

The System Overview:

The movement functionality is managed through Unity's new Input system, divided between two scripts: the Input Manager and the Movement Controller.

Interactions within the game rely on trigger colliders, informing the Interaction Manager of available actions to be triggered by the player. Tooltips offer guidance to players on potential interactions, which are: a booth for selecting customization pieces; a counter for buying/selling; and a door for environment switching.

Customization is implemented using Unity's animation override feature. Each piece includes an animation override to maintain compatibility with player movement. Customization items are defined within scriptable objects, holding piece information.

The main UI elements consist of three buttons located in the top right corner. These include Shopping Cart display, Inventory display, and Pause. The first is only visible inside the store. Both the shopping list and inventory display open the same menu, allowing interaction with items based on context. Additionally, the system includes three popup panels: Confirmation, Counter, and Message.

Thought Process:

Upon reviewing the task documentation, my primary focus was on character customization. I initially worked on implementing a seamless system for switching between customization pieces without affecting animations. Once this functionality was achieved, I moved on to integrating character movement, including walk and sprint animations.

Subsequently, I focused on creating an immersive store experience to enhance player engagement. Rejecting a simplistic UI-based store interaction, I introduced a changing booth as the first interactable object, which allowed players to try on clothes. Finally, I shaped the remainder of the shop system around this feature.

Personal Assessment:

In reflecting upon the task, I find myself satisfied with the outcome despite the constraints imposed by time. I am particularly pleased with my ability to execute the codebase independently, relying solely on my own skills. This allowed me to showcase not only my technical proficiency but also my capacity for creative problem-solving.