

CS 415 - MP2 Design Document

In crafting my level, I started by using the default level provided by learning_kit map through Unreal Level tutorial, tailoring it to suit the requirements of the assignment. I kept some objects in the game to potentially provoke exploration (or maybe even waste time if someone is a new player). To create a sense of progression, I divided the level into distinct "islands," each housing different enemies, essentially serving as pseudo-levels.

The primary mechanic introduced was the encounter with various enemies while collecting gold coins and health pickups as aid. The first adversary encountered is the mortar. Its behavior involves predicting the player's movements while adding an element of randomness for the location of impact, ensuring engagements aren't entirely predictable. Usually, there is a green/yellow icon that shows on screen to see the location + randomness part. Upon detonation, visual effects accompany damage, with the intensity decreasing with distance from the explosion's center. The mortar can be neutralized by jumping on it, as suggested by the requirements.

The subsequent enemy encounter depends on the island chosen. On the left island, players encounter my custom built turrets designed to detect and damage on sight. These turrets employ knockback mechanics similar to the mortar and pursuer enemy types, with rapid bullet fire posing a significant threat if players linger. The bullets damage is pretty low, but they are quick (unlike the mortar) so you can waste time on destroying them.

Moving to the back island, players face the pursuers. Two roam freely (until provoked) while one remains stationary until provoked. Upon detecting the player, all pursue relentlessly, reverting to their default behavior when the target gets away from them. Similar to other enemies, these can be knocked down by jumping on them.

Gold coins and health pickups are scattered across the islands, with one special hidden coin strategically placed beneath stairs to incentivize thorough exploration. The location was chosen as the place under the stairs is dark and not intuitive to explore. Collecting all coins triggers a "You Win" prompt and restart option, while death prompts straight to the restart option. Falling off the map can also provoke restart due to death by fall.

To enhance overall immersion, the game features background music (I made in garageband) and sound effects accompanying collisions, enemy encounters, and pickups.