

Date Assigned: 21 – Nov - 2024

Date Due: 07 – Feb - 2025

Lecturer: Dr. Mohamed Shabbir

Assignment Overview: This assignment will contribute **40%** towards the in-course marks and consists of one group task with individual components as follows:

Group Assignment CLO3:

This section is a **Group** task with an **individual component** that consists of research and proposal on advanced network forensics or cloud forensics and carries **40%** of total assessment marks.

Case Scenario

A recently established company hosted all their services on the cloud. The IT manager of the company is concerned about **monitoring the digital activities and day-to-day transactions** that are occurring in the company. As a forensics specialist in the company, you are required to **research the most advanced tools and techniques that currently exist** in the domain of **network and cloud forensics**. Based on your research findings **propose a suitable tool/technique or methodology that achieves the desired goal** of the IT manager.

Conduction of Research:

Each student must look for **at least 3 recently published articles** (journals or Conferences such as IEEE) in the **domain of advanced network forensics or cloud forensics**. Each student should conduct a **critical review and propose a solution** based on the **overall findings of the research**. Students should use their own words (based on their understanding) in his/her portfolio, with proper academic writing and citations. The article must contain the following items:

- **Title**
- **Abstract**
- **Introduction**
- **Technical Background**
- **Network Forensics / Cloud forensics: Processes, challenges and solutions**
- **Conclusion and Future works**
- **References**

Sample attached (Cloud forensics: Technical challenges, solutions and comparative analysis).

- **Note:** In one group, there shall not be **2 students working on the same topic including the same techniques.**

Guidelines for the submission of the final report

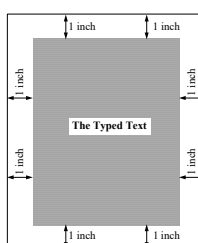
Document the results of your work professionally and systematically, in the form of a **computerised report**. **One (1) softcopy** of the document is to be submitted online on the Moodle platform.

Your completed documentation should contain the following: -

1. Cover page
2. Table of contents
3. Writing of your Group component
4. Conclusion
5. References
6. Appendices if any

Submission requirements

1. Your report must be typed using Microsoft Word with Times New Roman font. You need use to **include a word count at the end of the report** (excluding the title, source code of the program & contents pages) Report should be in 1.5 spaces.
2. The report has to be well presented and should be *typed*. Submission of reports that are *unprofessional* in their outlook (dirty, disorganised, inconsistent look, varying coloured paper and size) will not fare well when marks are allocated.
3. The report should have a one (1") margin all around the page as illustrated below:



4. Every report must have a *front page*. The front page should have the following details: -

- a) Name
 - b) Intake code.
 - c) Subject.
 - d) Project Title.
 - e) Date Assigned (the date the report was handed out).
 - f) Date Completed (the date the report is due to be handed in).
5. **All** information, figures and diagrams obtained from external sources **must** be referenced using the APA referencing style.

MARKING SCHEME

| Group Component (40%) Propose investigation tools and methodologies for advanced digital forensics based on the given scenario (A3,PLO4) | |
|--|--|
| Title & Abstract (16) | |
| Introduction (15) | |
| Technical Background (18) | |
| Methods and solutions (20) | |
| Conclusion & References (15) | |
| In-Class Presentation (16; based on): <ul style="list-style-type: none">- Communication & Style (10)- Flow & Clarity (4)- Q &A (2) | |
| Total (100) | |