Final Year Project : Interactive 3D Isometric Room

Project Description

The goal of this project is to create an interactive website on which the user can navigate a 3D Model (either through scrolling or clicking).

The 3D element will consist of 3 isometric rooms created and textured in Maya or Blender.

The models will then be imported and displayed on a website using three.js.

The aim is for the user to navigate these three models by scrolling or clicking, which will dictate the movement of the camera.

Each isometric room will have different lighting to denote the time of day.

Reason For Choosing Project

I am interested in exploring the ways in which 3D modelling and code can be implemented to emulate spatial environments online.

I feel that interactions with 3D models and the illusion of depth can elevate a website and improve user engagement.

The aim for the project is to incorporate what I have learned within the course while discovering new methods of applying this knowledge.

I hope to implement what I learn to develop an interactive portfolio (similar to reference images)

Software/Hardware

Software

- Blender/Maya
- Visual Studio Code
- Procreate
- Three.js
- Vite (Bundler)

Hardware

- iPad
- Computer
- Drawing Tablet

Research Topics

Three.js Fundamentals:

- Loading OBJ. files
- Add Camera and Renderer
- Add a Background or Skybox
- Multiple Canvases/Scenes

Web Design

- Bundlers
- Dependencies

Web Hosting

- Plesk

Final Year Project : Interactive 3D Isometric Room References & Examples

Three.js Journey Course Example

Creator : Bruno Simon

"Severance" opening credit models

Creator : extraweg

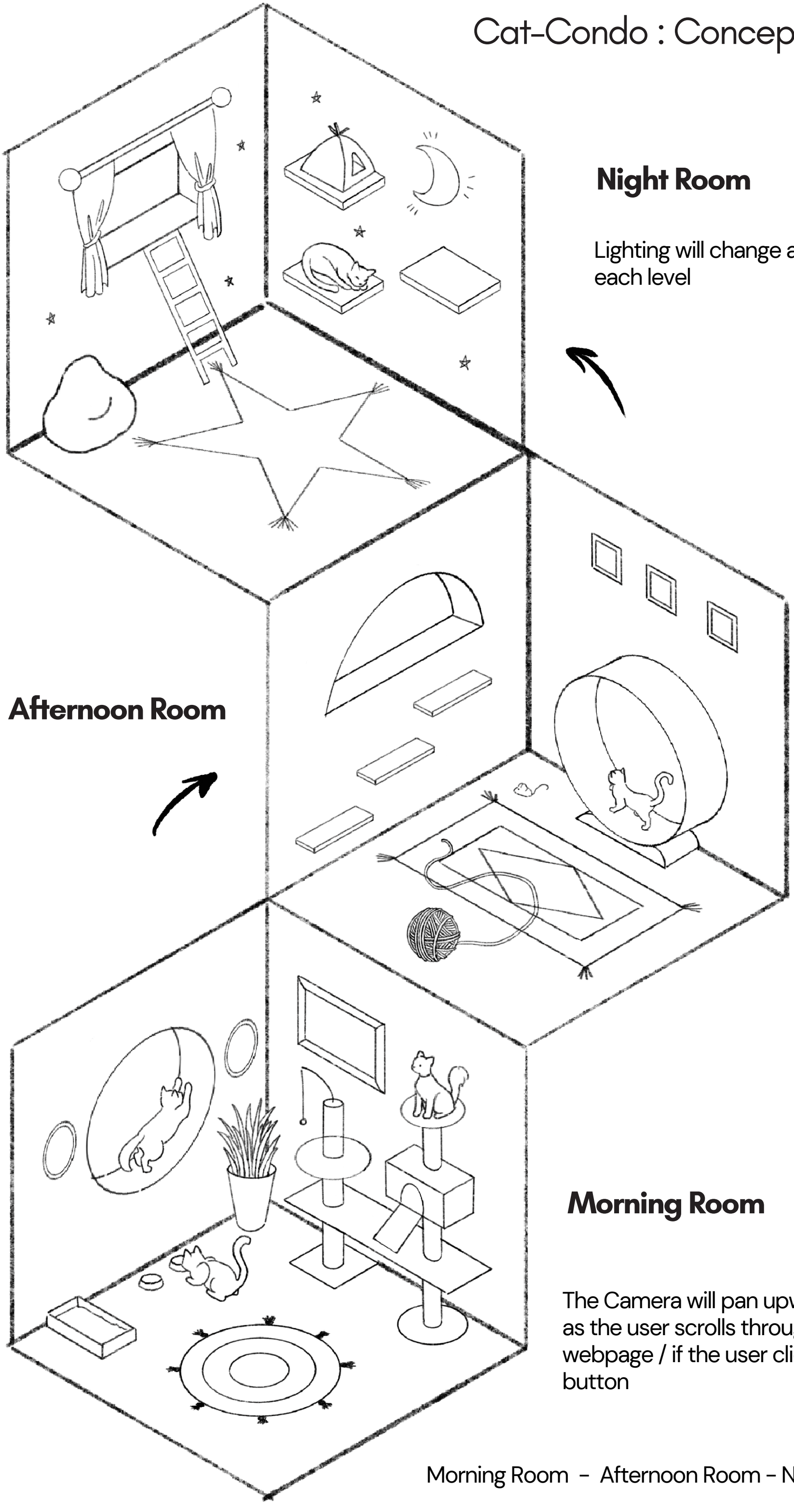
Interactive scrolling 3D Portfolio Website

Creator : Bokoko33

Stranger Things themed room

Creator : Roman Klco

Cat-Condo : Concept Sketch



Night Room

Lighting will change at each level

Afternoon Room

Morning Room

The Camera will pan upwards as the user scrolls through the webpage / if the user clicks a button

Morning Room - Afternoon Room - Night Room