LSW Programming Interview

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I really like the nature of what was asked for, the shop system and inventory management is really interesting, but easy to make mistakes. For that reason I started with a super basic mind map looking for key elements of what I need to be careful of.

I started with what I need to interact in the world to know what are the main systems that I have to work with.

Then I make clear what interactions in the shop system I have to be careful and what are the steps to follow in each of them.

One main concern was to be aware of the team's necessities. I wanted to make choices which would facilitate the creative process for the game designers and artists. Because of this, I decided to make the systems using Scriptable Objects in its core, as it can be easily edited directly in the inspector, fastening the prototyping and testing process for non-technical co-workers

So I made an Inventory Manager that holds an inventory Scriptable Object, to make it easier to make changes in the editor. The Scriptable Object, besides holding the currently equipped items and coins, takes care of simple actions like equipping an item, removing, checking if it is already equipped and so on. The inventory Manager is used to save and load inventory.

About the store, it contains a Scriptable Object that informs all the items available for sale. which can be easily modified by designers in the editor. The item also is a Scriptable Object, holding a sprite and a value in coins, if an item has a property, for instance, HP or ATK, the scriptable could be used to inform that as well. All the items in the store can be bought, sold or equipped. The store sends to the inventory the item that the player wants to buy, sell, or equip and the inventory takes care of it and calculates coins.

This is the basics of the system summarized in basically 300 words. I believe that it is a system that perfectly fulfills what was requested, as well as I believe that I managed to give a bit of personality to the prototype.