**Lab06 – WiD Draft**

COMP256 – Computing Abstractions

Dickinson College

Spring 2022

Prof. Grant Braught

**Introduction:**

COMP 256 is part of the Writing in the Discipline (WiD) thread for the computer science major. Each of the core courses in the major contains a WiD learning goal. By completing all of the WiD assignments across all of the core courses and collecting that work into a portfolio you will satisfy the College’s WiD graduation requirement.

For this lab and several others later in the semester, you will complete the WiD assignment for COMP 256. For this course the WiD learning goal is:

* “Be able to use metaphor and analogy to explain complex technical concepts.”

This seems a suitable goal for this course as metaphors and analogies are forms of abstraction themselves.

**Assignment:**

Complete a polished draft that fully addresses the prompt given below. You will note that this is similar to some of the questions that you answered in Homework #12. So, what you wrote there may be a good starting point for this assignment. Note however, that this prompt requires more detail and a more complete explanation than did the questions in Homework #12.

**In about 400-600 words, develop a metaphor of your own that can be used to explain caching.** You must clearly identify and explain how the elements of your metaphor that play the roles of main memory, cache, registers and ALU. In addition, you must use your metaphor to explain in detail the ideas of cache hits and cache misses and how the concepts of spatial and temporal locality contribute to cache efficiency.

**\*\*\* You must invent your own metaphor. \*\*\***

**\*\*\* You may not use the Plumber metaphor for this assignment. \*\*\***

**Double-Blind Feedback:**

After the due date for this assignment, we will use a *double-blind* feedback process through which you will provide feedback to your classmates on their work and receive feedback on your work. The process is called double-blind because you will not know who you are providing feedback to, and you also will not know who has provided feedback to you. This is a process that is frequently used in academic and scientific publication to help remove bias.

To make this double-blind process work…

**Please do not include your name in the text of the document!**

Instead, when you create the pdf document containing your complete polished draft…

**Name your file using the convention *username*-256WiD-draft.pdf**

Where *username* is replaced by your Dickinson username. That way I will be able to tell which file is yours, but can easily rename them to be anonymous before sharing them with your peers.

**Submission to Your WiD Repository:**

When you have a complete polished draft and converted it to PDF with a filename as given above, you will…

**a. Create a folder named COMP256 in your WiD repository on GitHub.**

**b. Upload your file to the COMP256 folder in your WiD repository on GitHub.**

If you find it helpful, the following screencast demonstrates how to place your document into your GitHub repository:

* <https://web.microsoftstream.com/video/f3f79772-ba76-48f7-8f92-bc4514a85322> (2:13)

There is nothing to submit to Moodle for this assignment.