

In this document I will explain my thought process and the systems in my life sim game prototype, which was developed within 48 hours.

First of all, I downloaded the 2021.3.2f1 Unity version which I used to develop this prototype and while it was downloading, I started searching for art assets on itch.io. I found a nice free asset pack which had most of the sprites needed for the prototype. The asset pack itself gave me inspiration to create a few game systems such as crop growing and harvesting wild plants.

On the day that I received this assignment I started working on the player controller and animations. I don't have much experience with clothing/cosmetic systems so I started with that. The asset pack that I got only had one character without any alternative skins/clothes so, with the time pressure in mind, I opened Photoshop and just recolored different parts of the body. I decided to keep 3 parts (Head, Torso and Legs) which can be swapped at runtime using AnimatorOverrideController component.

After the animation-swapping was functional, I started to work on inventory and items system so I could test the swapping while playing. Using Scriptable Objects I made a template for the items, which can hold data such as the item name, description, selling price, icon and the type (normal, seed or clothing). Based on the type of the item, functions will unlock such as planting the seeds or equipping the clothes.

After the item and inventory systems were ready, I started implementing some world interactions similar to Stardew Valley. I added some plants in the world that can be destroyed and drop some random items such as seeds or valuables to be sold. After testing, I decided to let the plants regrow in order to keep the gameplay loop.

Besides that, I also added some seeds that can grow giving the player some harvestable crops, which can be sold for coins.

After the world interactions and item systems were in place, I started working on the last feature: the shop. The shop works similar to the inventory system but with only the function of buying items and they won't deplete. Once the player has a shopping window open, they can start selling the items in their inventory to the vendor for some coins.

Having the systems in place and some time left on hand, I thought the game feels too static so I used an asset called DoTween to give the items and some UI elements a bit more life.

Overall I thought this project was fun and if I had even more time, I would add features such as taking care of the crops (watering, fertilizing, weed management), wood cutting, expanding the farm by using wood logs and many more.

Side note: I never used github before (mainly because I didn't have a reason to) so I hope what I uploaded there is fine. It took a while so I feel like I made some mistakes there, but that's how I learn.