Date Assigned: 21 – Nov - 2024

**Date Due: 07 – Feb - 2025** 

Lecturer: Dr. Mohamed Shabbir

**Assignment Overview:** This assignment will contribute 60% towards the in-course marks and consists

of one individual task as follows:

# **Individual Assignment CLO1 & CLO2:**

This section is <u>individual</u> research on the <u>digital</u> forensics procedure and the latest techniques involved in data collection, memory imaging, and hard disk acquisitions (use of tools). This section carries 60% of the total assessment marks.

### **Case Study**

An employee working for a reputable IT company was a key suspect in several malicious and illegal activities over the network. Upon investigation, the employee has strongly denied allegations of involvement in any sort of malicious activities over the company's network. A digital forensics team involving a first responder acquired the memory image from the employee's computer hard disk and passed it to the computer forensics department for further investigation.

As a forensics analyst, your job is to prove or disprove the allegations of the company against the employee.

### **Guidelines for the Report:**

Document the results of your work in a professional and systematic manner, in a way that is admissible in a court of law. Referring to the case above, your report should include the following:-

#### 1) Digital Forensics Procedure (30%)

- Executive summary
- Authorization and preparation
- Evidence handling

### 2) Practical Investigation (30%)

- Analysis and examination
- Reconstruction and reporting
- Conclusion

### 3) Appendix

- Evidence of study
- E.g. screenshots, video, photos (if doing site visiting), survey forms, authorization forms, hardware and software list etc.)

## **Guidelines for the submission of final reports**

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

Your completed documentation should contain the following: -

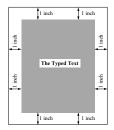
- 1. Cover page
- 2. Table of contents
- 3. Writing of your Individual component
- 4. Conclusion
- 5. References
- 6. Appendices if any

## Guidelines for the submission of video recording

You are required to submit a **short video recording (10 – 15 minutes)** explaining your **findings or results of the case** investigated above. The video recording submission link will be provided by your lecturer.

# **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 title, source code of 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 its outlook (dirty, disorganized, inconsistent look, varying colored 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

**Individual Assignment (60%):** 

#### Explain the procedures of digital evidence collection, preservation, and analysis using best practices and industrial methodologies (C6, PLO2) Perform first responder procedure and forensics analysis using appropriate tools (A5, PLO6) Criteria Remarks 9% Executive Summary and Introduction (15) Authorization and preparation (15) 9% Evidence handling (10) 6% Analysis and examination (20) 12% Reconstruction and reporting (10) 6% Conclusion (10) 6% Citations (in-text referencing, references list) (10) Video recording Presentation (10) 6% **Total (100)**