Due: Monday, 20 January 2025, 11:55 PM

This assignment involves an individual assessment which must be submitted by end of unit 11.

This assignment accounts for 40% of your total module mark. Remember to save a copy of the final development to your GitHub repositories. The word count is 1,500 words.

The Coding Output

Carrying on from the Full Brief provided in Unit 6, this assignment focuses on the second deliverable, a practical development of your design from Unit 6.

The code should be developed using Python within any IDE. You should submit a fully tested code set. Code should be organised and documented according to Python's PEP-8 style guide (van Rossum, 2001). You should supply evidence of execution, demonstrating how the various aspects of the system work. Your code should also be tested and the evidence of this provided. Testing should be supported using unit tests which you have written, in addition to the use of linters. You should submit a README file that documents how the application can be run.

The final submission builds on the work which you demonstrated during the seminars.

Submission Checklist

- You should submit a fully tested set of code with all required libraries. Code should be well documented with in-line commentary.
- You should supply evidence of execution, demonstrating operation of the key functionality of your code via demos, screenshots and output captures.
- You should include comprehensive evidence of testing including output from test tools (such as linters) demonstrating correct code, security, and functional testing with any remediation activity documented as well.
- You should submit a README file that documents how the application can be run.

Note that the grading criteria are highlighted in the requirements below, to be reviewed alongside the criteria grid (available in the Module Resources section).

Note that academic integrity applies to the demonstrations as mentioned above, and your codes, where all sources can be placed in the README file and/or as part of the code commentary.

The code development will be assessed according to:

- Knowledge and understanding of the topic/issues under consideration (30%).
  - Suitability of the security mechanisms deployed for the attack surface of the domain.

- Application of knowledge and understanding (30%).
  - Implementation of the secure mechanisms in Python.

- Structure and presentation (30%).
  - Adherence to object-oriented coding practices.

- Academic integrity (10%).
  - Reference(s) made to support design decisions. Accurate spelling, grammar, and punctuation in supporting documentation.

Please note that appendices should not be used to extend the core report as reports should be stand alone, complete, and concise, without any appendices. This module also assesses your ability to express ideas succinctly, concisely and with necessary brevity.

Learning Outcomes

- Design and develop/adapt computer programs and to produce a solution that meets the design brief and critically evaluate solution are produced.

Turnitin Originality Check

Before submitting your assignment, it is important to check the originality of your work by submitting your assignment to **Turnitin**.

By submitting your assignment to this tool you will receive an originality report which can be used to check that you have not included other authors work without correct citation. It is important to note that submitting your work to the Turnitin Originality Check tool does not count as a submission of your final work. You must still submit your assignment below.

Academic Integrity and Plagiarism

We take academic integrity very seriously. Academic integrity means acting with fairness and honesty, giving credit to others where you are referring to their ideas or research and respecting the work of others. Plagiarism is defined as: 'Using or copying the work of others (whether written, printed or in any other form) without proper acknowledgement'. Before you finalise your assignment take time to check that all your statements are backed up with supporting evidence, that all sources you use - whether referring to their ideas, quoting directly or paraphrasing - are correctly referenced in the text. Correct use of referencing acknowledges the academic whose work has informed yours, enables the reader to find the sources you have used and demonstrates your ability to find and analyse relevant information.

Failure to properly acknowledge the work of others is an academic offence and may result in your work incurring a penalty or, in the most serious cases, you being removed from the course for academic dishonesty.

If you are unsure about referencing or plagiarism there are useful resources available in the Study Skills Hub which is accessible from the menu on the left hand side. If you are still experiencing difficulties with academic integrity then you can **contact the Study Skills Team** for individualised support.

Please note, a word count penalty applies to this assessment.

If your assessment exceeds the word count limit or range by more than 10% then your awarded grade will be reduced by 10% grade points. For more information please see your **student handbook**.

Not meeting the word count

There is no grade reduction applied if your assignment does not meet the word count range or limit, but to maximise your opportunity to achieve the highest grade possible, you should aim to meet the word count or range as closely as possible.

Submission Instructions

- Submit your saved document below before the end of Unit 11.
- After the deadline, the submission page will be locked.
- If you need to apply for Late Submission, please complete the **late submission of coursework form.**

Add submission

Submission status

Attempt number	This is attempt 1.
Submission status	No submissions have been made yet
Grading status	Not graded
Time remaining	86 days 12 hours remaining
Last modified	-
Submission comments	▶ **Comments (0)**