

Thank you for submitting your individual essay for the Launching into Cyber Security Module

In this essay, you were asked to produce a report to management of Queens Medical Centre on a web-based appointment and scheduling management information system (ASMIS), providing the following information:

Details of the benefits of the ASMIS as well as the potential problems including potential cyber threats to the system.

The report must include at least two UML diagrams. Each diagram should show aspects of the system and a threat modelling technique that can be used to identify and mitigate potential cyber threats.

A background to the UML diagrams and modelling techniques, along with justifications for their use with supporting references.

The Cyber Security technologies that can be used to address the problem, discussing the strengths and weaknesses of the solutions with references to examples in which the technology has been employed.

Overall, excellent work done. To improve your grades further, do take note of the developmental areas highlighted below.

Knowledge and understanding

You thoroughly discuss potential benefits of ASMIS. You employed a combination of Attack trees, sequence diagrams and STRIDE modelling techniques to thoroughly identify potential vulnerabilities and their impact. You thoroughly discuss a number of measures and technologies to address the identified and these include: Regular backup, 'honey pot' server and access -based authorisation.

You also employed class diagram to illustrate how data will be generated and stored within the ASMIS system. You could have used use case diagram to illustrate system overview as part of the description of the system.

Criticality

You demonstrate criticality in your discussion and appraisal of the proposed solution providing counter solutions to limitations identified, which is excellent. However, the solution appears to focus more on network security and less on the software. For example, it is unclear how the elevation of privilege threat within the system will be addressed – ie how do we ensure a non-clinical staff is unable to view clinical report?

Use of relevant sources

Relevant sources have been provided to support discussion which is excellent.

Structure and presentation

The report is well written and very easy to read. While it was a delight to read, the report would benefit from organising the proposed measures around the STRIDE and the Attack tree to make it easier to follow. Perhaps a summary table showing how each threat and the corresponding security measure would help the reader. Also, some signposting such as clearly labelling sections of the report would help the reader.

Academic integrity

Excellent references have been provided to support discussion, which improved the quality and integrity of the report.