Module 8 Reflection

Throughout this course, I have improved a lot on my understanding regarding secure coding, including but not limited to ways to prevent injection attacks, maintain good morality, and adopt best secure coding standards. I am very confident that the materials I have learned from this course will serve as a robust building block for my future Computer Science career.

Since the start of this course, we have been guided to follow the best practice for coding and to not leave security behind. Our project is a perfect reflection of the basic principles and coding standards we all should follow when it comes to coding in real life. Adoption of the principles and coding standards is critical not just for us as future developers but also for any IT business to protect employee and user data.

When an incident happens, the first and foremost action teams should take is to mitigate the incident so that it does not spread. Post mitigation, teams should make effort to perform a careful root cause analysis to understand what the cause is and whether prognostic tools could be implemented to prevent future recurrence. Risk evaluation could be tricky based on the severity and the impact of the incident so it should take the RCA into consideration. For example, if the root cause is a widespread bug across multiple departments, then the risk evaluation should be set as high.

Implementing zero trust policy is another important point. Sometimes when we are newly hired by a company, we have a tendency to rely on others to build a strong trust. In general this is a good practice, but when it comes to security, I would highly recommend us reading the safety and security documentation thoroughly. No matter what company we join, the first step would be to protect ourselves from making any security breaches. And as time goes by, if everyone behaves “selfishly” on security, then the whole environment will become secure.

From a business perspective, companies should provide periodic security training to their employees to make sure they are aware of any updated policies and procedures. Annual/biannual audit could be performed to make sure everyone actually follows the policies instead of just blindly finishes the trainings.