Security Lab Manager

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ABSTRACT

The Security Lab Manager is a web application that manages vulnerable virtualization machines for users to practice hacking on. Users can start hacking in their own virtual environment. Administrators can view completed exercises and send grades to users.

PROBLEM

Security training is desired in all parts of industry: secure coding for developers, Q/A Testers, and Security Engineers. There are several virtual machines to practice security, but none have a student-teacher model. Students can now easily begin learning security with just this application.

REQUIREMENTS

Req 1 –
Req 2 –

DEVELOPMENT

This application was planned and developed using the Agile framework. DevOps principles of tested driven development, automated test, continuous integration, and continuous deployment were used. The CI/CD pipeline utilized code and web scanners to ensure code is lean and secure.

DESIGN

Diagram Title

RESULT

Screenshots

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sonarqube
docker
OWASP
Open Web Application
Security Project