Project Deliverable F: **Prototype I and Customer Feedback**

GNG 1103 – Engineering Design

Faculty of Engineering – University of Ottawa

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Introduction

This document focuses on the development of our first real prototype and design plan, which includes test plans, and analysis of our ideas. As well, we will be going through what was talked about with the clients and the feedback that was received.

Client Feedback

During our second client meeting, the feedback was mostly negative as many of us we're over complicating the assignment. This was mentioned plenty of times during the meeting. They pointed out that Noah's idea was closest to what they asked for and gave us a few suggestions for what we could do with it.

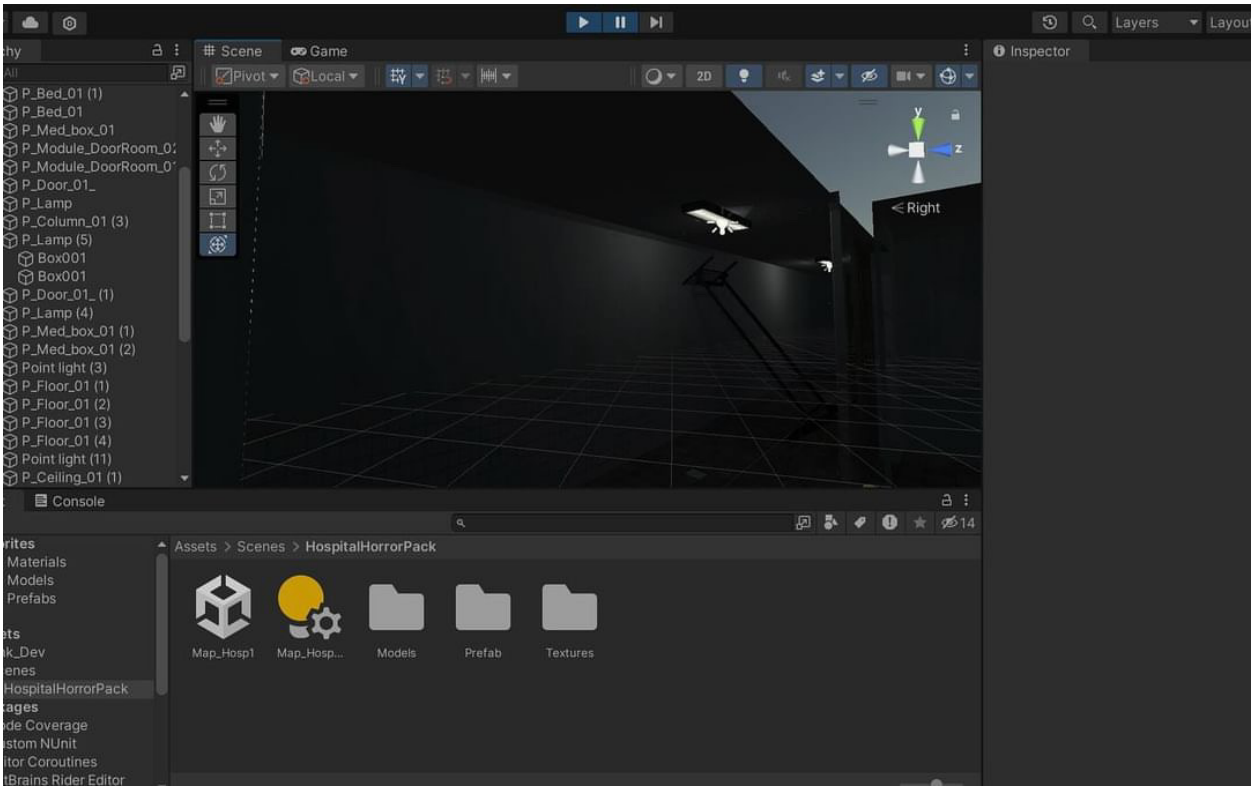
To make the coding aspect of it easier, we could use the camera movement code to simulate movement and the user will just stand in one place. This also gets rid of any user interaction to make it easier for both of us the designers and the users who don't have much experience with virtual reality. Employing the use of camera movement also makes the video height friendly as the simulation is not dependant of the user height in the real world.

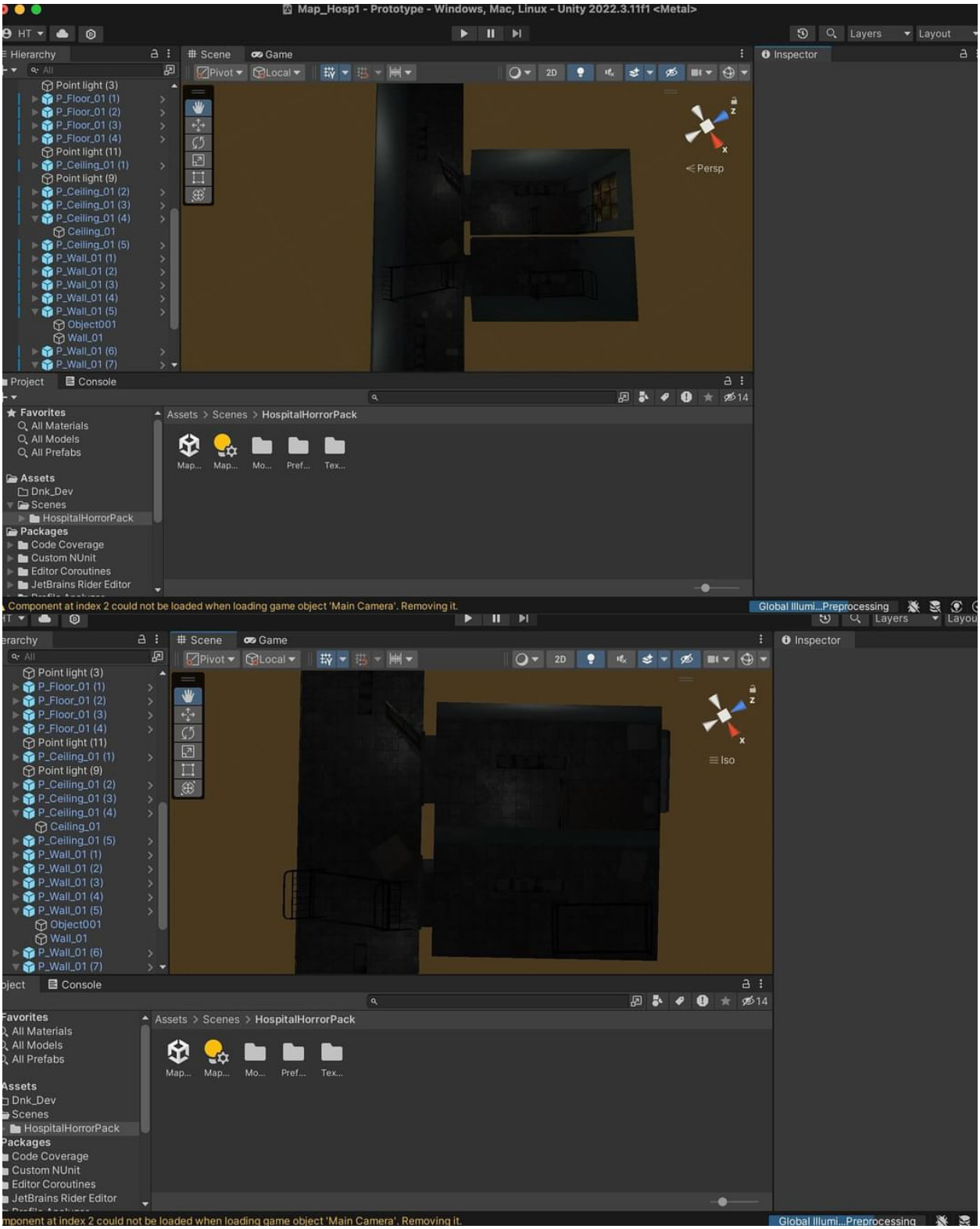
On top of that would add sound as well to create the immersive environment, such as the heartbeat sound that many games employ to simulate stress as well as some gun fire/machinery sounds to give the impression that an automated weapon is after the user.

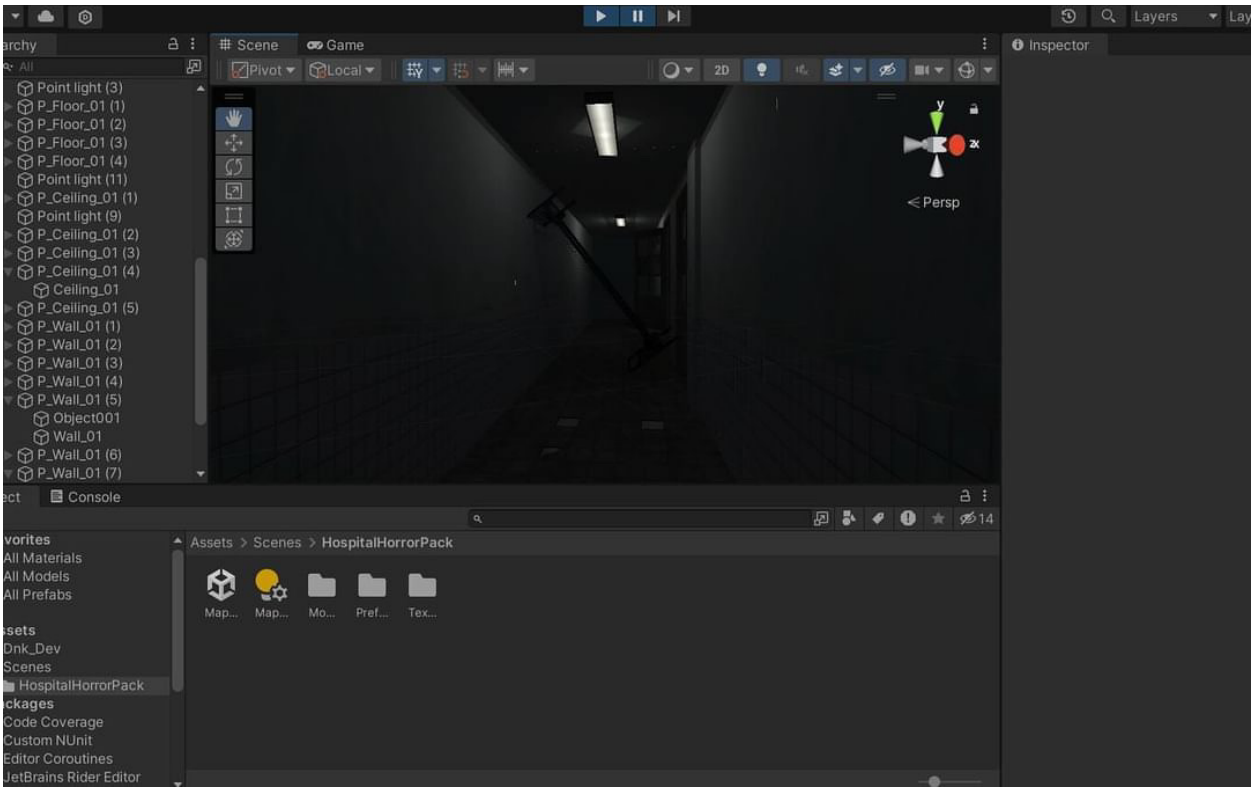
Prototype

The first prototype we have is a run-down looking building with the camera placed within the building to see when we load into the simulation, everything looks right. This prototype is to see if our client likes the direction, we are currently going in.

Prototype illustrations




Map_Hosp1 - Prototype - Windows, Mac, Linux - Unity 2022.3.11f1 <Metal>
Hierarchy
Scene
Game
Inspector
Persp
Project
Console
Favorites
All Materials
All Models
All Prefabs
Assets
Dnk_Dev
Scenes
HospitalHorrorPack
Packages
Code Coverage
Custom NUnit
Editor Coroutines
JetBrains Rider Editor
Assets > Scenes > HospitalHorrorPack
Component at index 2 could not be loaded when loading game object 'Main Camera'. Removing it.
Global Illumi...Preprocessing
Iso



Prototyping Test Plan

Our test plan involves us meeting on campus, at STEM or another place of use to us. We would try to keep it in line with the deliverables or a little more frequently than that, if need be. We will plan out and figure out what works and what doesn't work and share these with each other in accordance to be able to gain a better idea of our final product.

Test	Test Objective	Description	Description of Expected Results	Estimated Test Duration
1	Testing out different scenes and ideas	Using Unity to figure out different assets	- Realistic - Gripping - Story-telling	1-2 hours
2	NPC and other world-building motions	Placeholder and world building things	- Ability to interact - Captivating	1-2 hours
3	Camera Angles	Playing around with the different angles on Unity	- Best showcases the scenes and the area of use	1 hour
4	Interactivity	Tested out basic scenes with the VR Set	- User participation	1-2 hours

			- Scenes and moments	
5(?)	Final Testing	Tested out the whole project	- A good stable product	1-2 hours

BOM Update

Part #	Part Name	Description	Quantity	Unit Cost	Extended Cost
1	Personal Computer	Computers of use for software; provided by university or members	5	NA	NA
2	Unity	3D game engine to be used	5	NA	NA
3	HTC Vive	VR set, to be provided by university	1	NA	NA
4	VR headset	VR headset, in combination with Vive	1	NA	NA
5	Robot Pack(TBD)	Pack of 3D robots to be used for project	1	TBD	TBD
6	World-Building Pack(TBD)	World building for our simulation of torn down area	1	Free	Free
7	Sound Pack(TBD)	Sound pack to be able to add more authenticity to simulation	1	TBD	TBD
8	Gun Pack	Gun pack for user/robot	1	TBD	TBD
				Total	TBD