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It’s our duty as software developers not just to make sure that our program functions and meets the set goals of the program in terms of functionality but to make sure that the program is secure and safe to use, so any security issue that could affect the program should concern us, developers. We should work proactively to secure the program and prevent any security issue before it’s used and that should start at the earliest stage of making the program. So as a developer, we should make sure that the code follows secure coding practices, manage errors properly, model potential threats, ensure all the dependencies used are up to date, run security tests, and constantly monitor the program for any arising security issues.

Security is included in all the phases of the SDLC from the very beginning to the end, it is considered a shift to the left approach meaning to incorporate security from the start and be proactive in fixing security flaws early on at every phase rather than fixing it at the end, this approach helps with saving money by avoiding expensive reworks when the flaw is found at the end, and helps with production being on time by avoiding unexpected reworks.

To transform DevOps to DevSecOps several security measures have to be put in place, I would first implement the article’s process model of continuous security which has 4 main components secure design and engineering, security testing, security monitoring, security risk management, Every phase we make that the program developed complies with best practices and regulations, After that, we run various security tests and then monitor any security breaches and mitigate it and then keep monitoring it for any potential unaccounted risks.

The plan includes mechanisms to ensure security through continuous integration, delivery, and security and to ensure that the developing team adopts a security-conscious mindset to proactively patch security flaws as they build the program. And it puts an emphasis on security at every step of the developing cycle.