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Documentation for the interview test task.

Part I. Beginning of the project

At the beginning of each project I create a short document, in which I quickly relay all the systems I have planned to implement. During the work this document is constantly being re-written and new thoughts about the systems' implementations are added.

For this particular task I had to create a shop with a buying/selling system and an inventory, where I can equip items.

Part II. Character creation system

The first system I implemented was a character creation system, where a player can chose character's appearance.

Initially system was working by replacing the animators on character's child objects, assigned to the particular elements of their clothing, but later I had to add the item's scriptable objects to the system so it will work better with the inventory system.

Part III. Character

Character system is comprised of a character prefab: an empty gameobject, which has the objects for character's body and clothing as its children, a scriptable object for its configuration, a Component Handler script, which handles all the clothing and a body component, and a moving script.

Part IV. Inventory system

Inventory system is handled by the Inventory and Item scripts, as well as the ItemData scriptable objects.

Inventory script works with 2 dictionaries: initial _inventory dictionary, which receives all the objects sent to an inventory by outside scripts, and _inventoryTabs dictionary, that sorts those items into lists of ItemData type

according to their ItemType enum type in ItemData's scriptable objects of each particular item.

The sorting systems in this project work with comparing ItemType type against a tab's type in inventory/shop system and creating an instance of an inventory slot/ shop slot prefab with the item's data, using AddItem and RemoveItem functions of Inventory script.