

Assignment 2 - Develop a cybersecurity monitoring tool

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Due Mar 28, 11:59 PM

Total mark: 60

Objective: Create a python application that reads a type log file (e.g. network traffic, syslog, auth log, ...), processes the data, and provides useful insights. The application should be modular, using object-oriented principles and various data structures.

Your submission should include a **report** and the **source code**.

Your **report** should highlight the problem and any investigation (which can include network analysis and how to construct class diagrams). It should include an analysis of what is required - in terms of potential insights (e.g. list users or a machines with failed attempts to login) to help secure the system and prevent any intrusion or other cybersecurity hazards.

Your **design** should include a class diagram that shows all potential classes/attributes and methods. You should implement, test and evaluate your proposed solution.

Marking criteria:

- Abstract & introduction: 3
- Investigation: 5
- Analysis: 10
- Design: 10
- Implementation: 10
- Testing & evaluation: 10
- References: 2
- Demo: 10