

This assignment involves applying Chapter 1 design principles for computer security [1] to the contents of Chapter 2-6. It will require that you carefully read Chapters 2-6.

Task: write a short report that does the following.

1. In these mentioned chapters, find examples that illustrate each principle (an example may either follow or violate the principle). If there are principles that you find no examples for, then find additional examples for other principles.
2. **Discuss and clearly explain** how each example illustrates the principle in question.

Some examples of principles are explicitly identified by the text itself. You can use these, but you will be expected to also find other examples not explicitly identified by the text.

Additional requirements:

- ❖ define all notation and any new terminology used in your report
- ❖ for each example, clearly identify the location (textbook section number and page number)
- ❖ **do not plagiarize** from other sources or students (see the course outline re: plagiarism)
- ❖ screen captures and cut-and-paste of text or images is **explicitly forbidden** (any images or tables used must be your own drawings, while still citing sources for ideas)

Grading scheme: 25 marks as follows.

- 5: professional presentation (formatting, grammar/spelling, attention to detail)
- 5: selection of example uses of principles, with justification of their fit to the definition
- 3: context and background (e.g., regarding the principles, and details surrounding examples)
- 3: self-contained technical explanations (including any new terminology used)
- 3: technical clarity, and accuracy of details
- 3: cross-referencing the principle and identifying the location of the example in the text; for any external citations, use a separate references section and proper citation style
- 3: novelty, insight and understanding (as conveyed to the Instructor) of the material

Format: must be PDF, **11-point font** (maximum 12), no excessive white space or margins.

Length: 5-6 **single-spaced** pages of main content, excluding cover page (if any) and references.

Underlying objective: to motivate students to carefully read and understand each chapter as the course progresses; and to build a concrete understanding of how generic principles are instantiated in specific instances of security mechanisms and systems. It is ***strongly recommended that students make notes for this project each week*** as we cover chapters in class, to find these examples of principles for the project. The short page-length of this project actually makes it more difficult, rather than easier, as you must find a way to embed content worth 25% of your term mark into a short document. *You should expect to get a poor mark if you leave the majority of this to the last week before the project is due.*

[1] P.C. van Oorschot. *Computer Security and the Internet: Tools and Jewels* (Springer, 2020).