Little Sim World Interview Assignment

To begin with, I'll explain my process. After reading the Assignment, I made note of the key features that would be required, namely the movement, inventory and shop systems. I then further divided each of these features into modules for implementation, which resulted in the scripts used in developing the game.

The character movement is controlled with the Arrow keys. The Z, X and C keys are used to interact, skip dialogue and open/ close the inventory respectively. While in the inventory, the Z key is used for equipping, and in the shops, it is used for buying and selling, the SpaceBar switching between these modes. In the shops and Inventory, the X key shows the description of the item currently highlighted. The highlight is also controlled with the Arrow keys.

The inventory system is split into two parts, the Player Clothing System and the Shop Inventory System. Each article of clothing is a Scriptable object containing information about the item, as well as two Prefabs, one for UI Image and one for the GameObject. Player Clothing is a script containing all information about the player's inventory, money, as well as references to the Game Objects that display each article of clothing. The Shop Inventory is a series of Scriptable Objects that contain a list of what items are sold in a respective shop, which is later fed into the interaction system to display and open the shops.

The system so far seems robust, and I haven't found any bugs in my testing. However, improvements could be made, such as including animations for the clothing, implementing inventory scrolling, and creating different sprites for UI and GameObjects. I would also later implement a minigame to allow the player to earn more money, as well as a proper tutorial.