# CA 1 Report

This game was made by Myself (Joshua Seymour) and Ben MacKay

I worked on the majority of the scenes, the scenes I made were: BootScene.js, GameOverScene.js, GameScene1.js, HelpScene.js, LevelScene.js, OptionsScene.js and TitleScene.js.

Ben made the GameScene2.js and the Sprite Sheet of the player and an enemy, level 2 was planned to be a boss level but it was too much to do so it’s just a regular platformer.

# Process

My first idea of the game was a bit too big for what we are doing this project so I had to cut a lot of my ideas out of the game. For example, I wanted to have an attack function that would let me kill enemies. But that was too much so all we have is that animation.

## Boot Scene

In this scene I loaded all the assets, sound files, images, and sprite sheets. I also start the music in this scene, in the create function so when I’m in my level it doesn’t start playing the background music over the first background music whenever I die and it resets the level scene.

## Title Scene

I started this project making the title scene I used the button ui to add buttons to navigate from scene to scene. I also added the background image which I made in Photoshop and text for the name of our game.

## Help Scene (controls)

Originally I wanted this scene to have its own mini little world but at some point during the project it stopped working and I couldn’t figure out why so I had to just go to plain text that told how to play the game.

## Level Scene

This scene is similar to the title scene where there are two button options: Level 1 and Level 2 and there’s a back button to go back to title scene.

## Options Scene

This scene is similar to title scene as well, I wanted to have a button to mute sfx and one to mute background music but I couldn’t get them working, so the buttons just link back to the title scene.

## Game over Scene

When the player finishes the level they get sent to this scene which gives them the option of playing again or going back to the title screen. I tried to get this to show their score from the game scene 1 but I wasn’t able to figure out how to pass the value from one scene to another.

# Game Scene 1

This is my game scene. I wanted to try use tiled which would let me set up the would on a tile map but that was too complicated to do on my own and by the time we learned about it in class I’d already made my entire world by manually placing sprites and platforms with collisions so the players and coins and enemies couldn’t fall through the world floor. I set up a wall on both sides of the world that the player can’t get past, I made the camera follow the player so when the player moves right the camera will follow the player.

I made the background (I had to add another as the image wasn’t long enough for our entire level.)

## Enemies

I added enemies that if you touch them you die and reset the level. I tried to get them to move but I kept getting errors so I didn’t get it working. A sound plays when you hit into them.

## Guide / Ally

I also added a guide / ally who appears throughout the level and warns you of spikes / enemies and tells you to pick up as many coins as you can. I edited the sprite sheet of our player and just made a png of one frame to make him.

Since I didn’t use tiled to make my world, I used Photoshop for the majority of it to create all the sprites and background images. I used piskel to edit the sprite sheets Ben gave me so it fitted my game.

## Spike traps

I added spike traps that you have to jump over, (I had to edit my wall and make each section of the wall, if I made it all one thing you wouldn’t be able to fall into the traps because the wall image would not let you fall through it. A sound plays when you touch the spikes and you die and reset the level.

## Coins

I added coins to pick up and later added a big coin and then a key to collect. I added a pickup coins function that allows me to collect coins / big coins / keys and add that score to my total score which is displayed throughout the level. A pickup sound is played when you collect them.

## Score

I wasn’t able to make the Score follow the player through the world so I added the text every 1500 or so from each other.

## Background music

The background music plays from the boot scene, which makes the music continue even if you die and restart the scene.

## Animations

I added the animations for the sprite sheets in this scene. Some for the player (with attack animations) and one frame for the enemy which wasn’t loading as a png so I had to make it a sprite sheet and only use one frame.

At the very end of the level there’s a door and it you stand on it you will be taken to the game over scene.

## Controls

I made the controls in the game scene 1 I added my extra bits to make it more comfortable for the player to play, like being able to press two buttons at the same time. Thought about adding a glide function, but realised it wouldn’t really suit our game (Commented out just below the movePlayer function.).

## Collisions

For my collisions I used the getBounds() function, which would detect if the player was over anything that I want to collide with.

## Pickup coins

I made a function that would pick up the coins and key and big coins (disableBody, score +10). I had to add an overlap(x,y,function,null,this), which would let this function be called whenever there’s an overlap.