## Assignment 3: VGP125 - Data and Localization System

Due: Week 8 (Must be completed and checked in by the beginning of class)

## **Project Description:**

- Use your Unity project continued from Assignment 2, or use Lesson 05 Unity Example as a starting point.
- Create a static game data load from a json file using your own gamedata class for setup of a fictional game. For example:
  - o Game setup options
    - starting values
    - avatar choices
  - o set of Level data
    - Level num
    - Enemies to spawn (how many of each type)
    - min/max amount of random obstacles to spawn
    - list of spawn locations (player, enemy, other)
    - etc.
- Use the loaded static data values to set up a level and/or the UI
  - Show that by editing the values in the json, that something will change in the scene and/or UI
- Create some player data that can also be saved and loaded to/from a json file as a persistent data file. For Example:
  - o Player name
  - o Currency
  - o current level id
  - o score
  - o item inventory (list)
- Create a UI for displaying and editing the player data. Use labels on the data entry fields so the player knows what each field is for.
- Create a localization system that can pull data for localization from a spreadsheet and turn
  it into a lookup system for replacing strings in a game with localized text. The spreadsheet
  should have a column for the localization key and then a column for each language
  (include English and at least 3 other languages). Create a test environment with a UI that
  allows you to switch languages and see all of the text change to the other language text
  versions.
- The game needs to be able to pull the spreadsheet data in a live environment at runtime.
- The Player Data Entry UI (mentioned above) should have at least 10 text elements in it that will change when the language switch is triggered.
- If there is any setup that needs to be done to get the system to work, write up a document with step-by-step instructions.
- Feel free to use any code from the previous assignments that you think will help but it is not necessary to complete this assignment

## Marking (40 total):

- Player Data structure and Save/Load (10)
- Game Data structure and Load (5)
- SpreadSheet layout and design (5)
- Spreadsheet import process(5)
- Localization system functionality (5)
- Language switching functionality (5)
- User Interface (5)