Interview Task

Report

Lucas Ventura

Overview

During this technical task, I mostly focused on finishing all the features and functionalities while aiming at keeping everything modular and flexible for future iterations. I was able to implement the player movement and interactions, the shop was the hardest and most time consuming feature, but I was also able to implement all of its features and the only part that I am missing is the equipped items being shown in the character and some other weird bugs/issues.

Player Input

This was the easiest task for me, using Unity's New Input System I made players able to move with the keyboard WASD, arrow keys, controller left stick and D-pad, they can also interact with the world by inputting the E key or the South button on the controller. Once an UI pops-up the "Gameplay" action map gets disabled and the "UI" one is enabled and the opposite happens after exiting the shop (I focused on mouse navigation for the shop, so there is no full controller support)

UI/Store

The UI is made of various parts, the player profile, the player bag, the player hud, the shop and the item card. The player profile is the place where players can see their equipped items, and analyze them using the item card, the item card is a pop-up that displays all the information related to an item. The player can equip items from the inventory that automatically swap out, but they can also sell items from their player bag and buy new ones from the shop, this was the trickiest part of the entire process, but using arrays to keep track of the store and inventory slots ended up being a good solution. It is also worth mentioning that the UI assets were created by me, using Illustrator, and that the treasure chest was an interesting way I found to get a lot of coins quickly so I could test everything.

Problems

There are also some bugs in the game, when an item leaves the inventory it gets replaced by a white square; for some reason that I am still trying to figure out, there are no tilemap collision; the walk animation defaults to idle everytime the player walks to the right, and I also missed the feature in which the equipped items change the appearance and animations of the player character.