

CONTROLS:

WASD/Arrows - Movement

Space/Enter - Interaction

Tab/Escape - Player menu / inventory

Pre-written code: AudioManager.cs and Sound.cs

For this test, I started by analyzing the required features and what assets I was going to need to develop them.

A top down game with dialogue, inventory, shopping/selling and character customization would require a lot of art and sound assets, so after an hour of searching, I imported them to the project. Setting up a basic 2D top down movement and a Cinemachine 2D Camera was pretty straightforward, so I started working on the dialogue system.

I used scriptable objects to define “Speakers” (characters with names, portraits and voices) and “Dialogues” (arrays of sentences said by speakers). The dialogue controller autotypes every letter of each sentence, and waits for player input to go to the next one, updating the UI as the speaker changes.

To interact with an NPC in the game world, I created the IInteractive interface (which was also used for interactive objects and shops). Each NPC stores a queue of dialogues that can be triggered with an interaction.

Then, I started working on the inventory. The inventory can be populated with equipment (SO_Equipments with names, descriptions, icons, types and prices) and each slot can store an item. I was inspired by Stardew Valley’s inventory system and tried to replicate their way of interacting with the UI. The player can select items from any slot and position them wherever they want.

Afterwards, I developed an equipment slot (a class that derives from inventory slot) that stores an item and a reference to a Sprite Renderer in the player. If the item changes, the sprite also changes. That way, I was able to customize the player’s appearance by equipping different items.

I used the same inventory in the shopping system (also inspired by Stardew Valley), but selecting an item in a shopping context will sell it. Each shop stores a list of items that can have their size increased or decreased by the player.

After that, I just had fun with the characters and the dialogue. It was a fun project to work on and I hope I did a good job.