

## Documentation

### Character movement:

The character movement is implemented using Rigidbody2D and an Animator with multiple sets of sprites to move the player.

A force is added to the Rigidbody in the direction of the player input, and the animation of the sprites swap depending on the same direction.

The steps sound effects are triggered from an animation event.

### Camera:

The main camera follows the player smoothly, "lagging behind" a little from the player to create a better "movement feeling". Using the mouse scroll wheel, players can increase or decrease the zoom levels. The zooming is also made smoothly to prevent the "jittery" movement introduced by the mousewheel input.

### Player inventory:

The inventory is created with the generation of multiple UI elements called "Slots" and positioned in an array form.

These "Slots" represent empty spaces for the player to fill with items.

Items are represented by another UI element named "ItemIcons". These icons can be selected and dragged with the mouse to other empty "Slots" to move items. Also, it's possible to move an item to an already used slot, performing a "item swap" between them.

Items can be equipped in three different slots: "Spells", "Jewelry" and "Consumables".

Equipped Items increase the player stats, equipped spells also produce a certain effect around the player.

Players can drop the items to the ground, dragging the selected item away from the inventory. Also, items on the ground can be picked up using the left mouse button over them, if there is enough inventory space.

### Shopkeeper:

Players are able to sell items to the shopkeeper while near them. Clicking the shopkeeper opens the inventory, right clicking items in the inventory while a shopkeeper is nearby will sell the item for the listed cost.

### Buying items:

The shopkeeper has some items showcasing to sell, mouse over these items to show their stats and price.

Buying an item creates a copy of the showcased item on the ground.

## **Thought process and personal assessment of performance**

Working with Unity in a 2D environment being so used to 3D environments had an interesting learning curve on start, specially with sprite animations, but most of the logic in regards to character movement are the same.

I personally love inventory systems, with more time I would have implemented my favorite style of inventory, where items have different volumes and occupy multiple slots based on the size.

In a more complex environment with more time to spare, I would have added a scroll view to the shopkeeper NPC to show multiple items and facilitate the player shopping.

Overall, it's very interesting to see what we are able to do in just a couple of days when working in game-jams style practices, especially when the task has a lot of open-ended instructions that can end in a showcase of creativity.