CS 4730: Computer Game Design
Engine Team: Development Tool

Overview
For this assignment, you will be building a development tool. Once completed, you will hand this tool over to your design team so that they can use it build out rooms / levels of your game. This document describes the basic features you need to include, but allows you the flexibility to approach this problem in whatever way you see fit.

Required Features
Your development tool must support the following basic features. You may add more features beyond this if you wish and believe they would be useful.

- *Load Scene*: Your tool should be able to load a scene from a text file. You should discuss this with your level programming team, as they have already implemented scene parsing from files.
- *Save Scene*: Saves the current scene to a text file that can be read in by the game and played. Note that the scene might be missing a couple of elements (like the player character and enemies) for now.
- *Display Scene*: You should be able to look at the scene displayed in a window.
- *Camera Control*: You should be able to move the camera around to look around the scene.
- *Alter Scene*: You should be able to adjust the scene by selecting tiles, changing their id, position, scale, rotation, alpha values, and anything else you might deem useful for your specific game (e.g., is this a platform? Etc.).
- *Tile Snapping*: Your editing tool should have a "snap to grid" feature to make laying out the level easier. Most games will build will have a default tile size, and your sprites should automatically snap to this grid to make aligning sprites easier.
- *Copy and Paste*: Some kind of copy and paste feature should be present to assist with tiling many tiles that are all the same size.
- *Adding new tiles*: Your tool should look for a resources/ folder and display all images present in that folder (and sub-folders). The user should be able to select an image and move it into the scene.

Language / Development Environment
You may develop this assignment in any language / environment you want. Be wary though, it might be easiest to use the engine features you already have built and build this tool on top of those. However, you are not required to do so.

README
When you submit your code for this assignment, please include a text file called README.txt that summarizes how to compile and run your development tool. This file should also contain instructions on how to build a level with your tool.

Turn In
As always, submit your code on Collab.