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16 December 2021

CS 405 – 21EW2

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Data breaches are happening around the world every day. Cyber attacks are made possible when security is vulnerable. Leaving security to the end can be disastrous to an individual or even a large corporation. An attack can cause businesses to go bankrupt, potential legal issues, and identity theft. Proper security with defense in depth layers is essential today. Principle number 2 “Keep it secure and simple (KISS) (*Secure coding: A practical guide*. WhiteSource. (2021, October 27).). Keeping designs simple can enhance security. This principle also avoids software from becoming more difficult to understand and secure.

Risk assessment levels helps identify threat levels from 1-5, 5 being the greatest threat level. The assessment also includes the likelihood of an attack and the remediation cost. The most likely and high severity risks should be a guideline to build defenses and prevent attacks.

Zero trust should be followed to bring the highest level of security as a developer. Zero trust relies on continuous verification of trust across every device, user, and application (Kueh, I. S. I. T., & Kueh, T).

Implementation should happen from the start and during development. Following the secure coding standards while developing code will ensure security less vulnerable to a cyber-attack. Creating a defense in depth security layer to protect critical assets, the system, and the data. The defense in depth layer should have a physical security, cloud, perimeter, network, host, endpoint, and app security layers.

References:

Kueh, I. S. I. T., & Kueh, T. (n.d.). *A practical guide to zero-trust security*. Threatpost English Global threatpostcom. Retrieved December 17, 2021, from https://threatpost.com/practical-guide-zero-trust-security/151912/

*Secure coding: A practical guide*. WhiteSource. (2021, October 27). Retrieved December 17, 2021, from https://www.whitesourcesoftware.com/resources/blog/secure-coding/