LSW Test - Modular Shop System no-code Item setup

This shop system was created with modular thinking, which should make the effort of expanding and adding future items a lot easier.

First of all, player movement and inputs are all implemented with Unity axis. Player movement correspond to WASD keys and interaction corresponds to E keys. When player moves, Interactables recognize him at OnTriggerEnter and the closest one can be interacted with.

Pickable items like Apple can be collected with interaction.
Pickable gems can be collected by simple collisions (walking over it).
Frog shops can be opened and closed with interaction.

Player Inventory can be opened and closed by pressing 'i' key.

Both Inventory and FrogShop UIs were implemented using self-updating mechanics, reading from Scriptable Objects at 'Scriptables' folder. This way, making changes to Items and player gem count is very easy at scriptable inspector with no need to code. Also UIs will always update to changes at Play Mode.

Item's pricing, names, icons and values are all configured at ScriptableItem inspector. Both Inventory and FrogShop read from a list of ScriptableItem and update buttons and values with corresponding items at list. With same logic, at both menus player can click and interact with items.

At Inventory, player can see acquired items and equip them. When equipped, item can be displayed at HEAD, BODY or HAND, which can be configured at ScriptableItem inspector. Also, player can drop at any time the selected item at ground, turning it into a pickable item. Just like Apple, dropped items can be collected again. When close to frog shops player can't drop items, but instead sell them to frog by displayed value.

At FrogShop player can see available items to be bought. When bought, item will be instantly displayed at Inventory and gems count is updated at both UIs.

In other words, LSW Shop project was designed with Scriptable Objects implementations, resulting in modularity.

Designers and testers can create new ScriptableItems freely at folders (outside scenes) and simply drag them to FrogShop's item list. The same goes to Inventory. Every new item can be bought, sold, dropped and equipped by simply configuring ScriptableItem and dragging to Inventory or FrogShop.

FrogShops can be placed all over map with independant available items and even if close won't cause bugs.

Did my best while maintaining good quality. Not sure if 100% bug free, but I feel it completed it's goal: modular shop system with no-code item setup.

writen by:
 Gabriel M. C. Gomes
 gabriel.machado.cg@gmail.com