

Development Strategy & Time Allocation

My focus during this task was to deliver clean, modular, and scalable code that reflects long-term maintainability, a principle I emphasized during the interview. While I could have finished the project faster with fewer structural considerations, I chose to show proper commit and pull request practices and clear architecture.

Most of my time was spent on coding, ensuring modularity, system decoupling, and extensibility. Asset searching and visual alignment were intentionally limited to maintain focus, yet I made sure elements on screen were presented in a clearly readable way.

Implemented Systems & Technologies Used

Overall: Used Unity Events for decoupling, and the New Input System for modern input handling.

Inventory System: Slot-based system with stacking and item interaction. Built using ScriptableObject-based item definitions.

UI: Fully dynamic inventory display, drag-and-drop support, item info hover, and interaction feedback.

World Interaction: Used Collider2D.Overlap for detecting interactables. Physics2D and composite colliders handled environment collisions.

Saving: Made a system that supports save slots. As the project works currently, it just auto-saves to slot 0, and auto-loads to slot 0.

Scene: Scene-based loading architecture, with fade-screen transition logic to support operations behind visual blocking layers.

Gameplay Guide

Move: WASD

Interact: E (Interacts with the object right in front of the direction you look)

Open Inventory: Click arrow icon

Use Item: Click an item in the inventory

Interactables Behavior:

Door: Moves to other scene

White Chicken: Gives eggs

Red Chicken: Takes eggs

Blue Chicken: Gives growth potions

Self-Assessment

I'm happy with the scope and structure achieved. The only missing piece I would've liked to add is a visual indicator for items being added/removed from the inventory, to reinforce feedback.

Overall, I gave the project my best within the time given and ensured it reflects both my technical strengths and development philosophy.