

BINUS INTERNATIONAL

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Major Computer Science
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**DESIGNING SECURE MOBILE APPLICATIONS WITH OWASP SECURITY
KNOWLEDGE FRAMEWORK**

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Abstract

Security breaches are prevalent today and have increased over the years. Security vulnerabilities found in insecure code is often why security breaches are allowed to happen. Software developers are often not aware of the dangers they might introduce in the feature they are developing and are not educated in secure software development. The study focuses on implementing security activities in the software development life cycle (SDLC) using OWASP Security Knowledge Framework (SKF). SKF as a security framework provides tooling to gather security requirements from the Application Security Verification Standard (ASVS) and Mobile Application Security Verification Standard (MASVS). Requirements that can be used to do thread modelling, security design, secure code implementation and security testing. This study implemented SKF in the during a secure SDLC for the development of CheFeed, a social recipe sharing app. The results show that SKF is a good candidate to use when security is important for an organisation or developer.

Keywords

security, sdlc, owasp, skf, code, programming, security testing, software engineering, asvs, masvs