BUY/SELL SYSTEM TECHNICAL TEST

For this technical test, the main character is a ninja who goes around the city collecting golden coins scattered randomly. The character controller component is added to the 3D player, enabling physics within the gameplay. The player moves using the arrow keys and AWSD keys. The coins have a trigger capsule collider that detects contact with the player. When the player touches a coin, the counter in the UI increases. The player has a collector script referenced in the player controller, connected to a singleton pattern with the UI system.

A variable named "currentMoney" shows the actual balance of money, which increases as the player collects golden coins and is also used for spending. There is a static seller character, an elf, in the gameplay scene who sells items to the player. These items include a pistol, rifle, and sword, valued at 50, 80, and 120 golden coins respectively. When the player touches the seller, who has a capsule 3D collider, a new sales panel appears, showing icons and prices for each item. The player can decide which item to buy based on their money balance. If the player has enough balance to buy the chosen item, the 3D object will be activated and added to the inventory. Otherwise, a message will be printed to the console: “There is not enough balance to purchase this item,” and the player will need to collect more money to make the purchase.

The inventory is designed with grid sprites. Every 3D object is defined in a scriptable object, which specifies the key sprite. Once an item is purchased, it can be equipped to the player as a new item. This game exercise according to the programmed mechanics, it was inspired on SIMS and Stardew valley in order to complete this successfully trial game.