



INFORMATION SECURITY AND ASSURANCE

(Course Project Specification)

Project Requirement(s)

Implementation: Web Application and Server Security

**Web
Application
Security**



Your team with expertise on Web Application development is tasked to design and develop a small-medium business enterprise web application (eCommerce, Inventory System, Information System or Thesis/Capstone-related Project) implementing industry best-practices and techniques in securing web application systems. Moreover, your team is also tasked to follow secure coding practices and properly implement web server security using security hardening techniques.

Documentation Requirement

Cover Page

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1. Introduction

Provide a brief description and purpose of the developed web application system.

2. Web Application Screen Designs

Provide all available web application user interface (UI) with proper label and description of its purpose or functionality.

3. Threat Model

Provide the threat model design, threats identified, and mitigations plan (refer to your created threat model document).

4. Secure Coding Practices Implementation

Provide the checklist summary of secure coding practices implemented in the development.

5. Server Hardening Techniques Implementation

Provide the checklist summary of the server hardening techniques implemented in the web server configurations.

6. Web Vulnerability Assessment Report (OWASP ZAP)

Provide the checklist summary of the OWASP ZAP vulnerability assessment (Initial and Post) report (refer to the results of your vulnerability assessment activity).

7. Reflection (Individual)

Discuss thoroughly your learnings about performing secure coding practices and its implications on business applications.

Presentation Requirements

Be able to provide a video presentation of the overall course project implementation which highlights the discussion of the web application description, web application features, web application design (actual walkthrough), initial vulnerability assessment report (OWASP ZAP), threat model, secure coding practices and server hardening technique implementations (actual walkthrough), and post vulnerability assessment report (OWASP ZAP).

Submission Requirements

Final Documentation (Printed Copy and Softcopy)

Video Presentation



INFORMATION SECURITY AND ASSURANCE

(Course Project Rubrics)

Term / Academic Year		T2 AY 2025-2026			Date	13/02/2026			
Group Name		ALTAEGIS INFINITE							
Members	Surname, First Name MI. (Alphabetical)			Section	Program Specialization				
	CASTILLO, ALEXANDER			COM231	BSCS-DF				
	MEDIO, CHARLES			COM231	BSCS-ML				
	SALAMAT, TRISTAN JHAY			COM231	BSCS-DF				
	TABERNA, MARK JHOSHUA			COM231	BSCS-DF				
	TALOSIG, JAY ARRE			COM231	BSCS-ML				
Project Component	SO	Unsatisfactory (0)	Needs Improvement (1)	Satisfactory (2)	Proficient (3)	Exceptional (4)	PTS		
Secure Coding Practices Implementation	SO1	Failed implementation of secure coding practices with critical vulnerabilities.	Poor implementation of secure coding practices with many vulnerabilities.	Basic implementation of secure coding practices with several vulnerabilities.	Implementation of secure coding practices with minor vulnerabilities.	Implementation of secure coding practices with no vulnerabilities.			
		Lack of input validation, error handling, and secure data storage.	Inconsistent use of input validation, error handling, and secure data storage.	Use of input validation, error handling, and secure data storage with several issues.	Use of input validation, error handling, and secure data storage with minor issues.	Comprehensive use of input validation, error handling, and secure data storage.			
		No use of secure coding standards.	Limited use of secure coding standards.	Basic use of secure coding standards.	Good use of secure coding standards.	Effective use of secure coding standards (e.g., OWASP, SANS).			
Secure Web Application Development	SO2	Development of a web application with critical security issues.	Development of a web application with many security issues.	Development of a basic web application with several security issues.	Development of a functional and mostly secure web application with minor issues.	Development of a fully functional and secure web application.			
		Lack of authentication and authorization mechanisms.	Poor implementation of authentication and authorization mechanisms.	Basic implementation of authentication and authorization mechanisms with several issues.	Implementation of authentication and authorization mechanisms with minor issues.	Implementation of robust authentication and authorization mechanisms.			
		No use of encryption for data in transit and at rest.	Inconsistent use of encryption for data in transit and at rest.	Use of encryption for data in transit and at rest with several issues.	Use of encryption for data in transit and at rest with minor issues.	Effective use of encryption for data in transit and at rest.			
Security Testing and Vulnerability Assessment	SO3	Lack of security testing with critical vulnerabilities not identified or remediated.	Poor security testing with many vulnerabilities identified and few remediated.	Basic security testing with several vulnerabilities identified and some remediated.	Extensive security testing with minor vulnerabilities identified and remediated.	Comprehensive security testing including penetration testing, static and dynamic analysis.			
		No vulnerability assessment report or mitigation strategies.	Incomplete vulnerability assessment report with few mitigation strategies.	Basic vulnerability assessment report with minimal mitigation strategies.	Detailed vulnerability assessment report with some mitigation strategies.	Identification and remediation of all critical vulnerabilities.			
		No use of automated security tools or manual testing.	Inadequate use of automated security tools and manual testing.	Limited use of automated security tools and manual testing.	Use of automated security tools and some manual testing.	Detailed vulnerability assessment report with mitigation strategies. Use of automated security tools and manual testing.			
Documentation	SO5	Lack of documentation covering project aspects.	Incomplete documentation covering few aspects of the project.	Basic documentation covering some aspects of the project.	Detailed and organized documentation covering most aspects of the project.	Comprehensive and well-organized documentation covering all aspects of the project.			



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Presentation	Unclear and unprofessional presentation of the project.	Poor presentation of the project with many issues.	Basic presentation of the project with several issues.	Clear and professional presentation of the project with minor issues.	Clear, concise, and professional presentation of the project.	
	No use of visuals and demonstrations.	Limited use of visuals and demonstrations.	Some use of visuals and demonstrations.	Good use of visuals and demonstrations.	Effective use of visuals and demonstrations to enhance understanding.	TOTAL POINTS EARNED
	Very poor communication skills demonstrated during the presentation.	Poor communication skills demonstrated during the presentation.	Basic communication skills demonstrated during the presentation.	Good communication skills demonstrated during the presentation.	Excellent communication skills demonstrated during the presentation.	
	Total Score and Feedback					
<input type="checkbox"/> Exceptional	20	Outstanding performance in all project components with minimal to no issues				
<input type="checkbox"/> Proficient	16-19	Good performance in most project components with minor issues.				
<input type="checkbox"/> Satisfactory	12-15	Acceptable performance in basic aspects with several issues.				
<input type="checkbox"/> Needs Improvement	8-11	Below-average performance with many issues.				
<input type="checkbox"/> Unsatisfactory	0-7	Poor performance with critical issues in most project components.				
Evaluated by: Gaudencio Jeffrey G. Romano Name of Course Instructor/Date	Remarks/Comments					



INFORMATION SECURITY AND ASSURANCE

(Peer/Self Evaluation Rubrics)

Student Name(s) <i>All members including the evaluator.</i>	Contribution to Team Effort	Communication Skills	Meeting Deadlines and Reliability	Quality of Work	Collaboration and Teamwork	PTS
	Contributes meaningfully to group discussions.	Demonstrate excellence in written and verbal communication skills	Completes group assigned task(s) on time.	Prepares work in a quality manner	Demonstrate a cooperative and supportive attitude.	
	Using scale 0-4 (0=Unsatisfactory; 1=Needs Improvement; 2=Satisfactory; 3=Proficient; 4=Exceptional)					
CASTILLO, ALEXANDER						
MEDIO, CHARLES						
SALAMAT, TRISTAN JHAY						
TABERNA, MARK JHOSHUA						
TALOSIG, JAY ARRE						
Peer Evaluation Interpretation						
<input type="checkbox"/> Exceptional	20	Outstanding performance across all indicators.				
<input type="checkbox"/> Proficient	16-19	Strong performance with minor areas for improvement.				
<input type="checkbox"/> Satisfactory	12-15	Adequate performance with several areas for improvement.				
<input type="checkbox"/> Needs Improvement	8-11	Below-average performance with significant areas for improvement.				
<input type="checkbox"/> Unsatisfactory	0-7	Poor performance across most or all indicators.				
Remarks/Comments						