Final Project: VGP125 – Data Management System

Due: Week 10/11 (Must be functional and testable by week 10 for playtest and completed by week 11 end of class)

Project Description:

- Create a new Unity project for a 2D or 3D game - feel free to use one of Unity's existing game examples or finished tutorial games. If you are struggling to make sense of any of the existing unity projects available you may use your custom build simple game with player character and shooting enemies from the previous assignments.
- Create or make sure the game has a Main menu, a Save/Load menu, Settings menu or popup screen and at least one Game Scene.
- Create a Data Management system that loads static (game and localization) data to use for game setup. Create or use the built in Game scene to use this data to set up a sample starting game level for this purpose.
- Add the ability to save and load persistent (player) data that can be used to save and restore the game state in the game scene. (use json format for player data)
- The game ui also needs to be able to pull the localization data from a spreadsheet or csv in a live environment at runtime and adjust the ui for language (as in assignment 3).
- Data Formats:
  - o   Json for game data and player data
  - o   spreadsheet or csv for localization data
- The game should be able to have persistence for a player and recreate a default state if the player data is removed (deleted).
- Your game should be able to use your data system to:
  - o   Save/Load Player Data (json)
  - o   Load Game data (json)
  - o   Load localization data and switch languages (csv or google spreadsheet)
- Write up a document detailing how your Data Management System works and, if there is any setup that needs to be done to get the data systems to work, include the step-by-step instructions.
- [Optional] handle multiple players and switching between them with separate data.
- [Optional] There can be an events system to make sure that relevant events are handled between the game itself and the data system to keep the system as modular as possible
- 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 (50 total):
- Basic Game Functionality (5)
- Basic Game UI (5)
- Game Integration/Adjustments (5)
- Data Manager Setup and structure (5)
- Game Data Classes and Loading (5)
- Localization Data Classes and Loading (5)
- Player Data Loading and use in Game (5)
- Player Data Saving (5)
- Modular Data System (5)
- Documentation (5)
- Bonus: (up to 15, Max 50/50)
  - ○   handling multiple players with login (5)
  - ○   special game functionality additions (5)
  - ○   Event System message handling (5)