

Singapore Polytechnic School of Computing

Module: ST2422 Ethical Hacking Essentials

Course/Year: DISM Year 1

Assignment: Research and prepare a report on the concept of Singapore's Cyber Law and the Enumerations on Information Gathering.

Total Pages: 3

Instructions

1. You are to work in **groups of 4 members** (Unless there are additional students 5 members are allowed).
2. You are **required to document all your findings for each topic, each commands, with screenshots for the scanning**, as well as **an explanation** for each screenshots in a word document.
3. You are allowed to only use up to **50%** of the materials from the slides in each topics.
4. Font Size for the document for topic headers can be **14 - 16**, while for content can be **12 -14**. Font style can only be **Arial or New Times Roman**.
5. You are **required to create a presentation slide for the presentation**.
6. All group members must be present for the **Presentation**. **Presentation** time for each team is **10 minutes**. **5 minutes** will be allocated for Q&A after each presentation.
7. Exceptions for presentation will be given to students with valid LOA on medical or compassionate grounds. Students in such cases will need to inform the lecturer as soon as possible.
8. The group leader from each group is expected to submit the **documentation and presentation slides** in the **Assignment Submission Section**.
9. You should finish your assignment and submit your documentation and presentation slides by **11:59pm on 01 December 2023 (Friday)**.

A **OBJECTIVES**

The learning objective of this assignment is to reinforce the concepts and principles covered in the first 4 topics of **Ethical Hacking Essentials**. **The topics will be covered in the assignment:**

1. Topic 1: Introduction to Ethical Hacking

2. Topic 2: Network Protocols and Tools

3. Topic 3: OS Enumeration

- Screenshots:
 - What kind of scans can you do to find information related to OS Enumeration?
 - How do the scans benefit you?

4. Topic 4: Network Enumeration

- Screenshots:
 - What kind of scans can you do to find information related to Network Enumeration?
 - How do the scans benefit you?

5. Additional research point for teams with 5 members: (Choose only 1)

- Describe Phase 1 and Phase 2 of Pen-testing stage and explain the methods and tasks that a group of penetration testers should undertake.
- Explain if IPS or IDS can detect OS and Network Enumeration?

B **REPORT REQUIREMENTS**

1. Proper report structure including:

- a. Cover Page
- b. Table of Contents
- c. Topic 1 to 4 research and findings
- d. Topic 3 & 4 will need to include screenshots of scanning done
- e. Additional research point (Only for team with 5 members).
- f. Conclusion
- g. Task Allocation
- h. References
- i. Appendix (If required)

2. Cover page of your report should include:

- a. Module Name and Code
- b. Course and class
- c. Name of students working on the report

3. Documentation work includes:
 - a. Introduction
 - b. Technical write-up including tools/issues/highlights/challenges.
 - c. Completeness and Presentation of Report
4. Task Allocation:
 - a. Breakdown of tasks assigned to each individual group member.
5. Research and Findings:
 - a. **DO NOT COPY** wholesale information that you found on the internet. Instead, you **SHOULD EXPLAIN IN YOUR OWN WORDS**. Very little marks will be awarded for wholesale copying.
6. References:
 - a. If you use any materials in your report, please quote the reference.
 - b. You can refer to any books, journals, news or online resources.
7. Length of report:
 - a. The total length of the report needs to be at least 15 pages long. This does not include Cover Page, Table of Contents and Appendix pages.

B MARKING ALLOCATION

The assessment of this assignment are as follows:

Group Written Report (80 marks):

- Introduction (10 marks)
- Research and findings for each topic (15 marks each topic)
- Completeness and presentation of report (10 marks)

Presentation (20 marks)

- Individual performance (10 marks)
- Group Performance (10 marks)

The lecturer may interview you on your report to ascertain that you did the work yourself. Failure to explain any part of your report may result in a failure for this assignment.

Warning: Plagiarism means passing off as one's own the ideas, works, writings, etc., which belong to another person. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you would have the permission of that person. Plagiarism is a serious offence and disciplinary action will be taken against you. If you are guilty of plagiarism, you may fail this module or be subjected to disciplinary action by the school.