

So I created a game in Unity with all the specified features. Here is how they work the way I programmed them:

There is a character script which controls the player's movement, this script also puts on the player's clothes. The player script calls the shopkeeper script when the player is within a trigger around the shopkeeper, enabling the player to interact with the shopkeeper. There is a script which controls the shopkeeper's dialogue, and then tells the shop script to open the shop. The shop script controls letting the player buy items and then transfers them into the player's inventory, which is controlled by an inventory script. The inventory script then communicates with the player script to tell the player which piece of clothing to put on.

I have also attached a log I kept during the development process.

All in all, I think I did pretty well in the time provided. The game could definitely be more polished and there are many more features I would implement given time. I did have some problems along the way and needed to completely redo the system to animate the player near the end of the development process. I also made sure that almost all of the code was reusable, eg. You could import any number of clothes sprites and they would animate just fine without any added code.