

# Advanced Features

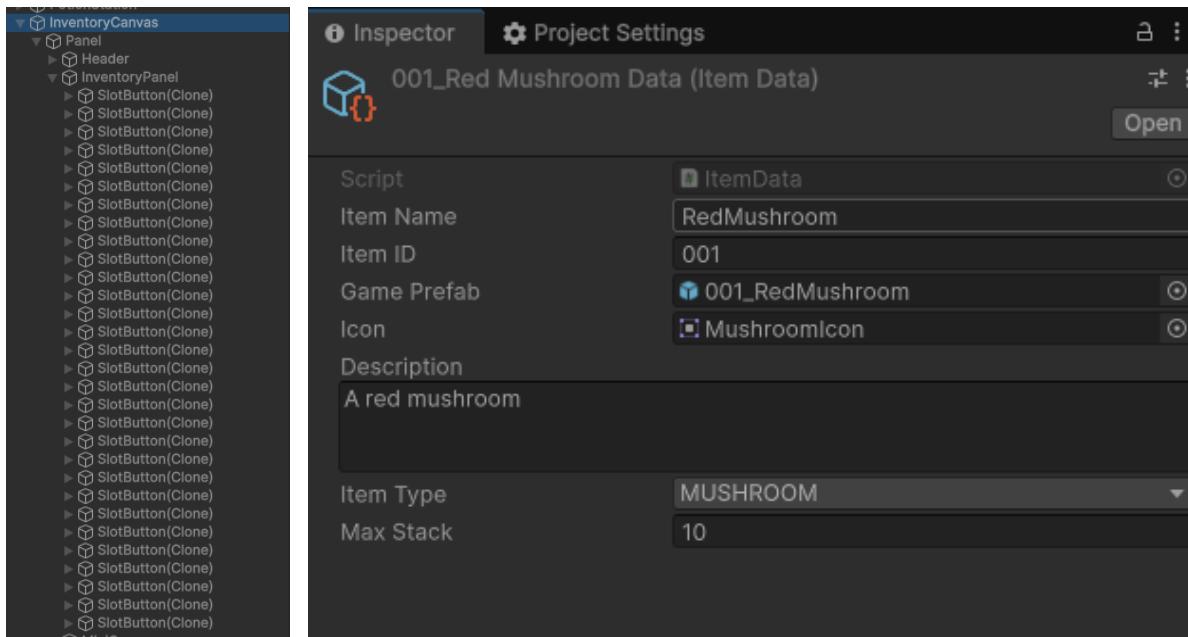
Based on my first idea to create a potion-crafting game where players can craft and sell potions across different stages of the day, night, and dawn, I selected two advanced features that I could implement within the given time and that would enhance my game prototype: an **Inventory System** and a **Day–Night Cycle System**.

## 1. Inventory system

This is one of the main systems required before players can begin crafting potions. The player can collect potion ingredients from the world and store them in the inventory. Items can be dragged and dropped within the inventory, stacked, used, dropped, and destroyed.

The inventory UI is hidden when the game starts and appears when the player presses “I.” Each item contains its own data, such as name, type, and max stack size, which can be adjusted within Unity. When the player collides with an ingredient in the world, the ingredient’s data is sent to the inventory, and the icon of the newly collected item appears.





The **Use** button removes one item from the stack and will later interact with the crafting system.

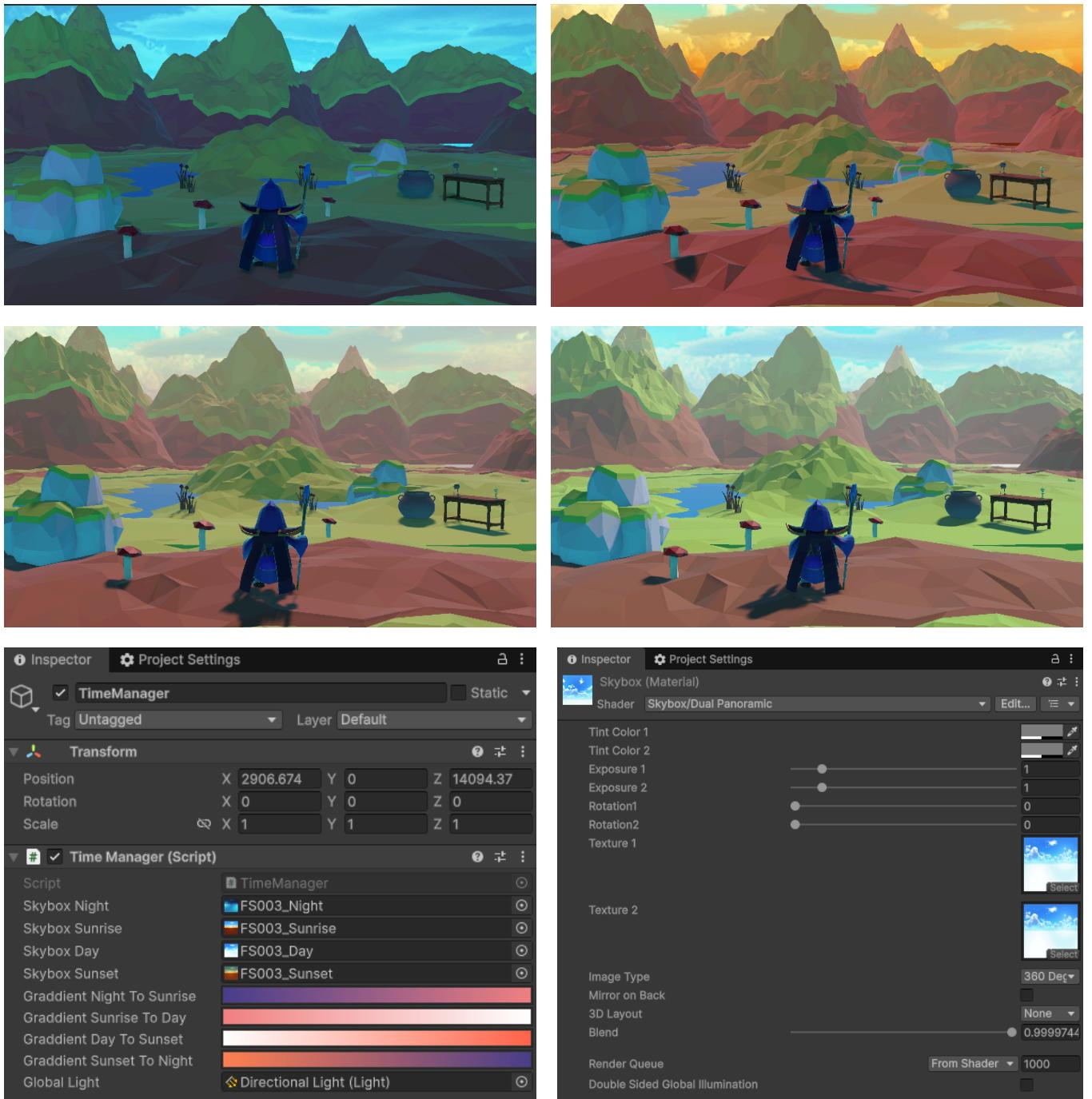
The **Drop** button drops the selected item from the slot into the game world.

The **Destroy** button removes all items in the slot.



## 2. Day-night Cycle

This system enhances the game and makes the environment feel more realistic. I created a time manager and connected it to the skybox and lighting system using a shader provided by the *JD Dev* channel.



JD Dev. (2025). 1CSJmbYH [Shader]. Retrieved from <https://pastebin.com/1CSJmbYH>