## <u>Inventory System Document for the Technical Interview at NG+</u>

## **Maximiliano Dominguez**

To focus purely on programming logic, I used the following asset pack: **Ninja Adventure Asset Pack**. It contained everything I needed to concentrate on the most important aspect: implementing the system.

I wrote all the code from scratch, relying on documentation and videos, as I not only wanted to demonstrate my knowledge but also challenge myself. I did not use any pre-existing code.

The system was designed to be scalable, allowing for the quick creation of new items and NPCs through prefabs. I envisioned a top-down RPG, a genre in which I have some experience, and decided to work from the UI to facilitate the integration of the inventory, dialogues, and eventually, a map—essentially creating an RPG starter pack.

The inventory system allows for dragging and moving objects, swapping them within the inventory and hotbar, and using them from the hotbar (currently only visible in the console). I did not use Scriptable Objects for the items but opted for prefabs due to some issues with the Unity version I was working with. However, I did implement Scriptable Objects in NPC dialogues to demonstrate my knowledge of the subject.

From the beginning, I designed the UI so that the tooltip and hotbar could interact dynamically. Additionally, I added a pickup popup, NPC interactions, and a closed scenario with sound effects (footsteps, dialogues, chest opening).

I am aware that the project could have been more polished, especially in the graphical interface and code optimization. I would have liked to refine these details further and, if given the opportunity, refactor it to implement Scriptable Objects for the items.

This process reaffirmed my desire to work full-time in game development. I want to continue honing my programming skills while growing in the gaming industry, improving every day, and exploring new ways to create interactive experiences.