

Design Document for MP 2

My design process for this MP began with the enemies. I first looked through the given asset files using the content browser and looked for assets that corresponded to an enemy that could chase, a turret, and a projectile. I settled on a robot with wheels for the pursuer, a spike for the turret, and a beach ball for the projectile. I felt these meshes looked nice and matched what the enemies should do.

I next began coding the enemies and implementing their functionality. I found some online assets for the explosions and simply used the included sounds from the original Learning Kit. For the custom enemy, I considered a few options, such as a turret with more targeted aiming pattern. I wanted something that would force the player to time their jumps and movements. I finally settled on the “mine” enemy since it gave an additional strategy of baiting out the explosion and then safely passing through (as opposed to just running past quickly).

For the collectibles and health packs, I used the assets in the Learning Kit and modified their functions respectively. The background and buildings were also just assets added for aesthetic value.

For the level design, I decided to make a platformer based on jumping across islands. This was because when I saw the initial map, I saw all the islands in the distance and thought it would fun if the player could travel around to the different islands and explore. I decided to use a mix of island sizes to accommodate the different enemy patterns.

I found the pursuing enemies and the mortar would work best in larger spaces, or between buildings. However, the mine enemies would be ideal in two scenarios: A) a minefield that forced the player to move carefully (or run through if they knew the layout) and B) a series of small islands each with a mine or two. The second scenario would force the player to move quickly since there was not enough space to bait out the explosion. Based on this, the overall level design was defined by larger islands (with pursuers and mortars, and some mines) connected with smaller islands (with occasional mines to force quick movement and provide a challenge). This gave the player a mix of planning out their path and executing movements quickly.

I wanted the overall level design to be linear, so the player didn't get lost with all the islands. However, I also wanted to give the player some freedom, so I added the optional challenge areas as well as the path splitting. This would allow the player to decide if they wanted a simple path to follow or to explore the level more. I used the coin collectibles to incentivize exploration since they were optional but rewarding to collect. Finally, I put in health packs in the level after larger islands since the players would potentially take damage but not fall off on these islands (as compared to the small islands + mines which would likely knock players off the map).