

## LCYS Unit 12 OOP application of principles and concepts

### **Tutor Feedback:**

Thank you for submitting your Programming assignment for the Launching into Cyber Security Module.

In this assignment, you were asked to produce a Python code of an implementation of a security solution to mitigate an identified threat, which was discussed as part of your report to management of Queens Medical Centre on a web-based appointment and scheduling management information system (ASMIS).

The learning outcome was to be able to evaluate critically the solutions developed to solve/mitigate security issues and the deliverables for this assignment were:

Python code with comments explaining the code.

Readme file containing description of the solution implemented and instructions on how to execute the code.

Test data used to test the code.

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

Knowledge and understanding of the topic issues under consideration – excellent.

The code has an implementation of a solution to ensure user passwords are secured. The solution is implemented using Python with MySQL and Secure Hash

Algorithm for encryption of user details which processes user password into unidentifiable characters before storage. However, there is no evidence of implementation of role based access control.

Application of knowledge and understanding - excellent.

The implementation logic was sound. You demonstrate excellent knowledge and understanding of Python programming and application of Object Oriented Programming. Implementation of strong password policy is excellent. While the implementation has some very good design principles, this can be improved. For example, there appear not be an account recovery functionality provided to support genuine user recover password. Also, it is also good to see provision made for maximum number of login attempts for the system to exit, which supports genuine users while preventing brute force attacks.

Structure and presentation (as detailed in the assessment guidance) – excellent.

There is a good documentation in lines of code. The README file is could be better. For example, having some screenshots of testing carried out to show both pass and failed use cases. You demonstrate high degree of criticality particularly around storing the password data and the need to secure it further secure against potential threats. You could indicate areas that can be improved in your code to demonstrate criticality. While README file is excellent, the code provided in the README file is not necessary.