First, I created a simple character controller using basic transform manipulation inside the PlayerController class. This is just for basic movements and no animations yet. I used the new Unity Input System for handling the Player's input.

Then, I added a camera follow using Unity's Cinemachine. After that, I imported the "Base Character" to be used for the character's sprite and animation. I also imported some UI and environment assets from Kenney's free assets.

For the animation, I used Unity's animator layers to separate each body part animation. The layers are the <u>Body</u>, <u>Outfit</u>, <u>Hair</u>, and <u>Hat</u>. Inside each layer, I decided to use a blend tree to transition to different directions, then use <u>int</u> parameters to identify different <u>Outfit</u>, <u>Hair</u>, and <u>Hat</u> sprites. I also added boolean parameters for the Walking and Running states of each layer.

I know that this animation system is not ideal since it will be hard to extend it in the future, but for faster prototyping, this maybe enough and can be improved when needed.

Next, I made a simple inventory UI that allow the players to access the items that they bought from the shopkeeper. At first, I unlocked it all for the sake of testing, then I proceeded to create the shopkeeper.

The shopkeeper is an NPC near the player's spawn point. I made it so that when the player is nearby, a text will pop up with an instruction on how to interact with the shopkeeper.

When the player decided to interact with the shopkeeper, I made a simple shop UI that displayed all the possible inventory items. This is the way that I made it:

- InventoryItemData ScriptableObject -> has all the data for each item: name, sprite, animationId.
- ShopItemData ScriptableObject -> has a reference of the InventoryItemData ScriptableObject

I made it this way so that the shop items are updated whenever there is a change made in the inventory items.

I created a gold system that allows the player to gain gold per second. I also restricted the player from buying an item in the shop if the player's gold is not enough.