

The system consists of an inventory that displays a dummy to show the player how he'll look and a shop system that allows him to buy and sell items that aren't equipped.

During the process, I tried to think about a system that would scale, since we're talking about a shop that may have an infinite amount of items. With that in mind, I tried to minimize $O(N)$ operations looping through the Items and applied cache of memory by reusing the objects that once were created to save space in memory.

Besides, I aimed to write a clean code that follow patterns aiming to make it easier for future features to be developed around the system and utilized Scriptable Objects to construct the items systems in a way that would be very easy for even non-developers to interact with. In other situations, I would suggest passing the variables through a sheet to make it, even more, easier to test and adapt values.

About my performance, since the beginning I aimed to deliver more than was expected, creating more functionalities and approaching the project to the real world, but that came with a price, as I had limited time and other demands, therefore some structures weren't able to be built in the best way, leading to some problems that I needed to fix and spent time after. Therefore I feel like I did a good job by delivering all the requirements and some extras, but still have space to improve my planning process.

The project counts with the required features and more.

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