2D Character Customization

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I have never done 2D Character Customization before and because of this to start making this project I searched how most of people usually do it, after having a direction on how to make it I started searching 2D Assets that matched with what I was thinking, found free character packs on Unity Store but I didn't find anything for the map, so I decided to search it on itch.io where I find the External Pack and Modern Interiors Pack.

With the game assets downloaded I created the project on the specified Unity version (2021.3.2f1) that was downloading while I was searching for the assets. I've started importing the character asset packs that I found and creating a simple Idle and Walk animation for the character, after that I started separating the good pieces of clothing that I wanted the player to buy and equip on the character, with all that done I've started to code a way to equip each part of the clothes on the character, for that I've just changed the actual body part of the character for the new.

After that I've realized that some clothes doesn't should be equipped with others, so to define that I've created Scriptable Objects for Head, Torso, Hands, Pants and Legs that would define what will be equipped and

what pieces can go together. After that I've started to make the shop UI, and created a system to load the items automatically from the Resources folder in the right category, so when I want to make new clothes I just have to add a new scriptable object on the right folder and it will appear on the shop.

With the shop UI done I've started to create a way to equip the character and save equipped items, so for equipping I store the item on EquippedItems class, not letting items that can't be equipped together be equipped and saving this EquippedItems on a Json file, all equipped items need to have a green background on the shop UI so after equipped I've needed to recheck the items on the category of the equipped items, than the new equipped item will have the background color changed to green and the others back to white color.

With the items now being able to be equipped I created a system to buy items, that I just store if the item is bought or not on a PlayerPref, and created a price value in the items ScriptableObjects, after that I just verify if the item has been bought when loading items on Shop UI, if it isn't I block the button and add a new button to buy, populating with the price of the item. When you buy the item it subtract the price of the item in your coins and update the item Player Pref (I could use a Json file to save it as well, but decided to use other way of saving data, and let it easy to change in the future if needed).

After the shop is almost done I've started to do the map so I imported the Assets Pack for the map that I've chosen and started creating the game map using Tilemap, after the map was created I created a simple script to the player to walk (Imported Cinemachine so I can easily control the camera to follow player or stay in a position), control animations, and interact with things, to interact I detect when I enter and leave a trigger collider of an object that have and Interaction script, and in the Interaction Script I define if the interaction is by button press or enter area, if it is button press I show a button icon on player head and the player needs to press this button to interact, if it is a enter area when the player enter the trigger collider it will interact automatically.

With the map, the player movement, and interaction I've created an NPC on the shop and put the Shop UI on scene, so when I "interact with it" the Shop UI opens, I also put empty buckets on map that have infinite coins so when interacted the player will gain 50 coins. After that I realized that I was forgetting the sell item button, to do that I just needed to set the item bought player prefs and verify if the item was bought on the equipped items, so when I sell an item the EquippedItems automatically unequip it if it's equipped.

After that I've just modify the shop ui to torso items show when it already has pants or not, created a simple main menu, pause menu and UI to show the coins and added some music's and sound effects. All Sprite Packs,

sound effects and music's credits are on the main menu, all the project code was made by me.