Developer notes - Shopkeeper test

How to play:

Walk around with WASD, interact with the Shops by getting close to the NPC and pressing Space on the keyboard. You can buy/sell/equip items just by using the mouse.

Developer's thoughts:

- -My first thought was to create the basic tileset and the movement. It was very quick to do so. Then I've created the base classes for the shopkeepers, the scriptable objects for the items to be sold/bought, the player interaction with the Space bar, the UIs, the money system, buying/selling items, and finally finishing with equipping the items.
- -I had some experience doing similar tasks before in my last job, like setting up the UI, or using the collider for the interaction, so I did this part without big troubles.
- -The hardest part was structuring the UI, which was divided in 3 parts: The main UIManager, the two screens (Equip and Shop), and the individual class that shows the shop icon and stores the ScriptableObject info, the Item Object class.
- -For the shop, I went with the design that you can buy multiple of the same item, and the shop has infinite items to sell, which is used in most RPGs. Also, the sell price is the same as the buy price, which I know isn't always the case in games.
- -I've added 4 shopkeepers, and 4 slots to equip items, which is a good number to test the different equipment. The item price is tied to the item, so it means that different shops sell the same items for the same price. The items they sell are configured directly in their Shop Inventory objects, in a list that's accessible in the editor.
- -For released games, I know that all text should be in a localization sheet, like the Unity one, or an external one. For this project, since there isn't a lot of text, they're added directly.
- -In a full game, the playable character would likely need at least 4 sprites for the directional movement, and more animation frames. This would also mean that each cloth would need their own directional and movement frames.
- -One thing that wasn't really asked, but I did, was to be able to unequip items, because I thought it'd be an important feature to miss.
- -All instances of FindObjectOfType were used to cut some time developing and avoid cross-referencing prefabs. I wouldn't use it in a real project because I know it affects the performance. Same for the text update inside the MoneySystem class.
- -I didn't like that much the packs that were suggested for this test, and I ended up using some I've found on opengameart.com

Known Issues:

- -If you keep the direction pressed while you interact with a NPC, the game is paused, but your character keeps running.
- -Some sprites' style don't work really well with the rest of the game. But at least I hope you get the idea.