Course Name: Virtual Reality Technology Lab
Course Number and Section: 16:332:571:01

Experiment: Lab #1 – The First

Lab Instructor: Mingju Liu

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Submitted by: Aniqa Rahim - 178004998

REQUIREMENTS

For this lab, I have been tasked to create a dark, spooky street scene. I downloaded most of the components from the Unity Asset Store in addition to making use of the Standard Assets. I imported the following assets: Abandoned buildings, Alien, DBK, Lowpoly StreetPack, Milky Way, and Mobile_city_props_collection. The required deliverables for this ominous 360° traversable environment were a long street, buildings, light posts, a Skybox, a first-person controlled character and textured use of normal maps.

My dark scene reads like this: This is your first trip to an alien planet that is being colonized by human civilization in the future. You visit a small colony in the mountains. However, while walking along a street you realize that the colony has been deserted and destroyed. As you look for signs of life amongst the destruction around you, you find that you are not alone.

The Skybox from the Milky Way Asset package makes the user feel like they are in space, underneath the stars of the Milky Way Galaxy. I transformed the Terrain to have tall mountains and used the "Mud" Texture on its normal map and the ground's map to make the scenery more realistic. I used the DustStorm particle effect from Standard Assets to give the image of an ominous fog rolling through the deserted street.

I found the first-person controllable character in Standard Assets. I can control the orientation and location of the camera, which moves according to the WASD directional keyboard inputs, making a first-person controllable camera. The ability to walk, run (Shift), and jump (Spacebar), and the inclusion of their respective sound effects helps the user become more immersed into the world.

I created the long street itself by duplicating a component called "Road_Streight" from the Lowpoly StreetPack and placing them so that the ends almost seamlessly align together, giving the illusion of a paved street. I also added the "Road End A" and scaled it width-wise so that it would match with the rest of the street. It ends the street right underneath the "dumpsters" from the Mobile_city_props_collection. The "streetlight_double"s that line the street also come from that package. I used Spotlights to create the dim, yellow lights that emanate from the light bulbs. I turned the Directional Light almost opposite to the world so that it looks like it is nighttime on the planet and to put a focus on the Skybox. Since this made the scenery too dark, I put a Point light over the street and pointed it at an angle mostly away from the Terrain, so that I could somewhat see the road and to accentuate the streetlights.

On the left of the scene, you will see "aband_hous"s and "ruined_hous"s from DBK and Abandoned buildings which I duplicated and modified individually to make it look like a real street where the houses have similar construction/patterns, but are unique. I textured the houses with an overlay of the Alien Material and made the roofs of a Metallic material to make them seem otherworldly. The brick already makes them seem manmade. At the tops of the mountains, you will see "Mr Grey"s from Alien watching you from a distance. There are alien "Cocoons" in a pile of rubble that used to be a building of some sort. The alien at the end of the street is waiting for you, and you can see his silhouette from afar due to the "Fire Complex" from Standard Assets that set the dumpsters on fire. There is also a ginormous alien watching you on the left, standing off the cliff of the mountain. You will not notice him because of the occlusion by the buildings, and assume he is part of the mountainside unless you get close enough to see his enormous figure.

<u>LINKS</u>

YouTube Video: https://youtu.be/ztT-gHdWn1Y

Unity 3D File (Google Drive): VR Lab 1.zip