2019 Fall Term (1) Capstone Experience in Digital Forensics Cybersecurity I CSCI 400 01[16012] (John Jay College)

Complementary writing

Students get to practice writing with the following quick exercises related to the weekly reading assignments:

Chapter 1 Overview

1.1 Compare and contrast the different approaches to characterizing computer security in Sections 1.3 and 1.4.

Chapter 2 Cryptographic Tools

2.1 Briefly summarize what you know about the field of cryptography.

2.2 List seven questions or things you don't know about cryptography. For each question you list, indicate why it might be important to know the answer.

2.3 Describe situations in your life when you might need to use encryption or secret codes. How important would it be to have enough understanding of the subject of cryptography to assess the strength of the code you used?

2.4 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 3 User Authentication

3.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 4 Access Control

4.1 Which do you think is harder to understand: DAC or RBAC? Explain.

4.2 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 5 Database Security

5.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

5.2 Evaluate the chapter you have just read. What more do you think you need to know on this subject, or what aspects of this subject are not clear to you?

Chapter 6 Malware

6.1 List seven questions or things you don't know about keeping a computer system secure from malicious software. For each question you list, indicate why it might be important to know the answer.

6.2 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 7 & Mirkovic Chapters 1-6 Denial of Service

7.1 Prepare a one-paragraph objective summary of the main ideas described here.

7.2 Which of the main topics described here do you think is hardest to understand? Explain.

Chapter 8 Intrusion Detection

8.1 List seven questions or things you don't know about keeping a computer system secure from intruders. For each question you list, indicate why it might be important to know the answer.

8.2 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 9 Firewalls

9.1 Summarize what you know at this point about firewalls. What points or questions would you like to discuss further?

9.2 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 10 Buffer Overflow

10.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 11 Other Software Security Issues

11.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 12 OS Security

12.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 20 Symmetric Encryption

20.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 21 Public-Key Cryptography

21.1 Summarize the cryptographic algorithms available at http://www.bouncycastle.org/index.html. What do you think of the selections they have made? Is this a useful service? Explain.

21.2 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 22 Internet Security

22.1 Briefly summarize what you know about the use of cryptographic techniques for securing Internet protocols

22.2 Describe what you think are the most important requirements for secure use of the Internet.

22.3 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 23 Internet Authentication

23.1 Prepare a one-paragraph objective summary of the main ideas in this chapter.

Chapter 24 Wireless Network Security

24.1 Prepare a one-paragraph objective summary of the main ideas in this chapter