Assignment 3-2: Journal Reflection

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March 23, 2025

**Journal Reflection**

As a developer, I should always code with security in mind and have security as a requirement for my code and not just an afterthought. Solving security concerns could be as simple as writing code a little more differently than usual because it is a more secure way of doing the same thing. Developers may also be responsible for doing some security testing on their code before it even makes it to the code testers because the developers are testing their code as they code, albeit on a much smaller scale than testers. Traditionally security is an afterthought and it’s done at a later stage in the development cycle, but to ensure a secure system it is best to incorporate secure coding principles from the beginning. One way to transform a DevOps pipeline into a DevSecOps pipeline is to create a plan that incorporates security design and engineering within the DevOps framework that helps ensure that the DevOps process is following the correct security principles. You would also need to add security testing and risk management procedures that occur frequently to maintain a standard of security. The article suggests that in order to create a secure DevOps cycle you first need to do “a high-level rapid risk assessment for the new

release and quantify the risks by evaluating the threat models” (Jeganathan 1994). Then the article suggests creating a plan and securing the DevOps tools that the company typically uses. Next, the plan calls for making sure that user access keys, API keys, and other such accounts are properly protected. Lastly, the plan calls for a plan to define infrastructure protection controls and ensure that the principle of least privilege is being used. I would recommend following this plan and maybe making adjustments as necessary because every company is different and may benefit from doing the steps in different orders. The plan is pretty general but it highlights the importance of doing threat assessments, having a plan, and security protocols in place which all help in creating secure software.

**Citations:**

Jeganathan, S. (2019). DevSecOps: A Systemic Approach for Secure Software Development. ISSA Journal, 17(11), 20–27.