

Faculty of engineering, Environment and Computing



Module: 6005-CEM Security

Assignment Brief

Module Title: Security	Group / Individual Individual	Cohort Sept	Module Code 6005-CEM
Coursework Title CW1: Security Audit			Handout Date 1st Week
Lecturer Dan Goldsmith			Due Date and Time 14th December
Estimated Time (hrs) 20 Hours	Coursework Type Report		Credits of Assessment 10
Submission Arrangements Via: Learning Platform Marks release expected: None Feedback Method: Written Feedback via LMS Word limit: 1000			

Module Learning Outcomes Assessed

- 1. Critically evaluate a range of encryption and authentication methods for a given set of requirements.
- 4. Critically evaluate the security of an IT ecosystem.

Task and Mark Distribution

In this coursework you are required to perform a security audit of a computer system and write a short (1000 word) report on the results of the audit.

You will have access to a copy of the system, and the source code, you can find details on the learning platform.

The Audit

You will need to perform an audit to find potential flaws in the system. You are free to choose appropriate method(s) for the audit process. This can include (and is not limited to):

- Code Review
- Use of Automated tools
 - Fuzzing
 - Automated Code Review

The Report.

You are expected to write a report *suitable for a technical audience*.

The report should describe the process used to Audit the system, and discuss any security issues found.

It is expected that the report will contain.

- A description of the Audit method(s) used.
- Brief Description of any issues found, and an assessment of their seriousness
- Detailed description of *ONE* issue.
 - What is the problem
 - How Severe is the problem
 - Any Suggestions for mitigation.
- It is expected you make use of the supporting literature, and relevant citations, to support your findings.

Report Structure

A suggested structure for the report would be:

- Introduction
- Audit Method(s)
 - Description and justification for the Audit methods chosen.
- Audit Results
 - Summary of results from code audit.
 - Summary of security vulnerabilities discovered.
- Discussion of chosen vulnerability
 - Detailed description of a single vulnerability
- Conclusions

Marking Scheme

Component	Marks
Introduction and Conclusions	10
Audit Methods	25
Audit Results	25
Discussion of Vulnerability	30
Report Structure	10

Submission Instructions

Please submit your final report in **PDF** format, via the submission link.

Notes:

1. You are expected to use the [Coventry University APA](#) style for referencing. For support and advice on this, students can contact [Centre for Academic Writing \(CAW\)](#).
2. Please notify your registry/course support team and module leader for disability support.
3. Any student requiring an extension or deferral should follow the [university process as outlined here](#).
4. The University cannot take responsibility for any coursework lost or corrupted on disks, laptops or personal computer. Students should therefore regularly back-up any work and are advised to save it on the University system.
5. If there are technical or performance issues that prevent students submitting coursework through the online coursework submission system on the day of a coursework deadline, an appropriate extension to the coursework submission deadline will be agreed. This extension will normally be 24 hours or the next working day if the deadline falls on a Friday or over the weekend period. This will be communicated via your Module Leader.
6. You are encouraged to check the originality of your work by using the draft Turnitin links on Aulana.
7. Collusion between students (where sections of your work are similar to the work submitted by other students in this or previous module cohorts) is taken extremely seriously and will be reported to the academic conduct panel. This applies to both courseworks and exam answers.
8. A marked difference between your writing style, knowledge and skill level demonstrated in class discussion, any test conditions and that demonstrated in a coursework assignment may result in you having to undertake a Viva Voce in order to prove the coursework assignment is entirely your own work.
9. If you make use of the services of a proof reader in your work, you must keep your original version and make it available as a demonstration of your written efforts.
10. You must not submit work for assessment that you have already submitted (partially or in full), either for your current course or for another qualification of this university, unless this is specifically provided for in your assignment brief or specific course or module information. Where earlier work by you is citable, i.e. it has already been published/submitted, you must reference it clearly. **Identical pieces of work submitted concurrently will also be considered to be self-plagiarism.**