

## **NG+ Unity Programmer Task Report**

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The items are stored in InventoryData and accessed and manipulated by InventoryManager. There is a base item class and three subclasses for weapons, consumables, and other items. The items are displayed on a grid and can be dragged to different slots. You can add items to the inventory by picking them up in the world. A way to remove them was not implemented, aside from the consumables that can be dragged to the character's portrait to be consumed. The weapons can be dragged to a special equipment slot near the character's portrait. Once that is done, the weapon the player uses in the game will change. When you hover the mouse over an item, there will be information displayed on the box in the bottom right corner.

The inventory items and the currently equipped weapon are saved to a .json file every time something in the inventory changes. When the game starts that same file is loaded and the inventory is populated.

The character can move around the world and attack in different directions, having animations for all those actions that change according to the direction it is facing.

Unfortunately, I wasn't able to create that many extra features, besides displaying information about the currently equipped weapon, due to lack of time. There is a mockup of what the menu would look like, with the health UI included, but it is not functional. The plan was to create a simple enemy and generate constant enemy waves, and the enemies would drop items that could be picked up by the player. I believe with another day of development I could have implemented this feature and also polishes like sounds, music, and a UI retouch.

Features aside, I believe my code is clean and well structured, but of course, I recognize there can always be room for improvement. However, given the timeframe, I think it is an excellent compromise of code quality and completion of features.

### **Controls**

WASD - move  
Space - attack  
Enter - open menu

*Assets from Ninja Adventure - Asset Pack by pixel-boy*  
*<https://pixel-boy.itch.io/ninja-adventure-asset-pack>*