

Programmer Test – Blue Gravity

Victor Paulo Melo da Silva.

The game seamlessly operates through an interconnected system, primarily following the MVC (Model, View, Controller) software design pattern—an excellent choice for intricate inventories or systems with numerous connections. The inventory employs independent slots for item operations, including transfer, removal, consumption, or equipping, each assigned a specific function (e.g., Consumables Slot, Clothing Slot). The highly modifiable character controller serves as a versatile reference point, connecting with almost all systems, while Rigidbody2D is utilized for movement due to its ease and impressive results.

Aligned with its intended purpose, the game features items impacting both visually and functionally, affecting player attributes like armor and damage. A modular Paper Doll system allows dynamic changes to the character's appearance, facilitating the interchange of armor, hood, and weapons across any body part.

Additionally, a basic enemy attacks the player in close proximity, offering a source of income when defeated. To showcase system modularity, two interaction systems were implemented: a straightforward NPC-player dialogue and a more intricate shop interaction enabling buying, selling, and inspecting in-game items.

Despite encountering a few **challenges** during the test, time emerged as a significant obstacle, limiting professionals' organization from planning to execution. Through this experience, substantial professional growth was observed. In comparison to a previous test, the new version shows marked improvements in map design, gameplay, UI, and notably, in the code and comments.

Moreover, I consistently prioritized the player's **experience** by crafting story backgrounds, characters, and elements enhancing the game's final quality throughout the test. Personally, my **performance** was gratifying. It's worth noting that this type of test consistently pushes me to my physical and mental limits, revealing my capacity to learn, overcome challenges, and renew my determination to become an outstanding programmer creating impactful works that make a difference in the world.

It was a pleasure, and see you soon – Victor Paulo Melo da Silva.

Email: svictorpaulo@gmail.com