

# Documentation for the Cloth Shop task

## Introduction

The "Cloth Shop Simulator" is a game feature that allows players to browse and purchase items using in-game currency. This system consists of several scripts, including the Store Manager, Item Holder, Dialog Handler, Item, and Player Items Manager.

## System Overview

The Store Manager is responsible for managing the entire store. It displays a list of items that players can buy, and it handles the Buy/Sell functionality. Items from the store can be added from the ItemShopList inside StoreManager.

The Item Holder script is attached to each item in the store. It displays the item's name and icon, and it also holds a reference to the actual Item object. For the shop button elements we use ShopItemHolder which inherits from ItemHolder, when the player clicks the Buy or Sell button, it calls the Buy/Sell() function from the Store Manager script, passing the Item object as a parameter.

The PlayerWallet.cs just keeps track of the player's in-game currency..

The Item script holds all the characteristics of an item, including its name, price, type, and icon.

The Player Items Manager script keeps track of all the items that the player currently owns, and it's responsible to equip and display items. For the player inventory, PlayerInventoryManager is responsible for opening and displaying through the UpdateInventoryUI function, each element on inventory has the InventoryItemHolder script, which also inherits from ItemHolder, and call the EquipNewItem from PlayerItemsManager to equip the items.

For the shopkeeper interactions, there is a PlayerInteractionManager script, which looks for any interaction objects near, and once found it tries access DialogHandler on him, which is them responsible to display the dialog window and show random messages to player, on the same windows, player can opens the shop UI and it will work as mentioned above, using ShopItemHolder.

There is also a SmoothCamera script, which just moves the camera to the player with a bit delay, and the PlayerMovement which moves and flips the player.

# Thought Process During Interview

During the interview, I started thinking about the different components that would be required and how they would interact with each other. So I decided to break down the task into individual points to make it easier to manage.

I started by creating the basic essentials first, PlayerMovement and basic shop UI, then I work on the Shop functionalities and Item class, next I created Inventory manager for the player, and also the functions for equipping and displaying his items, then I work on the shopkeeper interaction and his dialog box, and lastly I work on the design, one thing that was quite hard to find was suitable free assets, but in the end I just used a mix of art styles.

## Overall Assessment

I believe my performance during the interview was satisfactory. I surely could have done some things better, mainly the design, which was very inconsistent and not much appealing, also could have added some more animations, I had some external difficult making progress on my first day though, was feeling a bit sick (I probably should have rescheduled :e), I ended up having to do some extra work on second day, but still overall, I was able to break down the task into individual components and create a clear and concise documentation of the system. In terms of the actual implementation, I was able to create all the necessary scripts and ensure that they were all not just functioning properly but also well enough optimized and clean.