Aamir Rahman

CS405 Secure Coding

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8-2 Journal: Portfolio Reflection

Security is very important. When building software and coding, it’s important to consider security early on. Security standards needs to be followed to make sure code is secure. We need to develop a secure coding standard for a platform and programming languages. We also need to validate input from all of the external data sources including user-controlled files, network interfaces, and command line arguments. The program should deny access by default and the software should be able to identify conditions when access is permitted rather than exclusion. Any software that’s created needs to enforce and implement security policies in place. When compiling any code, we need to make sure to use the highest warning level to compile the code. We also need to implement various layers of security defense mechanisms. We need to make sure error handling and logging is fully implemented properly.

When comes to security, it’s important to understand the risks and have risk assessments. Risk eval is when the seriousness of the risk in relation to the other risks are defined. Risk assessment is analyzing and identifying various hazards that are associated risks within an organization, to implement or reduce the risks. Mitigation is the process of reducing the loss of life and property by lessening the impact of disaster.

Zero trust is the concept of any organization not trusting anyone automatically and allowing access. Zero trust means don’t have trust on anyone automatically without the necessary access and proper requests. Before providing access, the company should verify the person requesting access and make sure granting access is necessary.

There are various implementations and recommendations of security policies. Some of these recommendations include identifying the risks, learning from other orgs, confirm the policy conforms to legal requirements, understand the level or security which will impact the level of risks, make sure all employees receive proper training, and make sure there are penalties in place and the security policies are enforced.