

System

Move System

The move system was the simplest. I used the input system to perform the task, so I just get the input values from the Input System and move the character based on these inputs times the character speed.

I also added a sprint speed that is enabled when you use the left Shift.

The whole move system was designed inside the PlayerController script since I like to have a script that handles all player inputs.

Interaction System

Since I was going to interact with very different objects that had to act in different ways I decided to use an interface for all interactable objects. So I implemented IInteractable interface, with an enum to define types of instances and inherited it where it was necessary.

- Interactable Items
 - Those items can be either carried or collected.
- Interactable NPCs
 - Inside NPC scripts I design a method to start dialogues, using scriptables objects to perform it.

Collectable System

Using an interactable type I defined what objects would be picked up. Using scriptable objects I passed this information for the inventory and destroyed the object.

Some objects can be carried instead of being destroyed going to inventory.

(In fact my first idea was to implement a pool of objects, but could do it on time)

Inventory System

This was definitely the hardest part. I had to use a lot of techniques to make it work, from abstract class, interfaces to scriptables. It was very challenging but in the end I could achieve the result that I was looking for.

Save Load System

That was one of the easiest parts, since I always do something like that in my games. I use JSON to store and load data, since it is a very flexible data type.

- I used F5 key to save and F9 to load (Unfortunately I couldn't finish a full gameplay flow)

My thought about the process

I found the task very fun. I liked the result, even though I could deliver everything I first thought.

It was not clear if I could or not use AI to help speed up the process, but since it's a very useful tool, I made use of it by always reviewing what it gave me. I hope it's not a problem.