Programming interview task for Blue Gravity Studios.

- Introduction:
This documentation provides an overview of the 2D character inventory and equipment management system. The system incorporates mechanics for purchasing and selling items, as well as the character's ability to equip different classes of clothing and weapons. This solution is implemented in a 2D Game but similar logic can be applied for a 3D game.

- System Overview:
The primary objective was to develop a system that fulfills all the requirements while maintaining simplicity due to the limited time frame provided for the interview task. Initially, the focus was on creating a robust system that met the necessary criteria. The subsequent challenge involved sourcing assets with a consistent aesthetic, as it was not feasible to find assets with all the required components. Furthermore, enabling the character to equip different clothing items necessitated careful planning regarding assets, animator implementation, and character structure. Fortunately, I was able to find an acceptable asset package for the demo, which addressed this requirement.

- Thought Process:
Throughout the development process, my key considerations were functionality and maintainability. I aimed to strike a balance between implementing the required features and keeping the code simple. Additionally, I focused on establishing a clean code structure to enhance maintainability and facilitate future improvements or modifications. By utilizing C# actions for UI and logic decoupling, the system can be easily ported to different situations.

- Personal Assessment:
Overall, I am satisfied with my performance during the interview task. Despite the time constraints, I successfully delivered a functional system that met the specified requirements. The challenges I encountered, particularly in sourcing assets with consistent aesthetics from different sources, pushed me to explore creative solutions .If given additional time, I would have devoted efforts towards the development of a more versatile and generic database system, specifically designed to facilitate the deserialization of inventory and equipment. This would have allowed for the integration of a data persistence system.

I am at your disposal in case you have any questions regarding my solution to the interview task. Thank you for your time and for the opportunity.

Marco Ormello. Unity Developer
Buenos Aires, Argentina.
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