

Little Sim World – Interview

Introduction

Hi! My name is Gianluca Leoncini, I'm from Ribeirão Preto, São Paulo, Brazil. I graduated in Computer Science in January, 2022 and I'm currently studying game design and game programming, looking to take my first steps in the game industry.

Searching for my first job, I found Blue Gravity Studios and the Little Sim World game and loved the idea and concept. I received a message on LinkedIn and soon started the interview.

The interview consisted in making a little simulation game, with an item shop and a character able to interact with the NPCs and use the bought items. As soon as I've read the requirements, I began working on the concept.

The Concept

The first ideas came inspired from Stardew Valley, so the first step would be look for free assets I could use. Art is not my Strong skill, so I've looked for the simplest assets possible, so I could work with ease and could modify to make the sprites using the items the player would buy in game.

With the assets in hand, I could think about the gameplay. The assets had flowers sprits in colors yellow, orange, and red, so They would be used to dictate the outfits and their colours, and also would be the source of currency for the player.

The player would be able to use two sets of items: shirts and hats. The shirts were based on the flowers colours, and the hats would to be made of the colected flowers. There would be a flower conter, to keep track of wich flowers and their quantity that were collected to unlock the items, but due to time restrictions, that mechanic was not implemented.

In the assets package there was also water and a dock with a boat assets, so there was initialy an idea of having fishing. The flowers would be a sorce of currency and would take time to spawn, so the fishing would be a way to skip time and would be a secondary source of money. Due to time limitations, the fishing mechanic had to be cut out.

The Animations

As my art skills are not that good, I had to improvise some modifications to the sprites I had. The animations changes that would take place as the player changed it's outfits

were done by changing animations spritesheets. This way, animations for four directions were made for each combination of items using Aseprite.

Inside Unity, the animations are controlled by blend trees. There are variables that will be changed based on the equipped items and will lead to the blend tree with the respective animations.

In the end, it got quite messy. I've tried a different method, but wasn't able to fully implement it in time, so the previous method was used.

The Shop

The shop script was based on the shop manager that the game programmer and youtuber Code Monkey made, with modifications to fit the interview project.

The shop will be instantiated in runtime, based on the items and will communicate with the player via an interface script. The interface makes the money verification and locks the player to buy the item if the money is not enough. Although, unfortunately, I did not have time to implement a verification to prevent the player from repeatedly buying the same items.

When the player buys an item, a sound will play, and when they can't buy, an alert sound will play. The bought item is saved in and listed in the PlayerController script via another interface.

The Inventory

The inventory was made using the same method as the shop, generated in runtime, getting the items the player has. In the inventory ui he can click an item to equip it, and when he gets out of the shop and moves, the character will have accordingly animations.

I have to mention some errors that I wasn't able to fix in the inventory. As the inventory ui is populated at runtime, it duplicates every item every time it gets open.