

Gravity Blue Test Documentation

Introduction

Hello fellow game devs, my name is Vinicius and I'm applying to the programmer role in the Gravity Blue Studios. The focus of this prototype was on the gameplay and the structure of the code, therefore, the design of this demo is very simple.

How to Play

The player can walk, talk and interact.

Walk with the WASD and Arrows.

Press 'E' to open/close buy menu

Press 'R' to open/close inventory

While near a NPC, press 'E' to start conversation and 'space' to end/skip the lines.

Design

The programming test consists in developing a clothing store with all the due mechanics.

From this point, I found my first difficulty: finding assets that are compatible with the project scope. So, I thought and started developing a medieval clothing store (sounds unusual, but games don't have to be realistic all the time, right ?). There, the player can buy and sell hoods, torso pieces and belts and apply them to the character.

Gameplay

Player

The player can walk around the store, change clothes and interact with the shopkeeper and the chests. The movement is simple, created using the Rigidbody2D and both WASD and arrows input. Since I'm programming a clothing store, the player can change clothes - as long as the outfit is in the inventory.

The player can also talk to the shopkeeper; but they need to be close to each other, otherwise, the dialogue will stop. All of the dialogue is controlled by the **Dialogue Trigger** and **NPC Dialogue** scripts.

To buy clothes, the player needs to be near a chest and have the specified amount to buy an item. The **Player Wallet** script controls the amount of coins of the player.

Inventory

The inventory is an important part of this prototype, since it holds all of the player's items and also serves to sell these items. The **Inventory** script controls all of the inventory actions: changing clothes and selling items.

. The changing clothes have a unique (**PlayerClothes**) script that holds the sprites to be changed (hood, torso and belt) and has a method to return if the player is wearing the cloth.

The Selling items does not have a unique script, but it depends on the **Inventory**, **Player Clothes** and **Player Wallet**. First, to check if the item is in the inventory; second, to check if the player is wearing the item and last, to sell and give the coins to the player's wallet.

Buy/Shop Menu

This menu consists of a UI Object that will have all the item cards. This is also a key feature for the prototype.

Every chest holds a specified shop menu via the **Clothes List**, where the type of cloth is defined. (example: if a hood is defined as the type of cloth, the hood's shop will contain only hood items.)

Every different item has a Scriptable Object named **Item Data**, which in turn has all the data needed for the instance of this object (price, type, etc). This data is retrieved by the **Item Card** and then setup the item card into the Buy Shop UI object.

At last, the **Buy Menu** script controls all of the actions of this UI object. The most important of those actions is the purchase, which can only be done if the player has a certain amount of coins and the item is being selected.

NPC

The only NPC script is the **NPCDialogue**, which is responsible for controlling the dialogue and its lines.

My Thoughts

Honestly, I enjoyed developing this test, especially because it's simple and challenging. My biggest difficulty was to find the proper assets to insert into the scene, besides that, I didn't have any difficulties while developing.

I believe that I did very well in this test. In addition, I also believe that I am the best person for this job position, as I loved the concept of Little Sim World and my talents as a game developer are the most suitable for the project.

My sincere thanks for letting me do this test!
With Love and Sweat,
Vinicius.