Module 8 Journal

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6-24-2024

CS-405

The value of establishing a secure coding standard was a core value of this course. Security is a culture or core value that establishes the foundation of the culture and products one wishes to provide. It is instrumental to implement within the beginning of software development, as it provides many benefits

One of these benefits is that security, as we have learned, is best implemented in non-redundant layers. That way whenever vulnerabilities are discovered, there are other levels of security to protect the system. There are also stages of implementation that can provide a longer lifecycle and minimize the efforts of having to implement design changes in development.

By evaluating core principles, we can establish a proper understanding of the implementations of these known vulnerabilities and exploitation methods. There are levels of impact that these vulnerabilities are known to encompass. There are some that tend to be more costly and time-consuming to mitigate. By prioritizing vulnerabilities with higher risk, we can help optimize time spent. By no means should low risk vulnerabilities be ignored but should bear lower priority in comparison to more dangerous ones.

Zero trust policies ensure that information is protected, and permissions are only granted upon authentication. By no means should anybody have general access to sensitive information within a system. Zero trust ensures that there are only those that are privy to the information who have access to it.

By implementing a security policy that prioritizes security and proactive defense we can see positive impacts to the dynamic to the system. We can understand the cost and time benefits scaled to a large system slightly by seeing time saved on testing modules and later stages of development. Recommendations can include protection from user input, as it can be dangerous if left unhandled properly. Another recommendation I would have for a security policy is to properly initialize variables. Unhandled variables can lead to errors and warnings within a system that can be exploited.