Security plan

Semester 6 portfolio

Introduction

In order to provide a secure and scalable enterprise software that complies with standards, it is necessary to define a plan that outlines all of the potential security pitfalls.

As a software developer, I understand that security is an important aspect of any application. To ensure that my application is secure and minimise security risks, I will incorporate security by design into my software development process. This security plan outlines how I can minimise security risks for my application and incorporate best practices in my software development process.

Security is a critical aspect of software development, and I recognize the need to minimize security risks for my application. To achieve this, I will take a proactive approach and incorporate security by design in my software development process. Here are the steps I will take:

Identify Common Security Risks:
To minimise security risks, I will research and analyse the most common security risks, such as OWASP top 10, and how they could impact my application. This will enable me to design my application in a way that minimises the risk of these security breaches.

Incorporate Best Practices:
To prevent security risks throughout my software development process, I will incorporate best practices. This includes using techniques like misuse cases and trust boundaries in the analysis and design of my architecture. I will also implement common techniques such as authentication and authorization to prevent common security breaches. Additionally, I will design for and test steps to mitigate breaches when they still occur.

Prevent Security Breaches:
To prevent unauthorised access to sensitive data, I will ensure that my application has robust authentication and authorization mechanisms. Furthermore, I will encrypt all data, both at rest and in transit, to prevent data breaches.

Design for Security:
I will design my application with security in mind. This involves implementing a layered security approach that includes perimeter security, network security, and application security. This approach will ensure that my application is protected from variouS types of attacks such as DDoS, XSS, and SQL injection.

Test for Security:
To ensure that my application is secure, I will perform regular security testing throughout the software development process. This includes regular vulnerability assessments, penetration testing, and code reviews. I will also ensure that all third-party libraries and dependencies are regularly updated to address any security vulnerabilities.

In conclusion, by implementing security by design in my software development process, I can minimise security risks for my application. I will identify common security risks, incorporate best practices, prevent security breaches, design for security, and test for security regularly. This approach will ensure that my application is secure and protected from various types of attacks.