

Name:

Computer Security I: Homework 1

Due August 30, 2010 on compass.

1. What are your goals for this class?
2. What are the top three topics you hope are covered in this class?
3. What programming languages and operating systems are you comfortable working with?
4. How familiar are you with IP networking? Choose the most appropriate.
 - a) I can recite the seven layers of the OSI network model.
 - b) I am familiar with the differences between IP, TCP, and HTTP.
 - c) I have used sockets to create a networking application.
 - d) I have used a network.
5. Ensure that you can access the various communication mechanisms used in class
 - a) Access the cs461 newsgroup. Report on the “magic” word posted by Prof. Hinrichs.
 - b) Access the c461 compass page
6. Classify each of the following as a violation of confidentiality, integrity, availability, or some combination:
 - a) Alice uses Bob's smart phone to post to his facebook account.
 - b) Charles reads his roommate's letter from home on the way back from picking up the mail.
 - c) Bob leaves himself logged onto facebook, and Alice changes his password.
 - d) Diana installs a free game that corrupts her system.
7. Consider two options Ernie has to check his balance and pay bills.
 - a) He uses his bank's web interface to check his balance and pay bills. Identify a vulnerability in this scenario. How could an attacker exploit this vulnerability?
 - b) He calls on the phone to check his balance, and he sends paper checks to pay his bills. Identify a vulnerability in this scenario. How could an attacker exploit this vulnerability?
8. Describe a computer security failure you read about recently. What classes of threats were involved in the attack? Disclosure, deception, disruption and/or usurpation?