Process of level design

Hanwen Zhang

Hanwen6

In the first step of the level design, I placed five islands of different sizes in the environment. The first island's ordinate is the lowest of the five islands. So, I put some disconnected stairs mesh between the first and second islands. If players want to go to the second island, they must find the correct path to go through the disconnected path to climb to the second island. And the ordinate of the second island is the same as the second island. So, players need to fly to the third island from the second island. The size of the fourth island is tiny, and the ordinate of the fourth island is lower than the third island. So, if players want to land on the fourth island, they must find the correct position to jump to the island during flying. The last island's ordinate is lower than the fourth island, so players must fly over the island and land on it.

The second step of the level design implemented three kinds of AI enemies. The Patroller will begin chasing the players once it spots them. If the Patroller catches players, they will be knocked back, and their PH will be decreased. If the players go out of the patrol Patroller's sensing range, the Patroller will return to its normal patrol path. The Mortar can constantly shoot projectiles around itself, and the projectile can be knocked back players and decrease the player's PH. Also, if players overlap with Mortar's body parts, players can be knocked back, and the player's PH will be decreased. The Drone will patrol in the air and shoot projectiles at the players; the projectiles can knock back players and decrease players' PH. Also, if players overlap with Mortar's body parts, players can be knocked back, and the player's PH will be reduced. Overlaps can destroy all the enemies with their head parts.

The third step is to place enemies, Coins, and health packages in the level. To increase the difficulty of this game, I placed the Drone above or between the islands to decrease the player's success rate flying to another island. And Patroller is used to distract and disrupting players while looking for the Coins. Because players can fly in the air to avoid Patrollers chasing them. I place Mortars to shoot projectiles randomly in the level to prevent players from floating in the air to avoid the Patrollers. Enemies surround the Coins; players must collect all 8 Coins to complete the game. And if players do not have enough PH to continue the game, they need to get health packages to increase their PH.

The last step is to create restart widget and congratulation widget. If players' PH reaches 0, or if players fall out of the island, the restart widget will be displayed on the screen, and players can restart the game by clicking the restart button. If the player collected all 8 Coins, the Congratulation widget will be displayed on the screen, and players can play the game by clicking the quit button.