Milo's New Wardrobe Documentation

Author Axel Leonardo Rosado López

The first idea in my mind was to make a clothing match challenge, in the idea a family member says the player that should by some clothes and gives it money and you start in the room of the player and you need to see the things that the plate likes (this are random every run) and go to the mall and try to match the clothing with the players likes, this can bring happiness of sadness to the player, and with more happiness the room gets cleaner (at the beginning was dirty and messy) representing that clothes can help you fight depression in some way, but i pivot to managing game when you were the shopkeeper and attend the clients yourself, clean the messy shelves that the people leave, try to carry the clothes to puts it in place and helping clients to find the right size, and of course being the cashier.

And for starters required features specified in the Interview, would use different systems to work starting for the player movement, I use the new input system that unity provides by default, and implementing the needed actions maps for the UI and the Gameplay, and can be play with keyboard and controller, besides this, I programed an Input Reader this script uses the new input system interfaces and works like a middle API between the new input system and the components that needs to use it, this is to have another layer of control over specific inputs or actions and because the input reader is a scriptable object that only creates once, can be use for every single script that requires it by just referencing on a serializable field and subscribing to the respective events.

The player movement was pretty much straight forward with a Rigidbody2D velocity based movement with an arbitrary speed variable, and a simple animator with a 2D blend tree for the animations. The other task was that the player can interact with the environment in any form not strictly specified, so this was simple too, and was made by using an Interface called IInteractable that only implements a single function (others if required), and by implementing this in every object that can be interact you can trigger the function and the object handles its own specific interaction.

For the player to interact with the object I created a script called Interactor that received as reference the Input reader (to be capable of receiving inputs) and a interaction radius to define at what distance the player can interact, and by using the Interact event that the "E" key triggers, it just triggers a Physics2D.OverlapCircle function to search the first closest object and check with a specific layer for interactable objects for the interface to trigger the Interact method, also i want to show a UI to the player when is near to a Interactable object to guide it, this was implemented by other Interface called IPoppableUI that have 2 method to show and hide the UI, and in the interactor component is used a circle collider 2D with the

trigger mode to call this method when enters and exits in the range of the collider (is the same radius as the variable in the interactor).

Then I continue with the shop system, and for this I implement a simple Stats System to track the Money of the player using scriptable objects and the use of dictionaries (For this i used a plugin that helps me visualize and modified the dictionary through the editor) and addition to that an Inventory System with the setup of items that was also programed with scriptable objects, this was that because you can now have multiple inventories to store the clothes or items for example a shelf that has 2 clothes only and other shelf can have 6 or more, basically to any thing that need to store items can have their own inventory instance.

For the shop system the idea was to have this inventory with the available items need it and dynamically load the images based on the numbers that th inventory has and the purchase availability, also buying them eliminates it form the shop inventory and adds it to the player inventory and decreases the money stat from the player, and the same logic works for selling items but reversed.

For the clothing customization the idea was that you can go to a dressing room and when interacts with it a UI pops up showing you the items in your own inventory and you can selected and equipped if you want, and there will be a little preview when you can see you with that on, and to holds that sprites in the caracter i think to ways one if that you create a empty game object inside the player visuals to appear and move accordingly to the player and flipped when the direction changes, the other can be used when the sprite is using the sprite skinning, that work like a rigged 3D model but for 2D deforming the mesh of the sprite, but creates bones, and those bones are game objects that referenced a sprite so is just a question of swap it.

For my performance in the task I can say that it would be better if I had more time, but the task wasn't a problem for me, the time really was, it was a simple implementation and I know the logic to make it.

Things that i would finish if i have the time:
● Finish the shop system
● Finish the clothing system
● Build a proper level for the shop
● Implement some comments for the NPCs or the player thoughts
● Implement a menu level and transitions
● Make a proper gameplay loop and pause