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Market Madness Reflection

This paper is a reflection on the development process of the game *Market Madness*. It will go over the design in the project plan and changes. The development process and the state of the finished build of the game.

Design and Project Plan

The project plan was drafted and created by Jodi Chapson, Siyathandana Nontolwana, Virikshaan Singh and Imraan Arenz. The initial idea for the game was a 2D stealth game that took place in a supermarket and had minimal lighting, restricting the player's view of the game screen. Looking at various stealth games for influences and inspiration, the main decided inspiration would be the stealth asymmetrical multiplayer game *Among Us*. Though, the game would be played as a single player game. Instead of being killed the player would need to avoid getting caught to avoid working an overtime shift.

The initial gameplay would have been playing as a worker in a supermarket that had no power and their boss is looking for them to work overtime. The player could hide and run from the boss until they were able to leave work but this simple system would become very tedious and boring to play through so the idea of having the player do work before they can leave as the time passes so that they are more active in the game space adds tension as they could be found by the boss and lose. However, they would also need to finish the job and leave before a certain amount of time passed or else, they would lose once their time was up. This would require strategizing so the player could work quickly and not get caught. It was also decided upon to add what the team would call Susan. Susan is the assistant manager who assists the boss in searching for the player and would alert the boss to the player's location to increase tension in the game and add that sense of being on the back foot when working through tasks. Customers were also added as blocks to the player as they stop the player in their tracks and ask questions. However, while the player is a victim to the customer, so is Susan and adds a level of strategy to the game as they are double

edged swords which can make the game easier or harder for the player and give them more or less breathing room when working on their tasks.

The tasks decided upon for this game were the following: The player would need to mop up water spills on the floors of the market, scanning and checking out items at the tills, checking and removing expired items. Labelling items in the supermarket, arranging flower stands and moving items from the storage room to the aisles. Afterwards the player would then be allowed to check out and leave. The set-out areas that the supermarket would have is the general aisles, the fresh produce section, the storage room, the bakery, the boss' office and the tills area. The produce task would have the expired goods task, the tills would have the scan goods task, the storage and general area task would hold the moving items task. An open space in the till area will be used to have the mop floors task.

Upon looking again at the task list, the layout and premise of the game (a stealth game in a supermarket), the flower stand tasks and labelling tasks would be removed as there would be no more suitable spaces to add the mini games. Additionally, supermarkets do not handle flowers as that is more specified for florist, nursery and other shops that handle garden work. The labelling task would have been unneeded as supermarkets receive pre-packaged and labelled products for them to distribute. The visuals of the game would be designed with a pixel art aesthetic to tie everything together.

Development

The project plan had talked about a set amount of time being handled for parts of development but due to unforeseen circumstances most of the development time was allocated to the mechanics of the game. The basic movement was quick to create and implement but the creation of tasks and implementation of them into the game and cohesive work of them was longer than expected. Through this development was where decisions for the tasks and design were had. The tasks would be handled through Unity's UI system to allow for moving between playing in the game in the normal game world and players performing tasks that do not clash with the systems in the game world.

Using the diagram as seen on page six of the project plan, a rough visual of the game level layout was made for the player to navigate and interact in. After this development

of the tasks were made. First was the scanning task which uses the WASD commands navigate where player moves their thumb to the scan spot. The next was the mop floors task which was relatively straightforward too. The till and dispose expired goods task were a little more challenging to implement. When integrating the games, the mop floor task would be changed to make based on mouse movement for better implementation and use.

Susan movement was handled with an A* pathfinding program package for Unity. It was quick to implement but at this point in time there was not enough time for further building on it and implementing the boss. Let alone developing the art assets. At the end, a prototype showing the basic gameplay system was made.

Recommendations for future work

Going forward, when making a game such as this, it would be wiser to rein in the workload and expectations going forward when making a game and looking at time constraints. Additionally, the time going into the work being made needs to be adjusted to be more realistic for better workflow.

Referencesa

- Brackeys, 2019. *2D PATHFINDING - Enemy AI in Unity*. [video] Available at: <https://www.youtube.com/watch?v=jvtFUfJ6CP8&t=582s> [Accessed 21 June 2021].
- Redefine Gamedev, 2020. *How to Make Among Us in Unity #2 | Card and Keycode Tasks*. [image] Available at: <https://www.youtube.com/watch?v=tA_wXHNzFXk> [Accessed 22 June 2021].
- Redefine Gamedev, 2020. *How to Make Among Us in Unity #6 | Putting Everything Together*. [image] Available at: <https://www.youtube.com/watch?v=Hq_Gzia-Tbw&t=1488s> [Accessed 23 June 2021].
- 2020. *A* Pathfinding project*. (version 4.2.15). [Software] [Accessed 22 June 2021]