`

Assessment Details and Submission Guidelines	
Trimester	T1, 2024
Unit Code	BN324
Unit Title	Enterprise Cyber Security and Management
Assessment Type	Individual assignment – (Formative Assignment 1)
Assessment Title	Recent Web Application Attacks and Security Principles
Purpose of the assessment (with ULO Mapping)	This assignment assesses the following Unit Learning Outcomes; students should be able to demonstrate their achievements in them. a) Evaluate the cyber security posture of an organisation. b) Analyse the cyber security of an organisation's mission, considering both those inside and those outside the organisation.
Weight	10%
Total Marks	40
Word limit	1300-1500 words
Due Date	**Week-3, 3rd April, 2024**
Submission Guidelines	• All work must be submitted on Moodle by the due date along with a completed Assignment Cover Page. • The assignment must be in MS Word format, 1.5 spacing, 12-pt Calibri (Body) font and 2 cm margins on all four sides of your page with appropriate section headings. • Reference sources must be cited in the text of the report and listed appropriately at the end in a reference list using **IEEE referencing style**.
Extension	If an extension of time to submit work is required, a Special Consideration Application must be submitted directly to the School's Administration Officer, on academic reception level. You must submit this application within three working days of the assessment due date. Further information is available at: https://www.mit.edu.au/about-us/governance/institute-rules-policies-and-plans/policies-procedures-and-guidelines/assessment-policy
Academic Misconduct	• Academic Misconduct is a serious offence. Depending on the seriousness of the case, penalties can vary from a written warning or zero marks to exclusion from the course or rescinding the degree. Students should make themselves familiar with the full policy and procedure available at: Student General Misconduct Policy and Procedure | Melbourne Institute of Technology, Melbourne, Sydney Australia (mit.edu.au) For further information, please refer to the Academic Integrity Section in your Unit Description.

Assignment Overview

Use this link (https://www.mdpi.com/1999-5903/14/4/118) to download the following conference paper (**Deep Learning for Vulnerability and Attack Detection on Web Applications: A Systematic Literature Review)** from the Future Internet 2022 MDPI website. This paper can be used as a starting point for the literature review that you will conduct in this assignment

In this assignment, you will briefly discuss **at least 5** Web Application recent attacks (which happened in the **last 5 years**). Carry out an **in-depth literature review** about **two attacks out of the 5** Web Application recent attacks you have selected**.** Your discussion must address the following points with **proper in-text citations**.

A. Introduction about Web Application security, Web Application attacks and their impacts on the society. Analyse and discuss the significance of web application security for organisations.

B. Variants of Web Application attacks:

     a. State at least **5 resent Web Application attacks** and **briefly** discuss them.

     b. Select **two Web Application attacks** which happened in the last 5 years and discuss them, **with more details**.

     c. Identify and discuss the main reasons for these **two selected Web Application attacks** being successful.

C. Working Mechanism

     a. The working mechanism of these **two selected Web Application attacks**.

D. Mitigation techniques:

     a. Analyse how these attacks, **these two selected Web Application attacks** could be mitigated.

     b. Recommendations on any two mitigation techniques to tackle the Web Application attack and discuss the effectiveness of the selected techniques.

E. Summary:

     a. Summarise the overall contributions of the report

     b. Based on the literature review, highlight the main findings and state your opinion on which attack is more damaging and which mitigation technique is better.

F. References:

     a. Must consider at least five current references from journal/conference papers and books.

Note: Your report must include at least 6 headings of all parts A-F. It is essential to have a proper reference for each attack and mitigation technique you include in the report, with a proper in-text citation.

Marking Criteria for the Formative Assignment 1:

Marks are allocated as described in the following table.

Sections No.	Description of the section	Marks
Introduction	- Introduction about Web Application security, Web Application attacks and their impacts on the society - Analyse and discuss the significance of web application security for organisations	05
Variants of Web Application attacks	- State at least 5 Web Application attacks and briefly discuss them. - Select two Web Application attacks which happened in the last 5 years and discuss them, with more details. - Identify and discuss the main reasons for these two selected Web Application attacks being successful.	10
Working Mechanism	The working mechanism of Web Application attacks Discuss the working mechanism of these two selected Web Application attacks with proper citation	05
Mitigation techniques	- Analyse how could these attacks, selected from part A, could be mitigated. - Recommendations on any two mitigation techniques to tackle the Web Application attack and discuss the effectiveness of the selected techniques.	10
Summary	- Summarise the overall contributions of the report - Based on the literature review, highlight the main findings and state your opinion on which attack is more damaging and which mitigation technique is better.	05
References	References - Must consider at least five current references from journal/conference papers and books. - Must follow IEEE References style	05
	Total Marks	40

Example Marking Rubric for Assignment #: Total Marks 40

Grade Mark	HD 80% + Excellent	D 70%-79% Very Good	CR 60%-69% Good	P 50%-59% Satisfactory	Fail <50% Unsatisfactory
Introduction /5	Introduction is very well written with very clear background, discussion about the impact of Web Application attacks on the society, and the report outline	Introduction is well written with clear discussion about the impact of Web Application attacks on the society, and the report outline	Introduction is generally presented in good fashion, however missing one element such as the impact of Web Application attacks on the society/ the report outline	Introduction is presented briefly with some relevance and missing elements such as the impact of Web Application attacks on the society/ the report outline	Poor Introduction withirrelevant details
Variants of Web Application attacks /10	In-depth and very clear discussion about five variants of recent Web Application attacks	Very clear discussion about five variants of recent Web Application attacks	Generally good discussion about five variants Web Application attacks	Brief discussion about some variants of Web Application attacks	Poor discussion with irrelevant information
Working Mechanism /5	A very detailed and very clear working mechanism of Web Application attacks	Very clear working mechanism of Web Application attacks	Generally good discussion about working mechanism of Web Application attacks	Brief discussion about working mechanism of Web Application attacks	Poor discussion with irrelevant information
Mitigation Tools /10	An in-depth and very clear discussion about Mitigation tools and their effectiveness	Very clear discussion about Mitigation tools and their effectiveness	Generally good discussion about Mitigation tools	Brief discussion about Mitigation tools	Irrelevant discussion about the mitigation tools
Summary /5	A section very clearly summarizing the overall contribution	A section clearly summarizing the overall contribution	Generally good summary of the report	Brief summary of the report with some relevance	Summary not relating to the report
References /5	Clear styles with excellent source of references.	Clear referencing/ style	Generally good referencing/style	Unclear referencing/style	Lacks consistency with many errors.