

CLOTHROPOLIS

Test Game Documentation

By Eddie Piña

INDEX

1.0 - Player Controller	3
2.0 - Inventory	5
3.0 - Cloth (Or Item)	6
4.0 - Slots	7
5.0 - Shop	8
6.0 - ClothController	9
7.0 - Conclusion	10

Systems Functionability:

1.0 - Player Controller:

The Player Controller works with one script that I made. I make a Tile by Tile movement, this means the player movement are like the classics RPG movement systems.

I could use other methods to detect the Inputs but this system works very well to me.

When the player press one of the movement keys (WASD) this will be launch a function that wait for a specified delay before move the player of his current Tile position. This is for make the pose alternation.

Also this player has a check system for colliders and Interactable objects. With a Raycast2D, the player can detect constantly what is in front of him.



When detects an Interactable object (NPC or some object like Signs) that will display an Interactive signal (Hand). And if press 'Space', this will launch a function that comprobates what sort of Interactable object it is, and this will launch its own public function that executes determinated things.



(If you press 'Space' on the Store door, you will be moved to he Store scene.

2.0 - Inventory:

For this system, I made a simple but cute UI using premade assets.



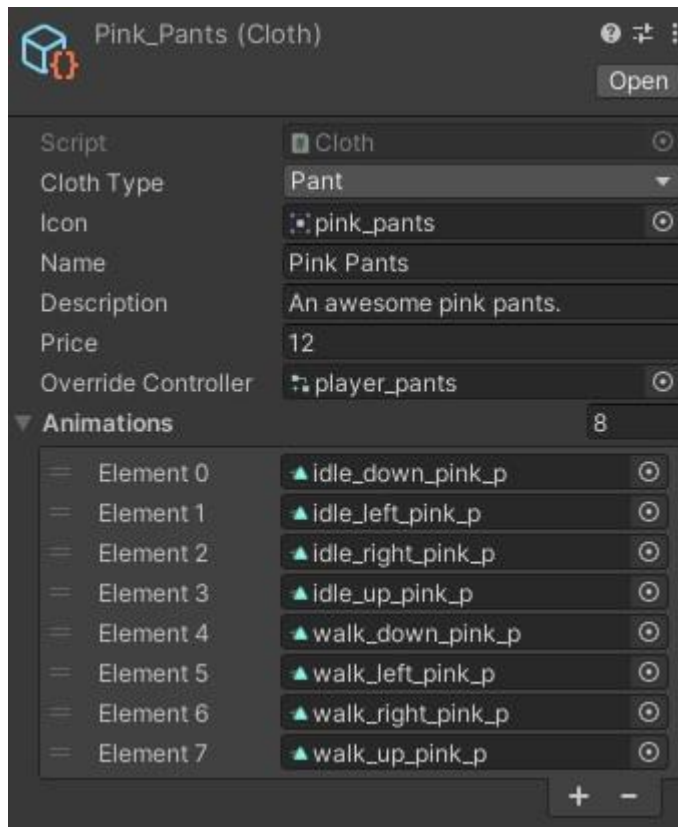
The inventory have 8 slots. You can fill them with items (Cloths and Pants). Also, In the Inventory you can use the items and sell them.

When you use an item. Calling a function called Use(Cloth) that are in the Slot Script, the item will appear in the left slot of the Inventory. The item will be placed on his specific slot. The item have his type of item (Shirt or Pant), and with this, I can check the compatibility of each slot.

Previous version of this system uses Stacks. But later I decided to remove this.

3.0 - Cloth (or Item):

This is an ScriptableObject that almacenates all of the data of the Cloth, the Type (Shirt or Pant), Name, Description, Preview Image and the Animations of the cloth.



4.0 - Slots:

The Slot System, works with 4 public functions and structs.

-AddItem(Cloth)

This receive the cloth data and set on this Slot. Returns true.

-RemoveItem(Cloth)

This receive the cloth data and remove of this Slot. Returns False.

-UseCloth()

Send the cloth data to the Cloth Controller and Remove the Item from the Slot.

-SellCloth()

Send the price data of the Cloth and add this value on the Player's currency. Finally, Remove the item from the Slot.

5.0 - Shop:

The shop is an good system that communicates with the inventory and the currency of the player.



When it's launched, the Shop set the prices of the items. And when you have the enough currency to buy one of them. The Shop System call a function of the Inventory called `BuyItem(Cloth)` and send the item data to one of the empty slots of the Inventory. I mean, check if the Inventory has an empty slot available, then, set the article on this slot.

6.0 - ClothController:

In the game, there are two ClothControllers.

-Shirt

-Pants

Also, each item have his own animations. And each Controller have his own AnimatorOverrideController. When SlotScript.UseCloth() is called, the ClothController receive the call of his Use() function. This replace the OverrideController animations with the animation of the item that will be using. And replace all of the data like the preview image.



(Player using the black outfit).

7.0 - Conclusion:

I feel very lucky to participate on this Interview. Was a good challenge and each thing of I do making videogames and programming other things, brings me a lot of learnings.

About the systems, I made other ways to develop this kind of codes, but for the time that I had to develop this test, I decided to make this way that I coded. (I mean specially the Slot System, but this works very well!).

I did not remember that I will need to make the Sell System for the items. When I was reading my book, on the list of things to do, I noticed that, and make this simple sell system that works on the Inventory, maybe would be good to make this on the Item Shop.

Thanks for your attetion and give me the oportunity!

- Eddie Piña.