* Adoption of a secure coding standard, and not leaving security to the end.
  + Some think that the testing stages of the development lifecycle or later are when security is thought about in the development process but it’s simply not true nor it is reasonable. If developers are following coding principles and standards, then security is being thought about and added from the beginning. Standards compliment principles and provide guidance on creating stronger more secure code.
* Evaluation and assessment of risk and cost benefit of mitigation.
  + Using the time and resources to adopt security practices now will be more beneficial than waiting. Utilizing threat modeling and evaluating risk assessments will help to determine where and what requires more security. Although the price of adopting security practices, providing the training, and implementing it could be high, the price of remediation could be higher. Mitigating now could mean less money spent over time.
* Zero trust.
  + Zero trust is a security strategy that adopts the mindset of “trust nothing”. Today’s day and age allows users to access data on mobile and IoT devices which allows more opening for attackers to get in. Because of this, the Zero Trust strategy requires verification for any kind of access. Users of the system may be required to go through multi-factor authentication which could mean verifying their device as well. A log of all who access the system and where they accessed it is kept to better keep track of data being used and allows for a quicker response to possible attackers.
* Implementation and recommendations of security policies.
  + When it comes to implementing any security policies, it is best to take time to figure out what practices best suit what you are protecting. What types of attacks is data or system prone to? What motivations may attackers have when targeting this system? How many layers of security is too much and what types of security programs will work best in this situation? Answering these questions provides a great starting point to figuring out what will work for that particular system although, secure coding principles and standards should be adopted in general since they work for every system.

Resources:

Check Point Software. (2019, November 22). *What is Zero Trust Security?* [Video]. YouTube. https://www.youtube.com/watch?v=1D5mg9an19o

sources: