

How the game works: I've developed Stardew Shop to perfectly match all the criteria for the Programmer Interview task.

- I got a character with top-view movement and animations. He can interact with the world, you can check this part by harvesting the ripe pumpkin, which will add the pumpkin to your inventory. For an easy and direct player-follow camera, I've also included the Unity cinemachine system.

- My shopkeeper interaction comes with a frog NPC, you can sell your pumpkins to him for several coins. For a coin price, you can also buy clothes and hats from his shop and if you got enough coins for the trade, you can equip your new piece of cloth directly from your inventory.

- Once equipped, all clothes and hats are visible on the character, all of them animated. I have animated all items on Unity myself. All the animations could be achieved with the help of Sprite Library and Sprite Library Asset.

Main Game Systems:

- Items: All items that will be used on Inventory are created using Scriptable Objects. I've created an Item base script that receives all the data necessary for a new item in-game. Scriptable objects are amazing for situations like this because they allow us to add new items very quickly and simply.

- Inventory and Market: For a more complex system like the inventory and market (buy/sell) I've decided to go for a Model-View-Controller system (Model receiving both systems data (my Scriptable Objects items, for example), View receiving UI-related things and Controller being both the bridge between Model-View and main Workflow).

I'm very proud of my progress and how I could achieve all criteria from the interview, especially having other responsibilities while I was coding for this Interview. Although, it bothers me a lot that I can't have more time to clean up all parts of my code, especially Inventory and Market related. And that a lot of the coding decisions I made in the final hours of my development were more time related than clean code related.

Thank you, guys, for the experience! I know how much I can bring into Blue Gravity Studios, hope you guys can see that as well.

Matheus França.