System Design

Since this is a 48 hour assignment and, given the scope, I decided to follow a Singleton pattern with a Game Manager controlling the Inventory.

It has an animation system for implementing multiple clothing and hair to the player without the need to recreate animations for every piece. It consists of a script that gets the Spritesheets and creates Animation Clips on the fly, adding the Body, Clothes and Hair properties(SpriteRenderer) to the Animation Curve.

For the movement system it uses the "New" Input System Package, allowing the use of multiple bindings and listening to presses by subscribing to their events.

As for the movement animations, the project uses a Blend Tree for the 4-way movement.

Thought Process

I started by creating a sample scene with movement and checking for triggers with the shopkeeper entity. After that I began to implement a system to create Animation Clips on runtime, since we have an asset package that contains options of clothing and hair. With that done, I implemented an inventory system with addable and removable items, along with an equipment functionality on click. By the time of this writing the equipment functionality doesn't work 100%, since it has a weird behavior(equipping a hair also equips clothes) that I couldn't fix.

Personal Assessment

I had a rough time starting out and lost a lot of time with the Animation Clips system, which frustrated me a lot. By the time things were going well I found this bug on the equipment functionality that took me a long time and still can't find the cause of it. With that said, I think that the 48 hour limit is a really small timeframe, considering most of us don't have that much free time in a day.