Task 1: Solutions Architecture: Plan your security and test security tools [80 Marks]

Theory and diagram will be overseen and helped by Joshua especially the diagram
Kashvir and LUKE

1. 2. The flow of the data in your system. This should include the flow form when a customer logs on until the transaction is sent to the SWIFT system by an employee of the bank. In your diagrams/designs you need to highlight the following:

a. How you will secure the information provided as input

b. How you will secure the data in transit

c. How you plan to harden this portal against:

i. Session Jacking

ii. Clickjacking

iii. SQL injection attacks

iv. Cross Site Scripting attacks

v. Man in the Middle attacks

vi. DDos attacks

You have also been asked to test out two new tools that can assist your team in ensuring that your hosting environment and future mobile application are safe. - Joshua

a. Download and configure MobSF: https://mobsf.github.io/docs/#/; Use this tool to analyse your OPSC7311 mobile app submitted in semester one to test the application. Use ChatGPT to write a short report on your findings to either support the use of the tool or to argue against it. This report will be served to the security team at the next CR (Change Request) meeting as it is up for consideration as a tech tool to be used by the organisation.

b. Download and configure ScoutSuite: https://github.com/nccgroup/ScoutSuite

c. Watch the following video to set up AWS CLI: https://youtu.be/jCHOsMPbcV0

d. Use the provided user account to run ScoutSuite against the provided AWS instance