

Fundamentals of Information Technology Security
CSEC 1110
Lab 04

- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must insure all answers are legal as defined by the class syllabus.
- All parts of your answers must be neat and easy to read.
- Paragraphs are at least four properly constructed English sentences.
- Embedding documents within documents does not work with the D2L Bright Space assignments.
- Plagiarism will not be tolerated.
- Unless noted, all lab sections must be done as unprivileged login.

Lab 04: Authenticating People

- 4.1. Upload each section answer D2L Bright Space Assignment section 4.1 before the due date found in the csec1110a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.
 - 4.1.1. Provide the complete text or XML log entry from a system you control showing "Failure and Critical Error Report" issue. Windows systems will report event id 4875, 4881, 5025, or equivalent. Please label your answer. [8 points]
 - 4.1.2. Provide the source code appropriate to the host with the following attributes. [8 points]
 - 4.1.2.1. The code purpose is clearly identified.
 - 4.1.2.2. All sources of help are identified. This includes people, web sites, and AI program(s).
 - 4.1.2.3. The author name and date
 - 4.1.2.4. The code will extract the log entries for this section into a csv or similar type of file.
 - 4.1.3. Provide the output of the source code showing at least five entries. [8 points]
 - 4.1.4. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]
- 4.2. Upload each section answer D2L Bright Space Assignment section 4.2 before the due date found in the csec1110a.pdf document. Create the logins on your server in the specified sections.
 - 4.2.1. Select one of the virtual machines you build. Provide information about how to provide multi-factor authentication to the host. [6 points]
 - 4.2.2. Provide information about the cost and training requirements of the multi-factor authentication your selected. [6 points]
 - 4.2.3. Provide evidence of successfully logging into the cloud provider service using two-factor authentication. [6 points]
 - 4.2.4. Provide evidence of failing to log into the cloud provide service using two factor authentication. [6 points]
 - 4.2.5. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]
- 4.3. Upload each section answer D2L Bright Space Assignment section 4.3 before the due date found in the csec1110a.pdf document. The text must be readable by the instructor. Submit a Windows or UNIX text file with the appropriate Windows extension.
 - 4.3.1. Identify the country, local jurisdiction having authority, and your legal requirements for each of the following. Include your information source and your obligation for each item. [24 points]
 - 4.3.1.1. You find someone using another login name other than assigned.
 - 4.3.1.2. You find child pornography on a system.
 - 4.3.1.3. You find evidence of personal use on a system.
 - 4.3.1.4. You find evidence of fraud on a system.
 - 4.3.1.5. You find evidence of malware creation on a system.
 - 4.3.2. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]
- 4.4. Upload each section answer D2L Bright Space Assignment section 4.4 before the due date found in the csec1110a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.
 - 4.4.1. Provide evidence of backup of all client files on host1. [4 points]
 - 4.4.2. Provide evidence of backup of all client files on host2. [5 points]
 - 4.4.3. Provide the output of a malware scan on host1. [5 points]
 - 4.4.4. Provide the output of a malware scan on host2. [5 points]
 - 4.4.5. In a paragraph, explain how the backups and malware scans reduce risk on host1 and host2. [5 points]

4.4.6. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]