Andrew

Building the initial prototype of the game meant that the main movement mechanics were settled from the start. From there, I worked on having an AI system working, to give some life to enemies besides a simple patrol pattern. The Minimum determined for this game was for the player to move smoothly, to have a single level functional, and to have at least one AI system.

Even after the player controller was finished, there were still iterative changes, adding small improvements to how the player moved. The game object that underwent the most changes was the patrolling enemy. At first, it used a ground check that when it returned false, it would flip the enemy and move in the opposite direction. However, this resulted in the enemy not detecting walls, greatly reducing the flexibility of placing them in the world.

The second iteration attempted a combination of ground and wall checks, however it was inefficient, resulting in scrapping the entire script. Starting over, I used two empty objects that determined the start and end of the patrol. This allowed us to adjust the enemy to different platforms, and even to patrol different sections of platforms if needed.

This being my first real try and creating an AI, perhaps better planning, and more research would have helped minimize wasted time due to constantly reworking the system into something that suited our needs. The same could also be said with how the system detected if the player was in attack range. Initially, the system used a raycast, however, there were many instances where it was not detecting the player when it should. Because of this, I resorted to a much simpler box collider which was set to a trigger. While not the most elegant solution, it was sufficient for what we needed.

After all of these were functional, I set to work on other aspects; improving the character's movement feel, giving him a sense of weight. Adding small touches to give some movement and life to the games systems. However, due to the lack of time, I was unable to make these additions as polished as I would have liked.

The final real shortcoming from my end is my inability to scale down ideas and slowly build on them. I have a tendency to be ambitious with what an idea could be, and immediately work towards it, rather than creating an idea that works, then slowly building up to it. For the time frame we had, the game idea was far too ambitious, and could have afforded being scaled down, which would allow us to better polish more aspects of the game.

Overall, I feel most of these mistakes could have been avoided with better planning, and generally more experience. Perhaps with more time, being able to restart certain parts of the game and improve them, the final product would be significantly improved. However, despite what I would call considerable shortcomings, I was satisfied with how I handled the problems. Exploring better solutions even after “solving” the problem.

Michela

The initial iteration of the pickup mechanic involved having an incremental point system, wherein the player was able to pick up the items and the points increment by one; this version of the pickup was scrapped. The base idea of the player picking up an asset was obviously kept, but instead, the item that is picked up is displayed in the inventory, positioned on the right-hand side of the screen. This version made it easier for the player to keep track of which items had been picked up and what items were left to reach the end of the level.

After the items were able to be picked up, animations were added to the separate items to make it easier for the player to spot what items are meant to be collected. When those components were ready, the items to be picked up were positioned in the game world.

There was an attempt to create a non-violent attack for the main character, a sort of pushback that would aid in fending off enemies, but when thinking about if it is needed and if it will work, we decided as a team that we would remove the attack all together as it would’ve created some issues, which due to time constraints, it wouldn’t have been viable to fix.

When the screens of the game were given, I set to work on creating the connection between the menu screen into the game, the game into the pause screen and the game into the game over screen. This didn't pose a great amount of difficulty, since this was tackled through the creation of the game manager; through the main menu the player is able to start the game and exit the game, the pause menu allows the player to resume (also facilitated by pressing the escape button, which is what was set to trigger the pause menu), go back to the main screen or exit the game entirely and the game over screen allows the player to either restart the level or exit to the main menu.

The main menu and pause menu work exactly how I wanted, but the game over screen posed a difficulty. Since the defeat states of the level were still in development, I was not able to factor in the game over screen, so while it was created, it does not appear in game. This is an easy fix and will be fixed with the next iteration.

Many shortcomings and issues from my end came due to the time constraint and my inability to plan properly. One mechanic that should've been finished within a certain timeframe took more time than originally stipulated, due to having different assignments and life in general getting in the way. Scaling down on the project and focusing on one level only, without having to worry about other levels that were to be implemented, would have helped us in not having as much pressure and given us the ability to finetune and polish our game.

In reality, the issues that are in the game could have been fixed if we had more time, and we didn't have as many things piled up against us. Despite shortcomings, I saw a reasonable development in myself as I learned how to tackle issues, and I feel more confident in going into future projects.