

Performance Evaluation Report

Assessment Task 3

Issues encountered

There were lots of little issues I encountered while trying to create this system that I didn't really plan for when creating the project brief and in general planning. The first major one was creating the custom editor, it proved difficult, and I couldn't get the layout exactly how I wanted it in the project timeframe. I can use the editor effectively, but I think anyone else who uses it may find it confusing and tricky to navigate. I need to do more research on custom editors to improve it, for now it is still functional.

The save system was done with Unity's "PlayerPrefs" and took me a while to get the save system to work. This involved saving all the slider, dropdown and toggle values for the settings, which wasn't too bad. For the inventory system saving, this proved to be more difficult. My first version of this was to save locations of items and load them back in by location. This system didn't work well at all as the items would get mixed up in the list if they were moved out of order. I came up with a better system to give each item slot and individual item an ID number and save those details instead of location details. Both the settings and inventory saving required a few more changes when I had multiple menu panels with settings and inventory items, which I didn't originally plan for.

Performance

The performance of the system is fine, seeing as this is all UI content most of it is loaded up on awake, and won't impact the performance of a game. Parts of the code could be optimised better, there are a few repeated sections that could be placed into separate functions. Most of the code ended up in the one script, this should probably be broken up and laid out in a better format. It also caused a bit of confusion for me with it being so large. I'm sure there would be better ways to instantiate all the data from the custom editor than the way I currently am, which is mostly just searching through a lot of lists with 'for' and 'if' statements.

When I was researching saving, I found a couple other methods of saving data, they looked complicated and time consuming to understand, so I decided to stick with "PlayerPrefs". I would like to optimise all these issues in the future as I feel this tool could be useful in future projects and to better my coding knowledge.

Required changes

Apart from the coding changes mentioned previously I would like to fix the custom editor to be more user friendly and logical to follow. Some extra functionality would be good for the menu system, give the user more options to add different menu items. I still want to add the Battle Pass functionality to the menu options. Didn't have time to get that up and running.

Finally, I would like to put this into an actual game and link it up to easily adjust settings like volume and screen resolution. As well as collecting items in game and adding them into the inventory system. It is basically set up for just displaying the menus and would require extra work from the user to add real game data into the menus.