## BlueGravity TechTask Doc

Nikola Knežević 12. 12. 2023.

## **Controls:**

WASD to move, E to interact, Mouse for the menus.

## **Thought Process:**

When starting the project, the first thing that came to my mind was "How am I going to animate the clothes on the character?" So I started, as I do all projects, looking through the assets provided in the task, to find something interesting that will inspire me. When I saw the separate sprite sheets for the clothes, I knew immediately how I was going to do the animations.

First off, I took care of the character movement and implemented animations using blend trees. Then I edited some assets from the provided packs and implemented the base of the shopkeeper interaction. Played around with the shop menus and buttons, to get the right feel. For the final task of the first day I made animations for some of the clothes. I figured, four items would be enough for a small project like this. Two hats and two full body robes or armor.

The next day I worked on finishing the clothes animations and scripting their movement with the player. It took some time, but the end result looks pretty good. For item names, prices and other data, I was thinking of adding each shop item entry manually, but quickly switched to Scriptable Objects to store them and to fill in the shop options automatically. Even though I only had four items, this approach would be a life saver in a huge game, with hundreds of items.

Then came the actual problem for this task, how will I signal to various menus which item is owned, sold or equipped? I used two flags in the Scriptable Object, isOwned and isEquipped. This allowed me to save the status of the items between games. But in the end I chose to reset the flags each time you leave the game.

I'd say the biggest challenge of this project for me was implementing the logic of equipping and unequipping clothes, not the GameObjects on the player, but behind the scenes, using the aforementioned flags.

For the finishing touches I added some audio and some bug fixes.

## Personal assessment:

The project was a lot of fun to make, I'm very satisfied with the end result. I think I got the look of the game right (even though there is some placeholder assets). If I had more time, the next thing I would've done is clean up the code here and there and probably add some other behaviour to the player.