<https://github.com/CuDevlin/UltimateGMDProject>

Personal Reflections:

Devlin:

Reflecting upon my experience of the GMD final project, where we created a 2D, VIA Survivor game, to start with how the scripting went, it was an up and down ride. With starting the project early in the semester and seeing separation of responsibilities which was not taken into enough account early on. This had to be addressed, and I was able to separate the responsibilities, and make the components more modular.

The scripting itself was normally straightforward but took an extensive amount of time and research of how certain gameplay mechanics would work, or how they should work. For example, the Damage Receiver was meant for both player and enemy, but as development continued it was decided this was unnecessary for the implementation of damage to enemies due to the damage scaling that Adrian implemented.

Looking back at these changes, we could have kept to a better separation as we continued, as some responsibilities could still be separated. Although I believe we handled with well given the time and scale for our ambition of the project.

To handle player movement, the built-in unity input system was used, where we could configure the movements and actions for multiple devices. So this aspect of the game for movements are configured by us but handled by unity.

A computer screen shot of white text

AI-generated content may be incorrect.

These vectors were used in the Player Controller. This was used to capture in current direction the player is moving, and if they stopped what was the last movement direction. This allows us to apply these vectors for the animations, since there is multiple animations and states where the player could be looking. It was important to handle how the players character would look with the given inputs.

A screenshot of a computer

AI-generated content may be incorrect.

The animations themselves focused more on the player, as seen above the player has a more in depth 8 directional animations, for movement as well as while idle. This significantly added life to the character from its original 2d box form. The enemies have simpler 3 frames to show some life but are not multi-directional based on their own movements.

Looking back, I wished we would have spent more time earlier on as this is one of the lasts sections we touched was with animations. As our focus was more on the gameplay and mechanics we wanted to implement, although I believed this still helped us make a more complete game.

Game physics in our case are minimal, there are collisions between the player, the environment, as well as the enemies. Which allows enemies to box in the player and gives the player obstacles to work around. This also works well with the current AI, as the enemies ai is as it stands only setup with a simple algorithm to track the player. This means the enemies do not avoid obstacles. I would like to in the future add either a more complex algorithm or make better use of the Nav-mesh. This would make pathing for the enemies better and give a higher difficulty with the enemies, so they do not just get stuck.

Our game uses game managers, to handle the UI state, as well as the game states. For example, the experience manager, handles all the interactions and uses for leveling up and the gaining of experience for the player.

I implemented the MainMenu, PauseMenu, and DeathScreen. While Adrian focused on the Level up mechanics and UI. Although the UI itself uses a RPG style. The buttons use multiple sprites to show when a button is hovered and selected by the player. This also allows on the arcade machine to show where you are in the menus. Currently the settings button has no function but, in the future, I would have liked to add a controls UI, as well as volume settings.

Overall, I believe we covered all areas required for the project in various degrees. Where we focused in some respects shows as we do well in game mechanics, UI, and the animations. We do lack in the AI aspects. But I believe this is to be expected and in the future, we would look to upgrade the AI and add more enemies, as well as different buffs and skills the player would be able to use. This has been an amazing opportunity, and I look forward to

Adrian: