

Hi! This document will cover the entire process of the task I was given.

First of all, it was a fun process. I have been interested in inventory systems since I tried creating a prototype for some game mechanics. I reused some of the code I had from another project, specifically the Inventory class.

The first thing that came to mind was separating the UI from the logic, so it would update whenever I made changes to the inventory or equipment. This is why I used the observer pattern to notify interested classes whenever there were updates in the inventory.

I received some advice from senior colleagues regarding dictionaries and other structural aspects of the project. They suggested managing the inventory as a matrix, but I knew a simpler approach would be faster and easier for me, as I needed to look up a few things.

As a result, you can drag items into the inventory, but equipping them via dragging is not implemented.

I was also helped with the saving system, as I was running out of time. The projects I had worked on before used a saving system quite different from the one I used here. I decided not to use that previous code because I thought it might cause additional problems.

Lastly, the game is not visually appealing, as you might have noticed. This was because the design of the game was intended to be the last thing I would focus on, as I knew the inventory system would be a challenge for me. So all the sprites I used are free assets and the Player is from a 2D Course I made.

Some side notes I want to share:

- I tried using underscores for private variables and capitalized names for local public variables. I also aimed to encapsulate everything.
- The folder structure is missing some sub-folders, like "Core" or "UI", but I'm used to working with those standards as well.
- The project is in the branch maxo/development. It was intended to be named just development and the features would be maxo/feature but it was too late when I realized.

If this doesn't match the position, please consider that I will still be working on the prototypes I mentioned earlier. So, if you'd like to check out my progress, feel free to visit my GitHub page. I will leave my ongoing project there, where I plan to replicate the inventory system using two-dimensional arrays. <https://github.com/Maxomiliano/camera-project>

Best regards,

Maximiliano.