WASD/ ARROWS to move. B inventory. E interact. Click to equip/buy.

My aim with this project was to effectively implement what was asked and not to create a boilerplate for further implementation. There are systems missing that would be present in a more official game (ex. State machines ,Game manager etc) that I felt were not needed since the goal is the completion of current tasks.

With that being said let's start with the Player object. Has a CharacterController script used for movement and a Player script used to manage equipment and inventory. On the child object Body there is a CharacterAnimation script. Everything is fairly separated in logic. The equipment mechanic was far the most tedious. Initially I tried to use Sprite Library and Sprite Resolver but unfortunately it is incredibly flawed and doesn't work as intended half of the time so I opted to just attach every armor to the player and animating them, then just switching the active game object. If Sprite Resolver would have worked as intended it would have been a more elegant solution.

The NPC object has a NPC script responsible for trigger interactions and a Shop script used to open the shop.

The ShopInventory and PlayerInventory are both derived from InventoryUi since, in our case, they behave identically, save for the click interaction.

There is an InputManager that just manages 2 buttons. In a more official game this would be responsible for the player movement as well but for this it would just be over engineering.

Most of the interaction between scripts is done using Actions to keep things more decoupled.

Graphically I used pixel art assets from the internet. Some of them I modified myself since I'm a pixel artist hobbyist. If time wasn't a constraint I would have made my own.