The artifact I chose is from the CS330 course. It is a block breaker game that we made in the last module of that class. The artifact was, originally, a single level of a block breaker game. The game would load you in straight to the level and do nothing after the blocks have been destroyed. The reason I selected this item for my portfolio is to showcase my ability to create a framework to encase a simple idea. I used OpenGL for the graphics of this project and refactored a large majority of those codebase. The separation of different components helped simplify the tasks that I needed to accomplish while completing the enhancement plan, I had created. The artifact was improved with a main menu with the options to play the first level or go to a level select screen where you can start playing on any level that has been completed previously. I accomplished this by writing a file with the level the player has achieved when terminating the program and reading that same file on program launch. The game also transitions between levels when the current one is completed and shows a clear distinction between levels that are playable and those that are still locked in the level select screen. I do believe this enhancement covers the outcomes that I had set out to complete. I think I have added significant value to this program as it’s now close to an actual game compared to the single level that it was to begin with. I also kept in mind algorithmic principles and best coding standards while working on this enhancement. I do know that I still need to refactor this project more to get it to a true showcase state, which I plan to do before the final push of the ePortfolio. As I was working on this enhancement, I saw myself recreating the same, or very similar, parts of code in multiple places and began to really appreciate the concept of Keep It Simple. There were many sections that I factored out into their own standalone functions which also helped keep some of the other main functions at a slightly more manageable size. When working with OpenGL I also faced a lot of tasks which, while not difficult, were time consuming. Such tasks were creating new levels, which I was able to change a function to create the blocks in desired locations easily, and creating the text for the menu screens, this I also was able to break apart into small more manageable functions that still need a little more work to be honest.