

Task overview

The main goal of the task was the development of a simple interactable environment in which the player would move, gather money and interact with the shopkeeper. The first main goal which I considered doing is creating such an environment with the appropriate assets. The assets used are a mix of different assets available on the asset store which were linked in the task. The environment was created using tilemaps with different layers in order to achieve a top down look on the game with some elements of depth. Next was the player movement which consists of tracking the standard keyboard inputs w,a,s,d and arrow keys. The player can move in any direction granted it isn't blocked by an obstacle. By using different sprite sheets which contain different clothing for the player model I made preset animations for the players main body model along with the respective parts in which different clothing fits (outfits and hats). Since all of the sprites are named the same the *ReSkinAnimation* script makes sure that the currently rendered piece of clothing along with their respective animations get played appropriately. The main script for interacting with the environment is the *Interactable* script. It allows the player to interact with different objects when a button is pressed (E in this case). Finally, the main idea was to develop a simple item system which could then be used in a shop or inventory. The main class is *Item* and it is abstract. Following there is a *ClothingItem* class which represents different clothing. The main usable classes are *HatItem* and *OutfitItem* which are derived from *ClothingItem* and can instantiate different types of hats and outfits since they are scriptable objects. The last step was the creation of a shop and inventory. The shop contains different types of created items which the player can buy with coins. The coins are gathered by interacting with chests. When an item is purchased it gets sent to the inventory which is visible on the left side of the shop. If a player clicks on the item while in the shop he gets asked whether or not he wants to sell it and the selling price is displayed. When an item is bought it can be equipped by opening the inventory away from the shop and clicking on the item. Since the inventory keeps track of currently equipped clothing when the player sells the item that is equipped it automatically gets unequipped from the player model. The final touch was adding the *AudioManager* component which provides different options for playing audio such as background music or sound effects. Although I believe this is a good starting system with more work it can be tuned to allow more flexibility when adding different features such as multiple vendors.