MAS/COMP111 Unity Assignment

Name: Isaac Zhuan Jian Lee
Student ID: 45526249

Unity features used in this assignment:

Effect	Marks	Check if used
An **outdoor** section built using the Terrain editor or GAIA)	25%	
An **indoor** section built using Unity primitives (cubes, spheres, etc) and/or ProBuilder (25%)	25%	
A **First Person controller** with which the player can navigate the scene.	-	
Appropriate textures on the indoor section	5%	
Textures with normal maps	5%	
A simple single-state animation clips	5%	
A multi-state animation that responds to trigger or mouse events	5%	
Direct light sources beyond the default Directional Light	5%	
Baked indirect lighting in the Indoor section	5%	
Use of light-probes for dynamic indirect lighting	5%	
Use of reflection-probes and reflective surfaces	5%	
Appropriately chosen post-processing effects	5%	
Use of multiple cameras (e.g. overlaid cameras or rendering to a texture)	10%	
Particle systems	10%	
Objects controlled by physics	5%	
Using joints	5%	
Appropriate 3D spatialised audio sources	5%	
Using reverb zones, effects and filters	5%	
TOTAL:		

Note: Totals greater than 100% will be rounded down.

On the following pages you should indicate where each of the above features appear in your game, using screenshots to direct the marker. You will not get marks for a feature if your marker cannot easily locate it within your world.

1. An outdoor section built using the Terrain editor or GAIA) + Textures with normal maps + Particle Systems

Features used:

- An **outdoor** section built using the Terrain editor or GAIA)
- Direct light sources beyond the default Directional Light
- Added fog
- Terrain
- Textures + Normal maps
- Particle Systems
- Windzone
- Skybox

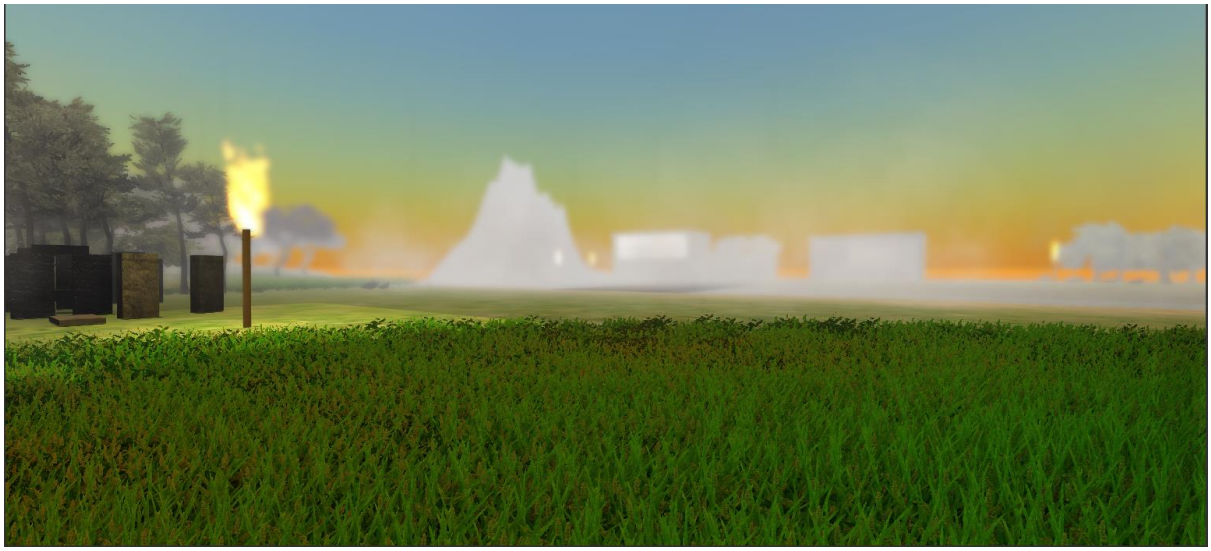
Where in Hierarchy

- /Terrain
- /DustStorm
- /Directional Light
- /Rain Particle System
- /WindZone
- /Rocks
- /Henge

Description:

For my terrain, I created the stonehenge in the middle of the map with some trees behind it. Next to it, it's a wooden stick that is lit on fire that gives the lighting effect. In addition, I applied grass, cliff and sand textures in the area with normal maps. I added fog to make the environment look very realistic as close as how we look in depth of field. Furthermore, I created dust storm to create the realistic effect including Windzone.
There are some buildings at the back on the map including hill.

Screenshot:



2. An indoor section built using Unity primitives (cubes, spheres, etc) and/or ProBuilder + Objects controlled by physics + A multi-state animation that responds to trigger or mouse events

Features used:

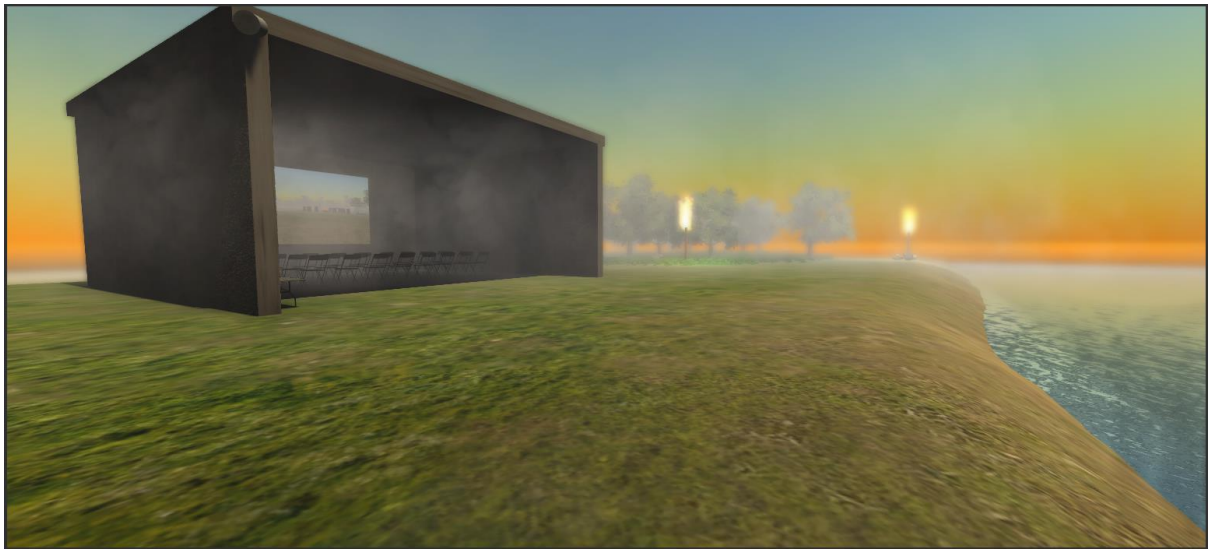
- Direct light sources beyond the default Directional Light
- Added fog
- Terrain
- Textures + Normal maps
- Particle Systems
- Camera
- Different types of map
- Skybox

Where in Hierarchy

- /Cinema Building
- /Wood + Fire
- /Terrain
- /Bridge
- /Grounds
- /Car

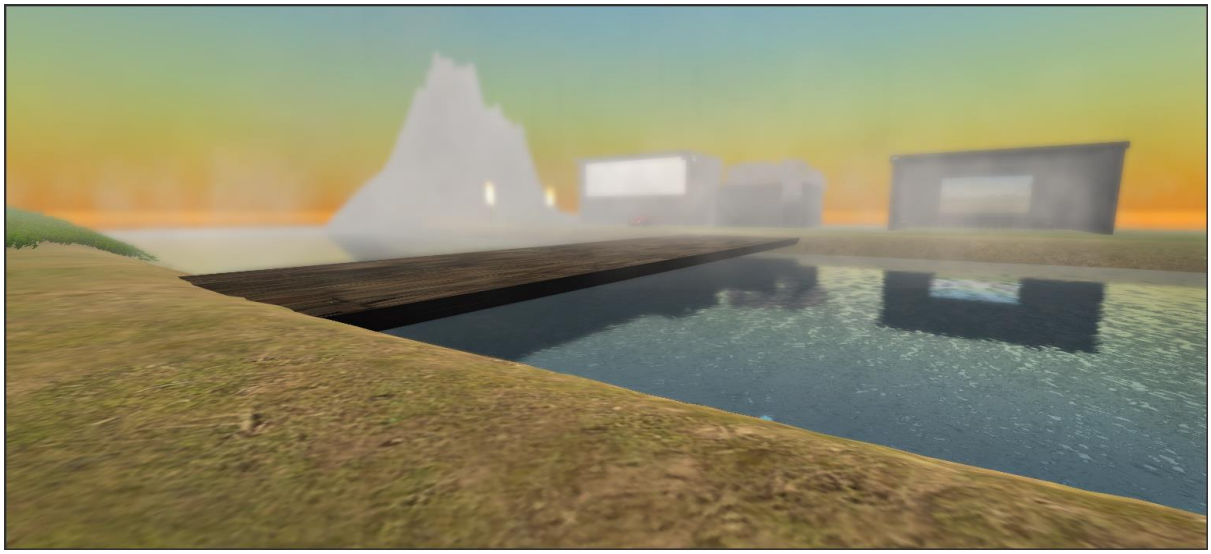
Description:
I created a cinema building using unity primitives and textured it with concrete texture. The building is surrounded by dust storm and some trees and wooden sticks with fire. I created the quad that displays the overall terrain with a camera. The chairs and tables can be pushed by a player that demonstrates physics.

Screenshots:



Description:
I created a building with a huge window on the left and a garden on the right. Both buildings have doors. The door on the left you can push whereas the door on the left you can interact by clicking the door knob. I created a working car with C# Script to get in and out of car.
Screenshot:

Description:
I created a bridge with unity primitives to get across the river. As you see the river, there is a reflection that is coming directly from the cinema screen to illustrate how to lighting works.
Screenshot:



3. A First Person controller with which the player can navigate the scene. + Appropriately chosen post-processing effects

Features used:

- Camera
- FPS Controller
- Post-Processing

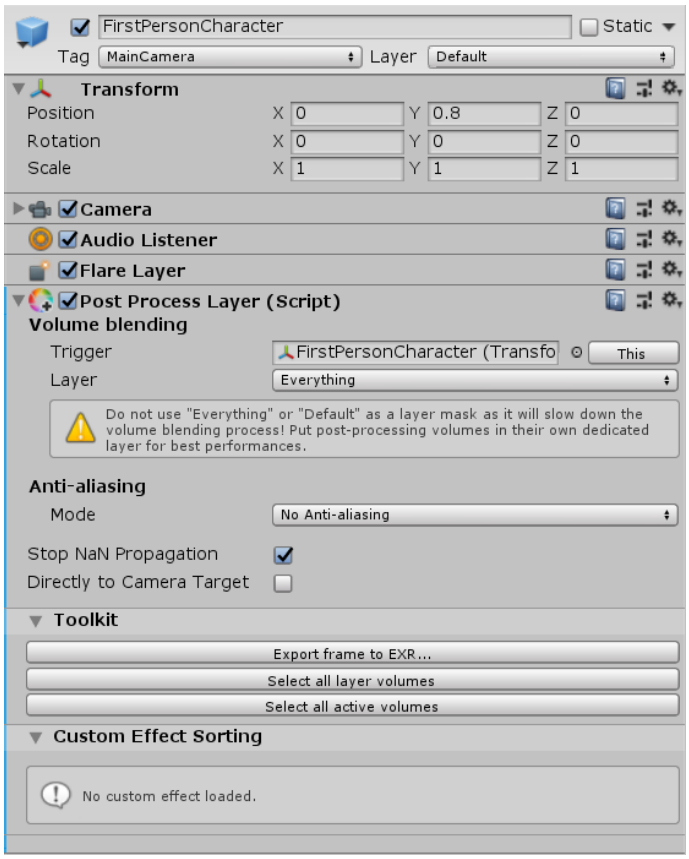
Where in Hierarchy

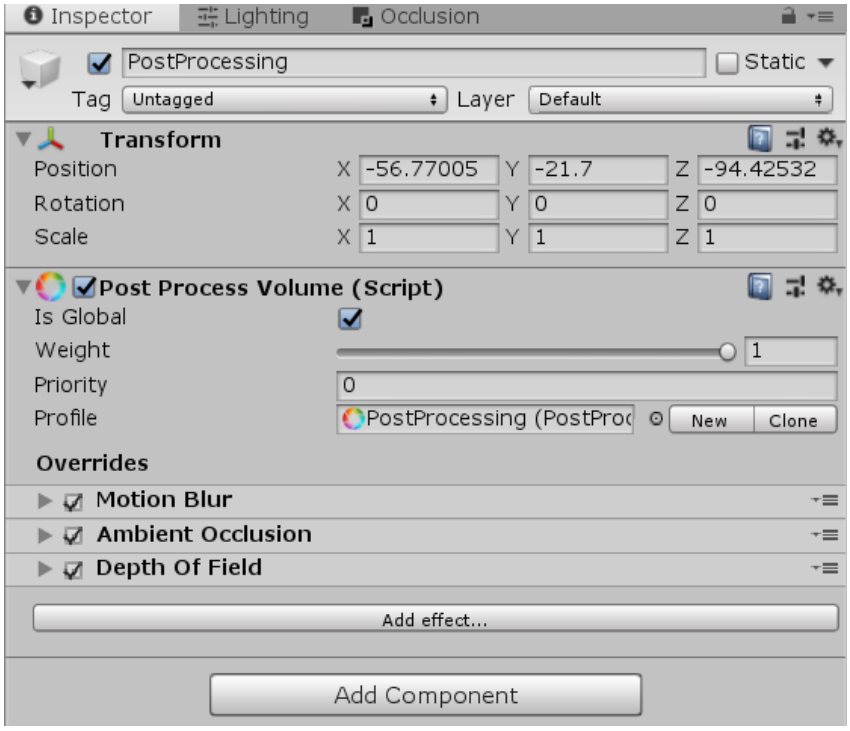
- /FPSController

Description:

This is the proof I use FPS Controller and Post-Processing in order to create a real life simulation.

Screenshots:




Inspector
Lighting
Occlusion
PostProcessing
Static
Tag
Untagged
Layer
Default
Transform
Position
X -56.77005
Y -21.7
Z -94.42532
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Post Process Volume (Script)
Is Global
Weight
1
Priority
0
Profile
PostProcessing (PostProc
New
Clone
Overrides
Motion Blur
Ambient Occlusion
Depth Of Field
Add effect...
Add Component

4. Appropriate textures on the indoor section +
Use of light-probes for dynamic indirect lighting +
Baked indirect lighting in the Indoor section +
Use of multiple cameras (e.g. overlaid cameras or rendering to a texture) +
Using joints + Objects controlled by physics

Features used:

- Unity Primitives
- Added fog
- Textures + Normal maps
- Cameras in different angle
- Different types of map
- Baked Lighting + Point lighting
- Light Probes
- Skybox

Where in Hierarchy

- /Bunker

Description:

I created two CCTV monitors to view different angles and created a window that enables transparency. I created a ceiling light that gives the light intensity effect.

Screenshots:

Assets Used

Terrain

- Terrain – Materials, by Unity Technologies

Textures

- Grass – Terrain Assets, by Unity Technologies
- Weed3 – Terrain Assets, by Unity Technologies
- WhiteFlowers – Terrain Assets, by Unity Technologies
- JapaneseMaple – Terrain Assets, by Unity Technologies
- Conifer_Desktop – Terrain Assets, by Unity Technologies
- Broadleft_Desktop – Terrain Assets, by Unity Technologies

Models

- Car – Standard Assets (Car)
- Water – Standard Assets (Enviroment)
- CHAIR_Folding – Folding Table and Chair by devotid (Props)
- TABLE_Folding – Folding Table and Chair by devotid (Props)
- P_Rock_01 – RockPack by DNK_DEV (Props)
- P_Rock_02 – RockPack by DNK_DEV (Props)
- P_Rock_03 – RockPack by DNK_DEV (Props)

Materials

- Free_concrete_material by IPO N7 (Materials)
- Wood – Materials, by Unity Technologies
- Stone Material – Materials, by Unity Technolgies
- Skybox – Materials, by Unity Technologies
- Window – Materials, by Unity Technologies
- View – Materials, by Unity Technologies
- BlackTire – Materials, by Unity Technologies
- SportsRed – Materials, by Unity Technologies
- Light – Materials, by Unity Technologies
- Monitor1 – Materials, by Unity Technologies
- Flame – Materials, by Unity Technologies

Render Texture

- Camera1 – Materials, by Unity Technologies
- Camera2 - Materials, by Unity Technologies
- View - Materials, by Unity Technologies

Scripts

- ClickToAnim – Scripts, by Unit Technologies
- carManager – Scripts, by xlconikkxGaming (Youtube)
- doorTrigger – Scripts, by xlconikkxGaming (Youtube)
- Sun – Scripts, by Unity Technologies

Animations

- Door Panel 1 – Door Animations, by Unity Technologies
- Door Panel 3 – Door Animations, by Unity Technologies

Prefabs

- Fire Particle System, by Unity Technologies
- Rain Particle System, by Unity Technologies
- Dust Storm, by Unity Technologies

Door Animations

- ClosedDoor3 – Door Animations, by Unity Technologies
- OpendDoor3 – Door Animations, by Unity Technologies