

CSI 4139 / CEG 4399

Design of Secure Computer Systems

Laboratory #5

Due: November 29, 2018 (written report due December 3, 2018)

Goal: Become familiar with some of the tasks and responsibilities of a security officer.

Details:

Play CyberCIEGE. (See <http://cistr.nps.edu/cyberciege/index.htm>, <https://en.wikipedia.org/wiki/CyberCIEGE>, and https://www.usenix.org/legacy/event/cset11/tech/final_files/Thompson.pdf. From the first link you can download a free evaluation copy which you can use to familiarize yourself with the game and understand its goals prior to the actual lab.)

During the lab you are to get through as many of the game scenarios as you can. Every time you successfully complete a game scenario, show your successful completion page to the TA so that he can note your progress – you will be marked according to the number of scenarios you successfully complete.

Deliverables: You are to complete CyberCIEGE scenarios and write a document.

Document: A security officer needs to balance a number of (often conflicting) objectives.

- (a) Discuss what these objectives are and the kinds of constraints that need to be considered.
- (b) Do you feel that CyberCIEGE does an adequate job of illustrating the difficulties and uncertainties involved in the security officer's job? Why or why not?
- (c) How could the game be modified to more realistically portray some of the security officer's day-to-day activities and concerns?
- (d) Name one thing that you learned from each game scenario that you completed.

Your document should be 3-4 pages in length. Be sure to properly reference any additional material you consulted in answering the above questions.

This laboratory project may be done in groups of up to 3 students. Each student should ensure that s/he gets sufficient time with the CyberCIEGE game.