

BGS Unity Programmer Interview Task Document

Made by João Cavacos

Starting up, the concept of the task was very interesting to see because the features that were supposed to implement were things I've experienced in the past in projects and it was features I liked to create which made me excited!

The first thing in my mind was to create a small square with the movement that would act as the player, moving around the level with some basic physics movement; next I started thinking about an interaction system, not only for the shopkeeper but a dynamic one that could interact with the environment and that's why I created the `IInteractable` interface for easy inheritance for the interaction scripts I created - this worked due to the player having an `interactor trigger collider` that could detect any type of `IInteractable`.

Next up the fun started - I started developing the core of the task, the shop and the money system: the money system is a simple coin based system that has an add and remove money function; the shop system was the complex one, create the shop's buy stock by using scriptable objects as item data to then show the player to buy, for the sell part it was just getting the items in the player's inventory as well as the quantity to sell, making it a very intuitive system. With that in mind came the hardest part for me: the equip outfit system, which made me think 1000 ways to do it but I ended up choosing one of the simpler, switching the animator for the outfit controller, making it easy to switch between outfits.

Overall I would rate my performance 8/10, since I could've went straight to the point in the equipment system that made me lose a bit of time for other stuff, everything else was just to the point and programming!