

## Shop System Implementation Summary

During the interview, I focused on creating a functional shop system within a limited time frame. Here's a summary of the features implemented, my thought process, and a self-assessment of my performance.

### Implemented Features

**Shopkeeper Interaction:** Created a basic system where players can open and close the shop UI by pressing a key near the shopkeeper, using a trigger to detect player proximity.

**Buying Items:** Implemented a system for buying items from the shop. Each shop item has a UI element displaying its icon, name, and price. Players can buy items if they have enough gold, adding the item to their inventory.

**Item Icons and Prices:** Displayed item icons and prices using a ShopItemUI script that dynamically sets properties based on item data.

**Basic UI Design:** Designed a simple UI for both the shop and inventory, including prefabs for shop and inventory items to display item information clearly.

### Thought Process

My primary goal was to create a functional and interactive shop system. I began with the core mechanics for interacting with the shopkeeper and displaying the shop UI. Then, I implemented the purchasing logic, ensuring proper gold deduction and item addition to the inventory.

I also worked on a character body parts and animations system, using scriptable objects to store body part data, and managers to handle animation overrides and player customization. This system dynamically updates the character's appearance based on selected body parts and animations, enhancing player engagement.

### Self-Assessment

While the implementation is not fully complete, the progress made during the interview laid a solid foundation. Given more time, I would refine:

**Selling Items:** Allowing players to sell items back to the shop, updating inventory and gold amounts.

**Equipping Items:** Enabling players to equip purchased items and updating the character's appearance.

**Thorough Playtesting:** Identifying and fixing bugs or usability issues through extensive playtesting.

However, due to the limited time, these solutions are not yet effectively integrated into the project. Despite this, I am confident that my solutions are effective and, with additional time, I could deliver a high-quality, polished shop system. Thank you for the opportunity; I look forward to your feedback.