

Explanation

Part 1

This system uses WASD movement. To initiate the clothes shopping, the player walks up to the shopkeeper and presses E. I began the prototype by finding proper art assets. Since this required a specific art aesthetic and camera perspective, it was important to me to find assets that fit the theme. I then worked on basic character movement, which was straightforward. I went on to work on the shopkeeper dialogue and player shopping.

The player has three clothing items that can be bought, sold, and equipped: the hair, chest, and legs. Each item type has a set price and several different options. There is also a preview window since the actual player may not be visible. If the player selects an option that can be bought, only the “Buy” button will show, as it is not relevant to show the “Sell” and “Equip” buttons. It should also be noted that the player’s default clothing (Hair 0, Chest 0, and Legs 0) cannot be sold. The different item types use Unity’s prefab variants system. This was incredibly helpful for programming, because, once the main layout was complete for one item type (e.g. the hair), there could simply be another prefab variant made for the other item types.

Once the main features were finished, I built out the shop environment using the Tilemap system. This consists of three layers: the ground, the walls, and the furniture. Each of these are given their own sort order. The executable build can be found under the “Builds” folder on GitHub. As far as areas of improvement, the amount of gold is able to go negative. I would also have liked to include some sound assets and animations to make the environment feel more alive.

Part 2

For the second part of this project, I began by finding some outdoor environment assets that roughly matched the aesthetic of the indoor environment. The exit to the outdoor area can be

found at the bottom of the clothing shop, and the door into the store can be found below the green sign. The outdoor environment features a park, roadways, the clothing store, and some alleys behind the store. The player is prevented from going out of the bounds of the scene by a fence. Once the outdoor environment was built, most of the development time went into creating a smooth transition between Unity scenes.

It is important that the player has the same clothes on outdoors as he/she does indoors. To this end, I used the PlayerPrefs as a save feature to store the clothing assets. It stores the names of the sprites for the player's current hair, chest, and legs. When the next scene is loaded (either outdoors or in the store), I find the corresponding sprites by name through a Resources folder. Because it is slightly awkward to find a sprite that is a child of a sprite sheet in the Assets folder, it is necessary to find all of the sprites in the resources folder and then filter them down by name. These sprites are then attached to the player.

As far as areas of improvement, I would have liked to add more NPCs to make the outdoor area feel more alive, such as a hot dog vendor or park attendant. I would have liked to add some multi-angle animation to the player character. Also, building the environment was very fun! This was a great opportunity, and I look forward to hearing your thoughts!

Sincerely,

Alex Robbins