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CS 498 Game Development

### Level Design Documentation

There were multiple different mechanics to take into account with level design for this project. We will begin with the design choices made due to the characters' limited flying abilities. I added the stamina system as infinite flying would likely lead to many ways the player could skip many crucial parts of the level. The space between islands was made in a way so that the player can reach all islands via the limited stamina/flying system. However, the lack of ability to fly directly upwards prevents depth when arranging the islands. If one island is significantly lower than the others, the player has no way of reaching higher islands from the lower ones. The solution to this issue was the addition of the launch pad. When the player comes into contact with the launch pad, it launches them vertically and in the direction they are facing. Finally, we used the coin system to encourage exploration. The player could easily speed run the level in a minute or so; however, to collect all the coins becomes much more challenging as some are placed in difficult locations.

There were also many design choices made for the level based on the enemy designs. The enemy that had the most impact on level design was the turret enemy, as it is the most difficult to evade. When placing coins near a turret, it could not be too close or else it would be nearly impossible for the player to retrieve the coin. Finally, health packs are placed as a sort of "checkpoint", after the player evades a certain batch of enemies.

Ultimately, the unique aspect of this level comes from the player's ability to manage their stamina and momentum when flying to maneuver around the map and evade enemy attacks.