

## Interview Prototype Explanation

The system consists of 3 key features:

- 1- Inventory System
- 2- Buy/Selling System
- 3- Interaction System

### 1- Inventory System:

The Inventory System consists of a list of element-type Items, that stores the data of the items that the player or NPC has

#### 1. b - Inventory UI:

To show the items, I use ItemUI, InventoryUI, Inventory Slots, and Equipment Slots.

ItemUI: Visual representation of Item.

InventoryUI: Visual representation of Inventory.

InventorySlots: Representation of the Inventory List, that the player can interact with. Using Unity's Events Drag, Drop, Pointer Enter, and Pointer exit the player can move items between slots.

Equipment Slots: An special type of Inventory slot, these slots are the visual representation of the player's current equipped items, it has a required type of Item that can be placed on them. To equip or unequip an item, the player just has to place the item on the slots or removed it. The sprites of the placeholders are replaced for the unequipped or equipped items

### 2- Buy/Selling system:

Both are a list of items, the Buy list represents the items that the player can buy in the shops. The Selling List uses a that keeps a track of the items that the player wants to sell. When pressing the sell button will add the cumulative sum of the prices of the items to the player's gold

### 3- Interaction Systems:

I use a simple box trigger that only interacts with the player. When the player enters the box's area, a sprite with the letter E will appear, indicating that if it presses E, it will open the Trade UI. And if it presses ESC will close it. Right now only the merchants have it, but can be applied to other entities.

There are other features Tooltip for the items and enemies. The ToolTip is a UI that the player can see if it places the mouse over an item in the inventory to see extra information and the enemies are a way to gain gold.

### Interview Process:

My main goal for this interview was to make a good trading system and inventory system because these were the main features. I prioritized the UI because it is the only way for the player to have a comfortable experience using these 2 features.

After that, the player's movement and interaction mechanics are the most important, I use a State Machine to determine the state of the player while playing the game, if it is moving freely or interacting with something. I use Unity's new input system to get the player's input.

And lastly, I added extra features to make the game more entertaining, like a map, enemies, animation, and NPCs.

### My Opinion:

For the first part, I think I did good, in implementing the Inventory system and the Trading system, but during the process, I got sick and I believe that I did some things in a hurry, so I'm not very satisfied with the final result, but I hope that you like it.