employees.
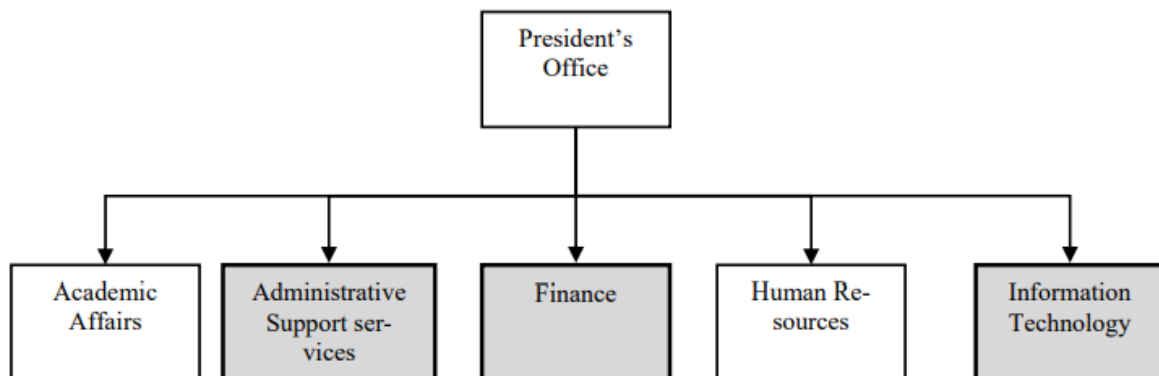
You as a team member have to address about data breach or any other vulnerabilities at university caused by lax security policies and includes an element of social engineering. The data breach at the university resulted in a number of students' losing personally identifiable information and similarly other vulnerability may create drastic problem internally. The resulting aftermath placed a significant financial burden on the university as it was not prepared to handle an information security disaster. This case can be used as a pedagogical tool as it uniquely captured a data breach or any other vulnerabilities in University setting. Readers of the case will identify that at the management level the case raised a number of issues regarding the security culture at the university and management of security function.

There are following 8 main domains within cyber security

1. Security & Risk management
2. Asset Security
3. Security Architecture & Engineering
4. Communication & network security
5. Identity & Access Management
6. Security assessment & Training
7. Security operations
8. Software Development Security

You are as a team member expected to address each of these 8 domains, the weight and importance of each is left up to your group to decide. It is expected that you will use own research for the bulk of the report. All research must be properly cited and referenced. The final structure of the report will follow the following lines.

Report Structure

All report on each element of the assignment is to follow the following report structure:

A. Introduction
   a. Introduction the sub-domain in general and give the reader pointers as to what the report will cover/ contain.
B. Review/ Overview the chosen Sub-Domain
   a. General background of the sub-domain area. Not overly technical.
   b. Specific topics within the sub-domain that you consider to be most important. This is where the more technical content will reside.
C. A Critic of the topic area
   a. Pros of the sub-domain. How the sub domain (and its use or implementation) will benefit the university and/ or its operations (note examples from other business areas can be used)
   b. Con of the sub domain (and its use or implementation) may be detrimental to the university and/ or its operations (note examples from other business areas can be used).
D. Summary
   a. Review the finished document and to highlight any specific areas which the author needs to bring to the reader's attention.

All elements of the assessment must be uploaded on Canvas.

Guidance Notes

a) Do not include your name anywhere on your assignment.

b) Your assignment should be written in a font size of 12.

c) You must include a correctly formatted Reference List on a separate page at the end of your essay. This must only include references to work which you have directly cited in your essay.

d) Report should be in well format and with justified alignment.

e) You must include your accurate word count at the end of your assignment.

f) Use standard margins for the assignment and 1.15 line spacing.

g) Only **Microsoft Word** files should be used for assignments and only **Microsoft PowerPoint** files should be used for Presentation assessments. Please allow time for conversion to these formats if required.

h) When you upload your file for submission you must name the file by your full student number in the following format: 'HANXXXXXXXXX'

i) For essays, please do not include any cover sheets, contents pages or module information in your assignment. Your first page should consist of a title, followed by the first paragraph of your essay.

j) For submissions requested as a report, you may wish to include a cover sheet and contents page

k) The marking scheme that will be used to mark your work is shown at the end of this document in Appendix 1.

Submission Procedure

You are not required to print and submit a hard copy of your work, as all submissions are carried out electronically through Canvas. Please ensure you do not wait until the last minute to carry out your submission; computer problems can happen any time and this will not be accepted as an excuse for late submission. This includes internet connectivity issues. When you submit your assignment, it is in your best interests to save and/or print a copy of your online submissions receipt to prove that you have submitted your assignment on time.

If you feel that you can't submit your assessment on time, you should speak to your module leader who will help you to work out how you can hand-in on time.

If unexpected circumstances which you could not have planned for have happened, you may be able to claim for exceptional circumstances to be taken into account. There is more information [here.](#)

If you have no exceptional circumstances and you do not submit you will fail the assessment. If you submit within 1 week of the submission deadline we will mark your work as late, meaning the maximum mark you

can achieve is the basic pass mark and this will count as your first attempt. If you are taking a re-sit assessment, late submissions will not be accepted.

Please see the Staffordshire university regulations [here](#) for more information

The Maximum word limit is shown on the front cover of the assignment.

You must provide an accurate word count at the end of your assignment. This word count must be placed before your reference list and should include all the written content of your assignment **excluding** the words used in any cover pages, contents pages, titles, sub-titles, reference list and appendices.

In the assignment, in addition to the word limit, you may make sensible use of tables, images of academic models, diagrams, figures and student-created graphics such as Word-Art etc. without penalty up to a maximum of 30% of the stated word limit of the assignment as shown on the front cover. In no circumstances must your overall use of words in these tables, models etc. exceed this maximum 30% limit. **If a marker feels that you have used tables simply to avoid the word count, they may count these words as part of your word count.**

 A sliding scale of penalties for excess length will be imposed according to the amount by which the limit has been exceeded.

1-10%   excess   no penalty
11-20% excess   10% reduction in the mark
21-30% excess   20% reduction in the mark
>30% excess   the work will be capped at a pass i.e. 40%

NB. None of the above penalties will be used to change your mark that is above the pass mark, to one that is below the pass mark. Therefore, the *maximum penalty* for exceeding the word limit will be a reduction to a pass grade.

Please note that students' work is regularly checked to ensure that the stated word count matches to what has been submitted.

Academic Misconduct and Plagiarism

BUV follows Staffordshire University policy on academic misconduct and takes suspected cases of academic misconduct, including plagiarism very seriously. The penalties are severe and can in some cases result in a student not being allowed to continue their studies. Plagiarism can happen in any type of assessment where you are given the questions or tasks in advance.

The Staffordshire University policy on Academic misconduct can be found [here](#): and you are strongly encouraged to familiarise yourself with this.

You will have committed academic misconduct if you commit any of the following:

- [Plagiarism](#)

- [Self-Plagiarism](#)
- [Collusion](#)
- [False Declaration](#)
- [Fabrication or Falsification of Data](#)
- [Bribery or Intimidation](#)
- [Contract Cheating](#)
- [Examination Misconduct](#)

Please see [here](#) for a detailed explanation of these terms or click the individual links above.

All work completed at BUV must be written in English directly by the submitting students. You must not, for example, write your work in Vietnamese, and then use online software to translate your completed work into English. This misrepresents the amount of effort you have put into completing your assessment. The use of online paraphrasing tools to assist with your writing is also forbidden. Any transgressions will be regarded as academic misconduct.

If Academic Misconduct is proven by the university, then typical punishments include:
- The grade for your assessment, being reduced to zero with the right to resubmit.
- The grade for the whole module or super module being reduced to zero with the right to resubmit.
- Failure of the entire level of which you are currently studying with a requirement to re-start the level at the next opportunity
- Failure of the award and/or termination of your studies at the University. Your ability to reapply and enrol again at the university may also be restricted, normally for two whole academic years.

BUV encourages you to refer to appropriate academic sources, as long as you reference these correctly, and do not use too much material from the original source.
You must use the Harvard referencing system for all your assignments, unless you are told otherwise by your Module Leader. If you do not know how to do this, please follow the guidelines given at this web-site address:

http://www.staffs.ac.uk/support_depts/infoservices/learning_support/refzone/harvard/

BUV employs Turnitin to assess all submissions for potential academic misconduct. This software highlights to the examiners in detail where material may have either been copied directly or paraphrased from a source with correct citation.

Appendix 1: Marking Rubric

Criterion (weighting)	0 – 39	40 – 49	50 – 59	60 – 69	70 +
Introduction (20%)	Introduction section is not clearly defined, with no definitive start to the report.	Some evidence of a defined introduction section, which shows an attempt at introducing the reader to the content of the report.	Introduction section are quite well. Report is in well format and justified alignment. Gaps is not clearly mentioned in introduction and information related to other sections are not mentioned.	A good, well-defined, introduction section is apparent which informs the reader of the contents of the report, although this is limited in detail.	An excellent introduction section which is clear and well defined. Introduces the report to the reader well, ensuring that they are informed as to the report. Excellent use of structure to increase understanding of the report.
Analysis of Sections (40%)	Report is a very limited and vague review of some literature – although with no evidence of academic rigour or source selection. Sources are poorly chosen and basic, with no consideration of peer-reviewed sources. Arguments are poorly defined, with no evidence of narrative or joined-up thinking.	Report is more of a general overview of the topics that are covered. Some evidence is shown of a review of existing literature. Sources are poorly chosen with very limited evidence of peer-reviewed sources. Arguments are somewhat defined, with limited evidence of narrative and joined-up thinking.	Report is quite well and discussed the topic with limited details. Findings are not given or clearly mentioned.	A good report which discusses the topics in some detail, rather than being a general overview. A good review of existing literature is evident in the report. Sources are well chosen, with evidence of peer-reviewed source selection. Arguments are defined and structured to ensure that the reader understands the	An excellent report which discusses the topics in a high level of detail, and is clearly different from a general overview of the topics. The review of existing literature is excellent, with clear use of peer-reviewed and academically robust sources. Arguments are exceptionally well defined, with clear review of existing works.

				points that are being discussed.	Evidence of independent thought, which shows understanding and thought over the topic, rather than repeating what is in the literature.
Conclusions **(20%)**	No defined conclusion to the report, which tails off without coming to any form of point.

No evidence of bringing together what has been presented in the literature review. | A defined conclusion is present, however, is largely unrelated to the arguments and discussions from the literature review.

Limited evidence of tying arguments and sources together.

There is some attempt at a conclusion to the arguments. | Application of final results are not mentioned in conclusion. Limitation of finding are also not included. | A good conclusion is presented, which is well defined and relevant to the discussions from the literature review.

There is clear evidence of tying together the arguments and discussions from the report.

There is a conclusion given, which is apparent but limited in terms of independent thought and is largely a summing up of what has already been said. | An exceptional conclusion to the report is presented, which is clear and wholly relevant to the literature review from the report.

There is an excellent evidence of tying together the arguments that are presented in the rest of the report.

There is a clear conclusion given, which is defined and shows an excellent level of understanding of the material and shows evidence of independent thought beyond what is shown in the existing literature. |
| **References** **(10%)** | No real attempt at referencing evidence in the report. | Some, limited, attempt at referencing shown in the report, although with clear | Reference are quite well in format. Some references are not clearly mentioned. | Good attempt at referencing apparent in the report with | Excellent referencing apparent in the report which go beyond the standard and show at |

	Either limited or no evidence of citations within the body of the report. References are provided in the wrong style.	errors shown in style and execution. Limited citations shown in the body of the text, with the formatting of the citations largely correct although with some errors. References in the correct style with some errors shown.		very few errors which are limited in scope. Good citations shown in the body of the text, with the formatting correct with very limited or no errors. References are in the correct style with no, or limited, errors.	least an attempt at picking academically robust sources – evidence of academic rigour at a level above Level 4. No errors apparent in either citations or reference lists – which are entirely in the correct style.
Structure and Presentation (10%)	No clear and coherent structure present in the report. Report presentation is unclear and lacks any form of consistency. Multiple and/or severe presentation errors which limit the reader's ability to understand what is being written. Formatting makes the report difficult to read and follow.	No clear and coherent structure present in the report. Report presentation is unclear and lacks any form of consistency. Multiple and/or severe presentation errors which limit the reader's ability to understand what is being written. Formatting makes the report difficult to read and follow.	Overall structure are quite well. Try to use logical progression from section to section.	Report is presented in a structured way, with a good attempt at logical progression from section to section. Presentation is clear and makes the report easy to read. Presentation is consistent from section to section with some formatting errors which are only minor in nature and do not affect understanding. Formatting is clear and the report is easy for the reader to follow.	Report is presented in a clear and professional structure, showing clear evidence of thought behind the structure of the report as well as the content that is given. Presentation is professional in execution and allows for easy reading and understanding. No formatting errors shown with consistent layout shown throughout the report. Formatting is absolutely clear, with apparent thought given to how to

| | | | | | improve the understanding and ease-of-access on the part of the reader.

Clear reference to the learning objectives that have been identified in the Module Handbook and specified in this document.

Evidence of clear, logical and thorough additional research, going above and beyond the base-level material given in the sessions themselves. |
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