

For the final game project, I added platforms for the player to jump on, implementing an algorithm as well to create successive platforms based on the position of the previous one, allowing there to be 2 or more platforms ascending next to one another. Platforms are also randomly generated and use the factory method to achieve this.

Following on this I added enemies based on the location of the canyons and then allowed them to walk between the two canyons where they were spawned in. Each enemy is created using the constructor method. Once an enemy touches my player, the player character dies and a life is lost. As previously, once the live runs out, the game is over.

I added the following sounds:

- Background Music
- Completed Sound
- Died Sound
- Jump Sound
- Collectable Sound
- Game Over Sound

These sound play when the relevant event occurs, i.e. a play completes the level.

The platforms were the most difficult part of this final assessment, as the initial idea of how they should be generated wasn't as straight-forward as initially thought. Following on from there, refactoring some of the code to allow my player character to jump on the platforms and not fall through them, while also not interfering with other elements in the world was difficult.

I practiced how to work with nested loops to create the enemies that move independently of each other. I added animations to world elements to make the game feel more alive using the `sin()` function.