

Introduction

For my project, I chose to tackle the third project option, which involved creating a game and I included a boss fight, and both "You Win" and "Game Over" screens. In this project, I aimed to design a unique gaming experience where every playthrough would be distinct, thanks to procedurally generated platforms on each refresh.

The dude has all the basic movement features, as well as an implemented double jump that is available every time he collects a sword in the air.

Main game code

In the primary game code, I began by preloading all the necessary assets, such as the background sky, player character ("dude"), swords, and other elements. The objective of the main game is to accumulate as many swords and daggers as possible. These can be used to defeat the boss in the subsequent boss fight stage. Players can also gather mushrooms to manipulate their character's size and gravity. Additionally, upon reaching a score of 100 points, players receive a 25-second powerup speed boost to enhance their gameplay.

The ground in the game features gaps that players must avoid falling into; doing so results in the loss of a life. Players can also lose lives by being hit by bullets. Upon losing three lives, the "Game Over" screen is displayed.

Boss fight code (faulty but should work for the submission)

In the boss fight section, players control the "dude" who must press the space key to throw daggers at the boss. The boss retaliates by launching fireballs at the player. To succeed, the player must dodge the incoming fireballs and land at least 100 daggers on the boss, which leads to the "You Win" screen.

Points proposal

Feature	Max points
Well written PDF report	3
Application works on Firefox, Safari, Edge and Chrome	3
The application has clear directory structure and everything is organized well	2
There is a clear plot in the game. It has a start and end.	3
There are different (more than 1) objects to collect	2
There are moving parts in the game area (collecting stars,player lives are dynamic (moving part if understood))	3
There are more than one map (never the same map for different players, boss fight map [very simple but I propose it counts])	3
Game uses physics engine, so that there are falling parts / enemies / players	2
There are enemies that can hurt the player (bullets in first map, fireballs in second)	3
There is music and sound effects when player shoots/jumps or anything like that (background music for both main and boss fight scenes, jump music, collection sounds, funny grunt sound when killed)	3
Total Points	27 (25 if boss fight map is still faulty)