

Module Three Journal

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CS 305-11883-M01 Software Security 2025 C-4

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Due Date: July 20th, 2025

Security as a Developer

Security plays a crucial role in every aspect of a project, and as a developer it's essential to integrate it proactively from the very beginning. While writing functional code is a foundational expectation, it must also be secure, resilient, and mindful of potential threats.

Addressing security concerns as a developer involves building secure features by design, not as an afterthought. This requires an awareness of common vulnerabilities and a commitment to continuous learning. Resources like those provided by the OWASP Foundation can help with this. OWASP, known for its global open-source community, offers tools and material to help developers write more secure code. Their *Top 10* article outlines the most common and critical web application vulnerabilities like broken access control, cryptographic failures, injection, and many more (OWASP, 2025). By staying informed developers can ensure their code is functional and secure.

Security in Software Stack and Software Development Life Cycle

Security spans both the Software Development Life Cycle and the software stack. It should be considered at every phase of the SDLC, not just during testing or deployment. In methodologies like Agile, where rapid iterations are focused on meeting a client's needs, security must be integrated from the start. Like planning, design, development, testing, deployment, and reviews. Each phase offers the opportunity to identify, mitigate, and prevent vulnerabilities before they become costly or dangerous.

Equally important is understanding where security fits within the software stack. This encompasses the layers of technology a program runs on including the frontend, backend,

databases, and operating system. Each layer introduces its own set of risks. A secure application isn't just built with safe code; it's also deployed on secure foundations.

Ultimately, developers play a key role in ensuring security is not just a single step, but a continuous priority throughout the development process and the software stack.

References

(2025). *OWASP Top Ten*. OWASP. <https://owasp.org/www-project-top-ten/>