Process Log

Beginning the project

Downloaded and installed Unity 2019.2.6

Imported Assets previously used for a project into Unity.

- Created a palette and tiles from a tileset included with these assets
- Imported images for the background from the same asset pack

Set up Character and placed it into the world

Created a simple tilemap to use as temporary ground

Collision

- Used Tilemap Collider 2D for the ground collision
- Used a Box Collider for the player's upper body and a Circle collider for the lower body
- Character was getting stuck on the edge of walls so created a Physics Material to prevent the character from sticking to walls

Added the RigidBody2D to the character so it is affected by physics.

Added a coin without any interactions

Creating the basics

Referenced an existing character controller to handle character movement physics

- Allowed the player to move left and right
- Made it possible for the player to jump

Added a Circle Collider to the coin

- Set collider as a trigger

Added animations to the game

- Added Idle, Jump, Running animations to character
- Edited the controller to detect the time after player jumps to fix animation bug
- Created transitions between character animations
- Added a spinning animation to the coin

Added interaction between the player and coin

- Set the player script to destroy the coin on contact

Basic UI and scoring

Added text and ScoreManager object

- Created Text Mesh Pro for score display

Implemented score increase

- Score increased when coin collides with player
- Was adding 2 points so added a Boolean check to limit it to 1

Fixing character movement

Realized that the character should only be moving to the right without the player's input

- Modified the character controller to allow only the required movement
- Removed methods to control horizontal movements

Level Generation

Created method to scroll background

- Extended length of the temporary tilemap to test
- Loops clones of background when off the edge of the camera view

Created small tilemaps to be used for generation

- Issue: sections of a tilemap could not be selected for generation
- Solution: grids can be saved as prefabs, allowed prefabs to be generated
- Level parts will be created with 20 units in length, coded with this in mind

Created LevelManager to spawn level parts

- Initially found the position manually to test spawns
- Tested single spawn using variable value
- Tested multiple spawns using variable values
- Created method to spawn land based on distance from player

Android build compatibility

Installed the Android SDK integration with Unity

- Set up developer options on Android Phone

Changed player movement to allow touch control

- Allowed jumping with any numbers of fingers touching the screen

Tested building to Android Phone [Success]