CPE-123 Midterm Study Guide

The exam will be closed book and closed notes with 50 minutes for completion. If the exam scores are not satisfactory, I reserve the right to curve the exam.

The exam will consist of three types of questions.
1) Multiple choice – Select the most correct answer from the possible answers (can also include true and false). I can get bored, so make sure to read all multiple choice options.
2) Short answer – Explain a concept or why you would choose a security mechanism or how you would rank security decisions.
3) Programming – Write a short program (in python or pseudocode) to solve a problem.

The exam is cumulative. This means that anything we covered in class, lab, or reading is fair game. The programming will be directly related to the first three labs from the class.

Topics that you will want to review include the following.

1) Introduction/secure thinking
    a. Principles of secure design
    b. CIA triad
2) Identity
3) Authentication
    a. 4 classes of authentication techniques (something I …. with examples)
    b. 2-factor authentication
    c. The benefits and downsides of passwords
        i. Password craking
        ii. Storing passwords
            1. Crypographic hashes
            2. Salts
        iii. Sending passwords
4) Social engineering
5) Physical security including
    a. Pin tumbler locks
    b. Lock picking
6) Web security including
    a. Web browser operation
    b. Same-origin policy
    c. SQLI
    d. XSS
    e. XSRF