

MY PROGRESS JOURNAL

COMPUTER SCIENCE INDEPENDENT STUDY

AMETHYST MCKENZIE

2020-2021

INTRODUCTION

This Journal recounts my journey and efforts into making a project for my Independent Study in Computer Science (2020-2021)

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WEEK 1: STARTING (SEP 14-18)

MONDAY SEPTEMBER 14TH 2020:

- Finished draft for proposal (1 hour)
- Worked on game designs (2 hours)

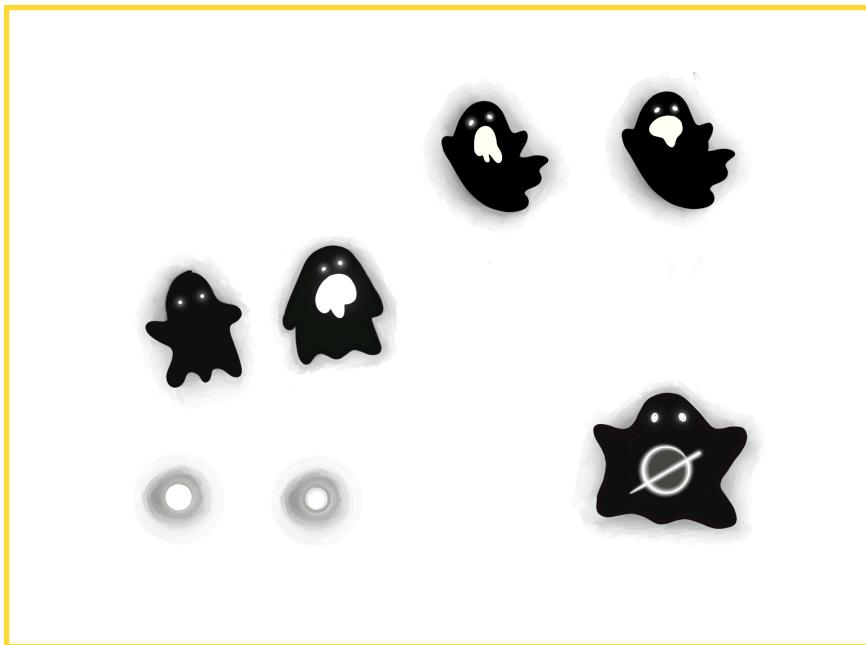
WEDNESDAY SEPTEMBER 16TH 2020:

- Watched “How Making Indie Games Change My Life” by Game Dev Unlocked (9 mins)
- Watched How To Make A 2D Game (Unity Basics)! - Thomas Brush (16 mins)

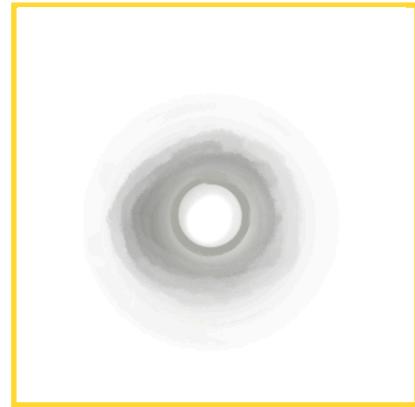
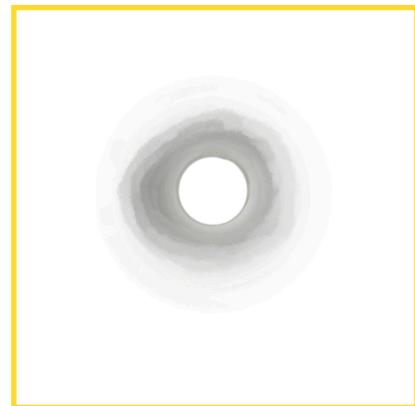
FRIDAY SEPTEMBER 18TH 2020:

- Started potential character designs (2 hours)

MOON



ENEMIES, MAIN CHARACTER, MOON



SATURDAY SEPTEMBER 19TH 2020:

- Finished potential character designs (1 hour)
- Downloaded “Learning 2D Game Development with UNITY” PDF
- Downloaded “Unity-5.x-Shaders-and-Effects-Cookbook” PDF

MC

WEEK 2: BRAINSTORM

(SEP 21-25)

MONDAY SEPTEMBER 21ST 2020:

- Worked on a design for the introductory level (3 hours)
- Downloaded Unity and tinkered with some of the controls (45 mins)

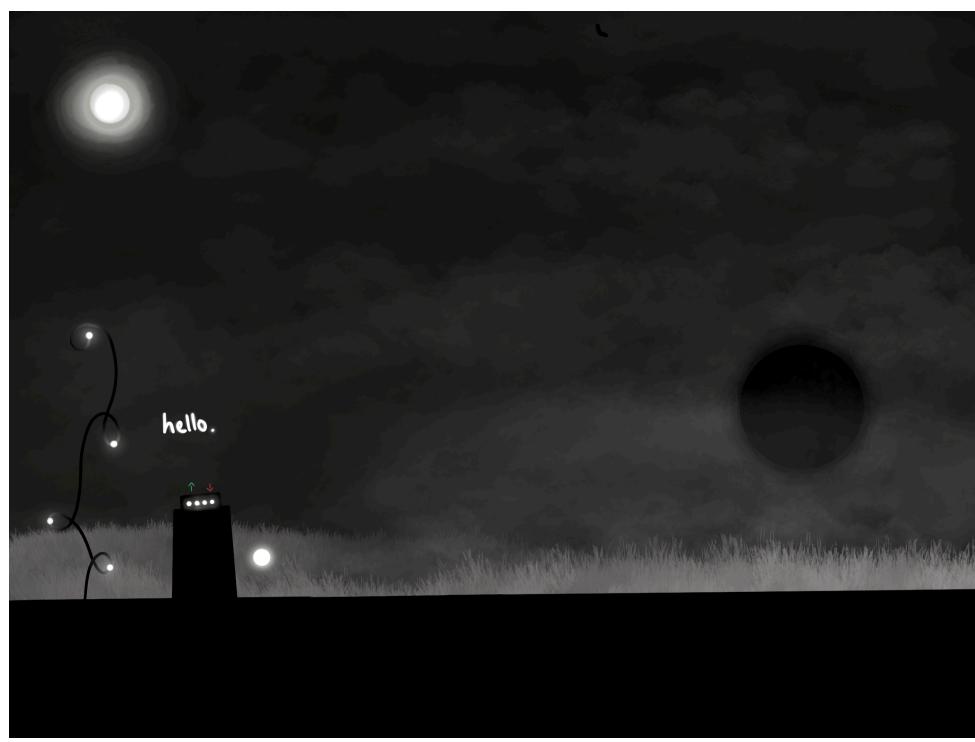
TUESDAY SEPTEMBER 22ND 2020:

- Continued working on a game design for the introductory level (2 hours)
- Worked on another level design (1 hour)

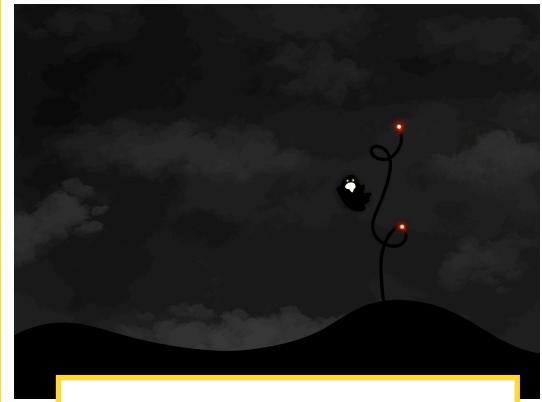
WEDNESDAY SEPTEMBER 23RD 2020:

- Finished the game design for the introductory level (1 hour)
- Organised meeting with Mr. Healy (5 mins)

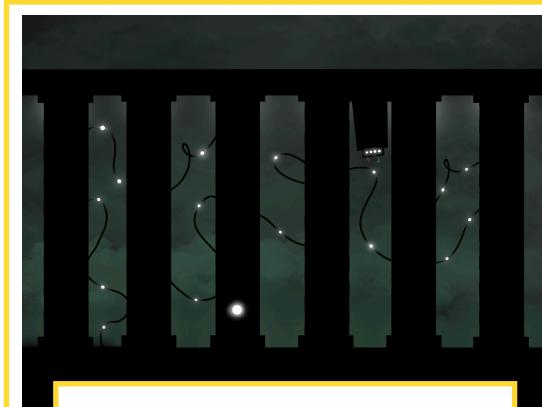
DISREGARDED DESIGNS



POTENTIAL INTRODUCTORY LEVEL



1 hour (in total)



1 hour (in total)

WEEK 3: STARTING UNITY

SUNDAY SEPTEMBER 27TH 2020:

- Downloaded Unity 2020.6f1
- Started the official Unity tutorial “Ruby’s Adventure: 2D Beginner”

WEDNESDAY SEPTEMBER 30TH 2020:

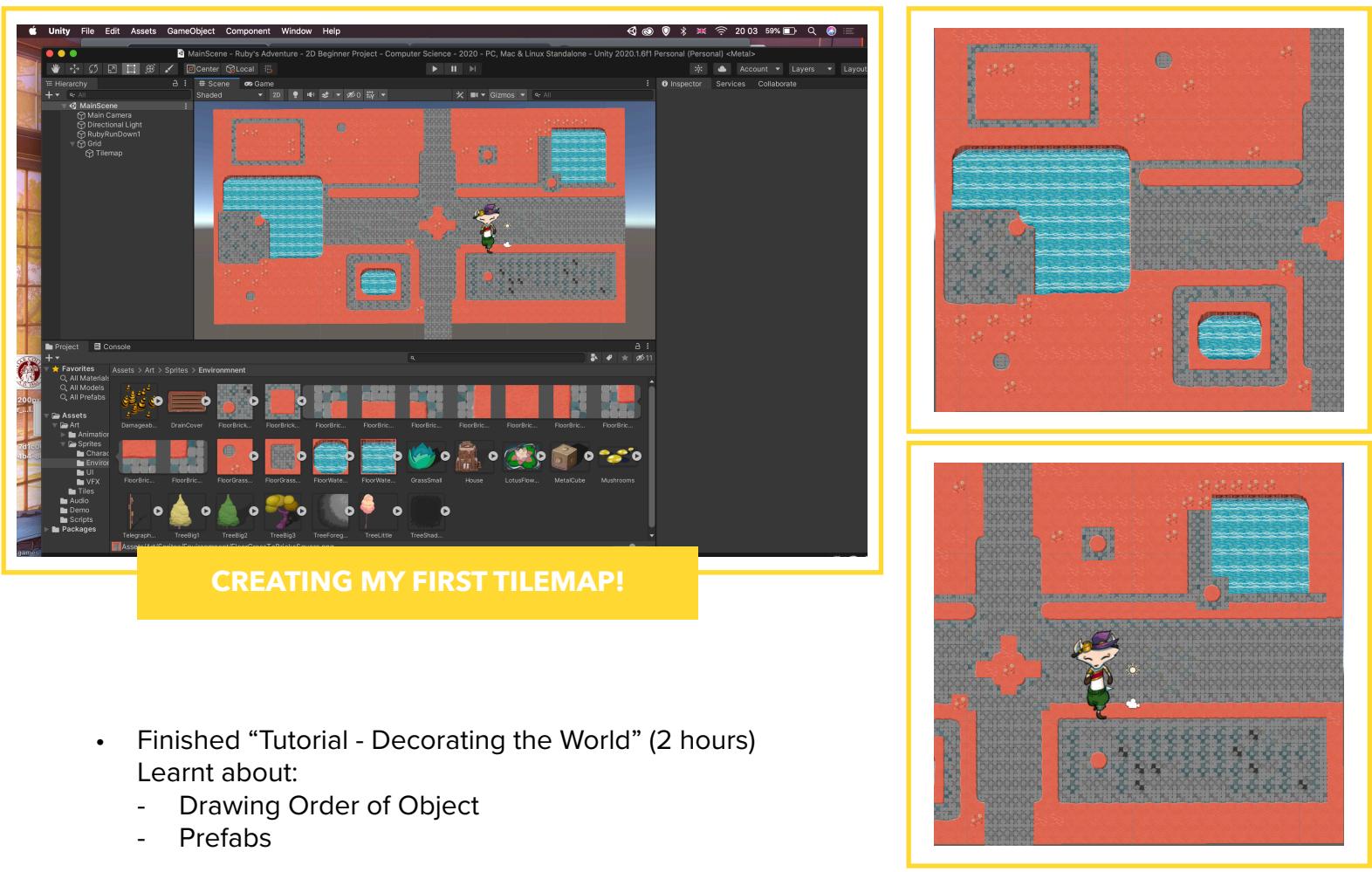
- Finished “Tutorial - Setting Up the Unity Editor” and Main Character and First Sprint” (30 mins)

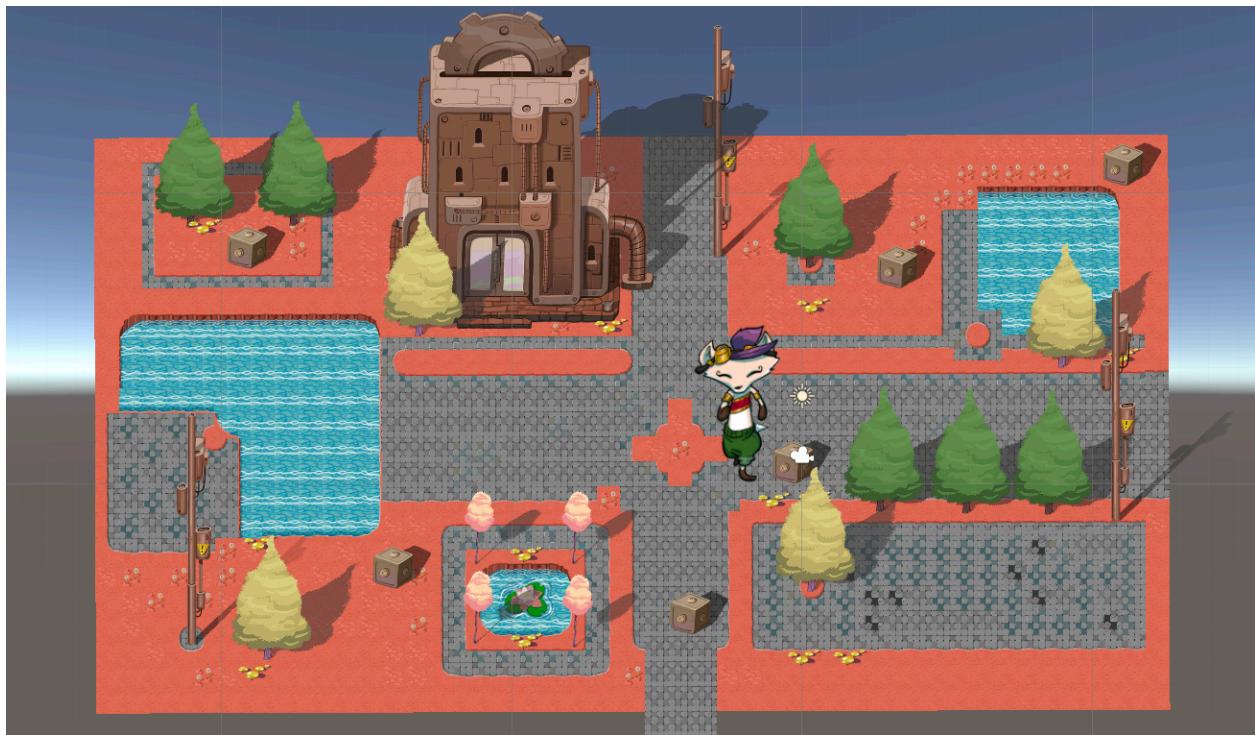
Total: 30 mins

THURSDAY OCTOBER 1ST 2020:

- Finished character movement by user input
- Completed my first tilemap
- Finished “Tutorial - World Design - Tilemaps” (2 hours)

Total: 2 hours

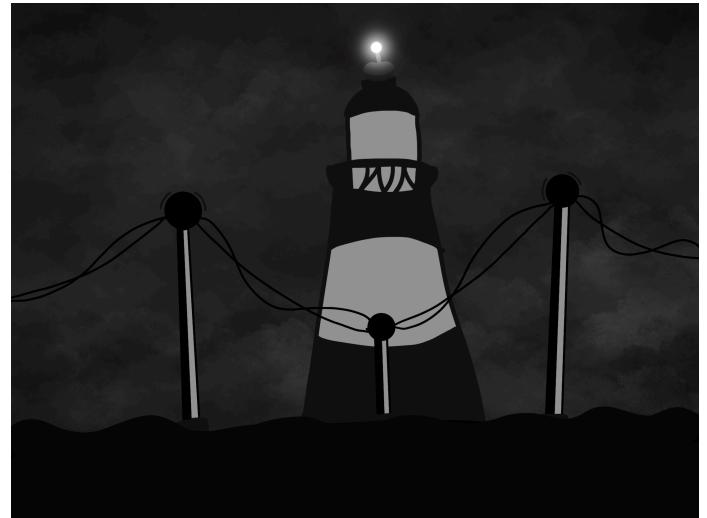




DESIGNING MY FIRST WORLD IN UNITY!

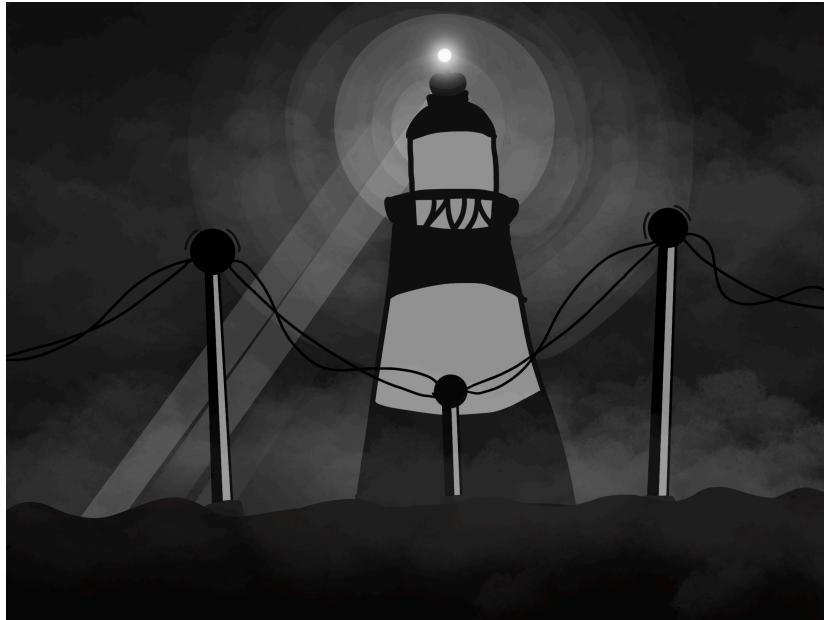
- Worked on 2 game designs (for my actual game concept) (2 hours)

Total: 4 hours



FRIDAY OCTOBER 2ND 2020:

- Edited one of my game designs: (30 mins)



- Added a Rigidbody component to the character Ruby in my Unity Tutorial
- Added Colliders to GameObjects
- Fixed Ruby character movement jittering
- Edited colliders so that gameplay appears more visually appealing
- Added colliders to water tiles
- Completed “Tutorial - World Interactions - Blocking Movement” (2 hours 30 mins)
- Added Health to Ruby
- Added a Health Collectible
- Trying to fix my console (debugger won’t show) - 1 hour

Total: 4 hours

WEEK 4: TUTORIAL PROGRESS

TUESDAY OCTOBER 6TH 2020:

- Fixed my issue with the console! (I had set the currentHealth equal to maxHealth, which makes sense once the character can be damaged, but before so you can't see the change in code because the health will exceed the maximum health if it passes over a health collectible—giving the illusion that the console wasn't picking up information) (2 hours)
- Finished “World Interactions - Collectibles” Tutorial (1 hour)

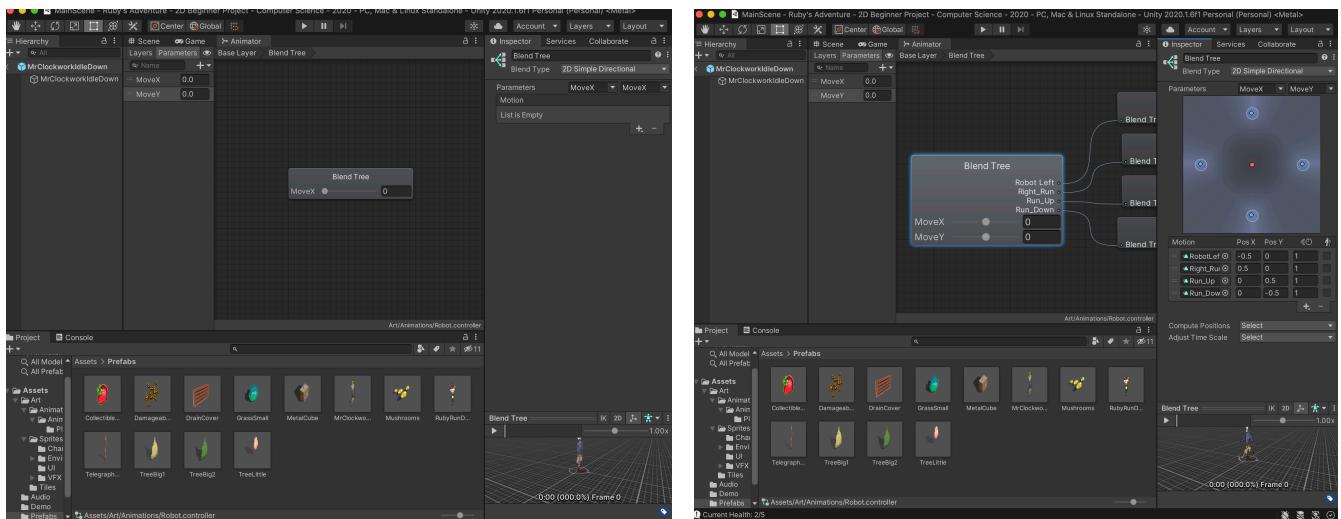
Total: 3 hours

SATURDAY OCTOBER 10TH 2020:

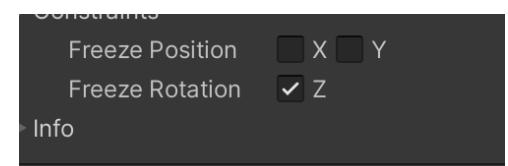
- Started “Sprite Animation” Unity Tutorial

SUNDAY OCTOBER 11TH 2020:

- Added an animation to my enemy. (2 hours)



- Encountered an issue: When Enemy changes direction it doesn't change animation with it. Error in code (most likely) (1 hour) -> Trying to figure out.
- Also, Enemy still behaves weirdly when Ruby runs into it.
- Semi-Fixed Enemy Movement (Had to click Freeze Rotation for the Z component).
 - Now it doesn't rotate weirdly when Ruby gets in contact with it. However, Ruby is still able to push the enemy around, which I don't think is by design.
- DIRECTION CHANGE WORKS!!!!
- I was naming the parameters in my code as “Move X” and “Move Y” instead of “MoveX” and “MoveY”..silly mistake...(1 hour)
- Adding animations to Ruby



Total: 4 hours

TUESDAY OCTOBER 13TH 2020

- Finished Sprite Animation Tutorial (1 hour 45 mins)
- Now both Ruby and moving Enemy have working animations
- Ruby has animations for standing still, getting injured, and moving (in different directions)
- Moving Enemy has animations for moving (in different directions)
- Started “World Interactions - Projectile” Tutorial

Total: 1 hour 45 mins

WEDNESDAY OCTOBER 14TH 2020

- Got Ruby to launch a projectile
- Made 2 layers (one for the Ruby and one for the projectile) so that they don't interact with each other.
- Finished "World Interactions - Projectile" Tutorial (2 hours)
- Added a "Fixed Robot" Animation to Robot
- Started "Camera - Cinemachine" Tutorial
- Installed Cinemachine package and created a 2D camera
- Made the Camera follow Ruby around!

Redesigned World



- Adding camera bounds
- Finished "Camera - Cinemachine" Tutorial (1 hour 30 mins)

Total: 3 hours 30 mins

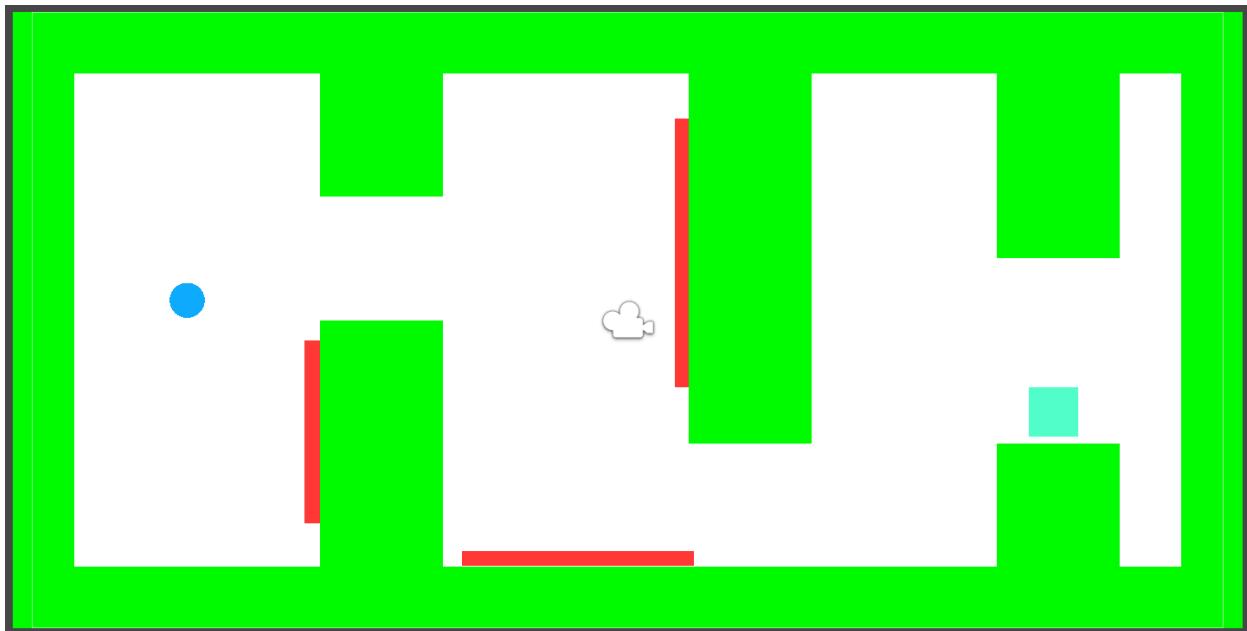
WEEK 5: WRAPPING UP RUBY

MONDAY OCTOBER 19TH 2020:

- Started “Visual Styling - Particles” Tutorial
- Added smoke particle effect, health particle effect and damage particle effect
- Customized them to my liking (2 hours)
- error with robot smoke effect (doesn’t stop once robot is “fixed”)

Total: 2 hours

WEDNESDAY OCTOBER 21ST 2020:

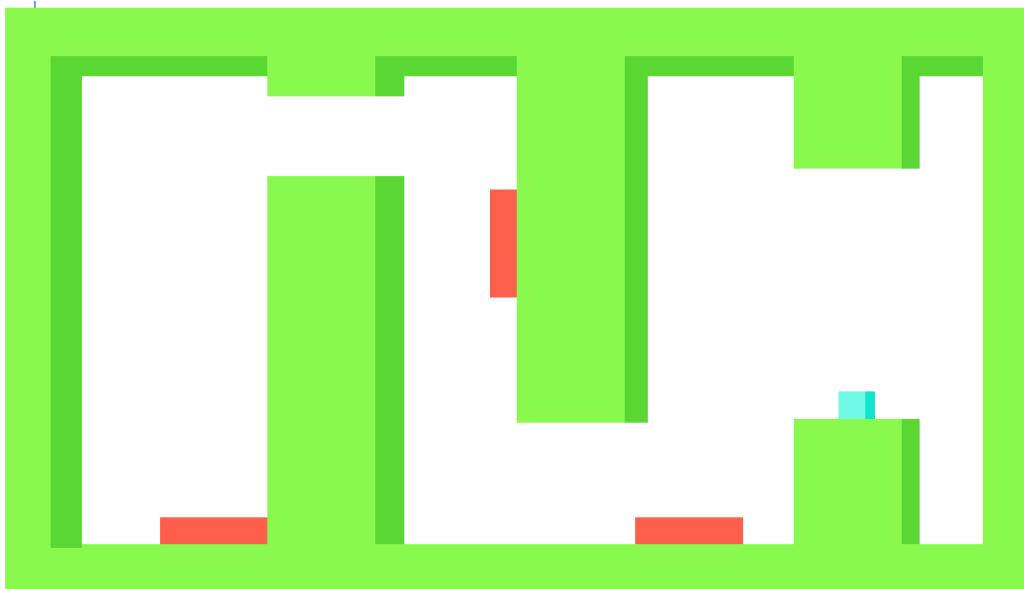


- Worked on making my switch game from last year in unity (1 hour)
- Finished design for first level (enemy, player, trophy game object)
- Added colliders (on the walls and enemies)

Total: 1 hour

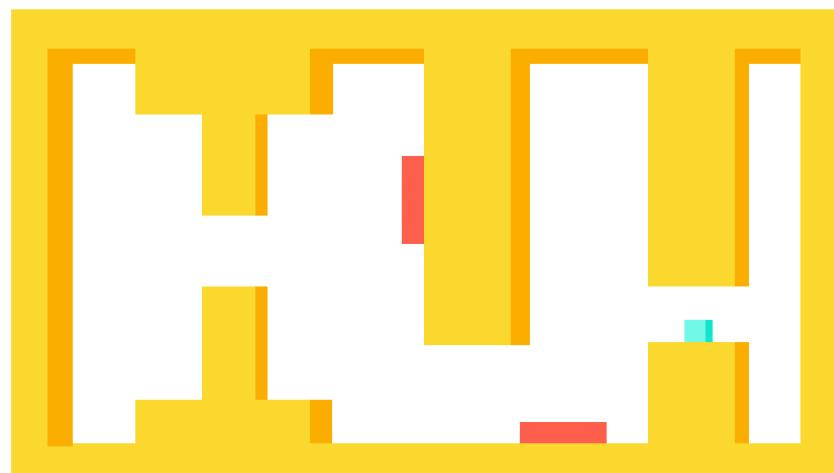
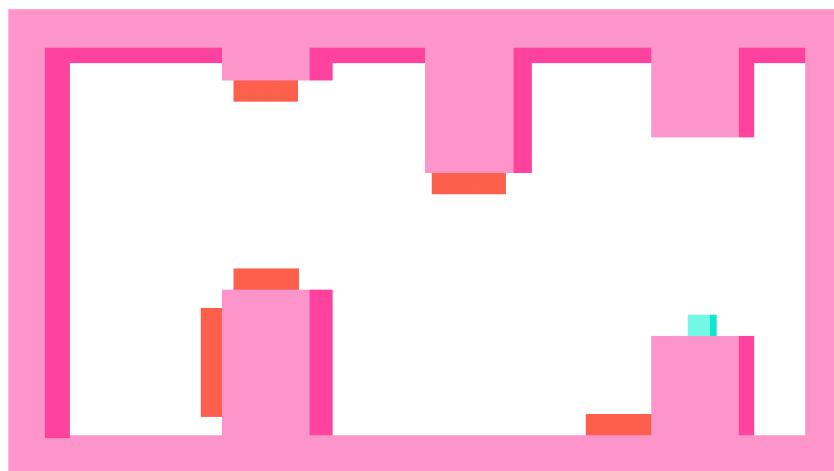
THURSDAY OCTOBER 22ND 2020:

- Finished Particle Effects Tutorial (1 hour)
- Started “Visual Styling - User Interface - Head Up Display”
- Created a UI canvas
- Added Health UI and Mask
- Running into an issue where I can’t see the anchors of the image to position them correctly.
- Fixed it (30 mins later)..I had to enable “Gizmos” at the top of my Scene-View in order to see the anchors.
- Completed “Visual Styling - User Interface - Head Up Display” (2 hours)



- Updated Switch Game Design
- Added gravity function
- Made 2 more world designs

Total: 3 hours 30 mins



SUNDAY OCT 25TH 2020:

- Fixed UI Health bar display (wasn't masked properly because the public gameobject from my code was attached to the UI image instead of the UI mask by mistake)

Total: 15 minutes

MONDAY OCT 26TH 2020:

- Added Raycast
- Added dialog box
- Set timer on dialog box
- Connected it to Ruby Controls
- Completed "World Interactions - Dialog Raycast" Tutorial (1 hour)
- Added Audio (background music)
- Added Sound effects
- Added spacial sound effects
- Finished "Audio" Tutorial (1 hour)
- Build and ran my game!!!
- Finished Unity Tutorial

Total: 2 hours



Final Image

TUTORIAL TOOK: 31.25 HOURS TO COMPLETE OVER THE COURSE OF 3 WEEKS