Unity Programmer Task

For this prototype, I decided to create a "Bullet Hell" game as is a simple but engaging kind of game, and it's possible to create in a short period of time, this game would align well with the requirements of this test. The "bullet hell" genre allowed me to implement a straightforward gameplay loop that could be easily expanded to incorporate new ideas once the core mechanics are in place. The game loop involves the player navigating through levels, dodging enemy bullets, and shooting enemies, collect items dropped from the enemies and use consumable items to restore health. The player must defeat all enemies to progress to the next phase, currently the prototype has 3 levels, each one introduce a new obstacle to the player with increasing difficulty.

In the inventory system the player can open the inventory pressing the "I" key and in this interface it's possible to drag and drop the items between the slots, a tooltip appears when hovering over an item showing more details about it, and it's also possible to drag items out of the inventory causing them to be dropped in the ground, for this prototype the inventory is used for consumables such as health potions that can be used from the hotbar slots, I integrated the inventory with a save system, allowing the inventory state to be saved and loaded when the game starts maintaining the same slots.

The results were as I expected, successfully implementing the core mechanics required for this task with a functional gameplay loop, in this project I only reused code from previous projects for the object pooler and save system. Overall, I am satisfied with the outcome, I would have liked to explore additional item types and more gameplay mechanics, which could have added further depth and variety to the game.