# Cabin in the Woods (Real-Estate)

*Genre:* Simulation, first-person

## Project Summary

Immersive Studios has been hired by a real estate firm to build a prototype of an application that will provide a way for potential property buyers to view an island property that cannot be easily accessed for inspection.

### Objectives

The purpose of the simulation is to provide potential buyers with the opportunity to view a remote property (a small cabin in the woods on a small private island) that has been listed for sale with the client's company. Users will be able to walk through a 3-D model that replicates the property as accurately as possible, navigating by interacting with a series of nodes that act as navigational waypoints. The application must also provide users with information about the property and land that is for sale via the use of digital notes that are scattered around the 3-D environment.

### Supplied Resources

The "RealEstate_WoodsCabin" Unity Package provides a scene that contains all a 3-D replica of the land and property for sale. Only the area around the cabin has been populated with relevant visual assets. Lighting has also been generated for the scene. Additional modifications to the existing scene will need to be confirmed with the client before being implemented. You are responsible for generating or sourcing all other assets including sprites, audio, and extra 3-D models. Assets used from a third party must be published under the CC-0 'public domain' copyright license.

## Gameplay

### Core Mechanics

#### First-person camera

The player is to have control over a simple first-person camera controller that will allow them to look around the virtual environment. The camera should have appropriate sensitivity and drag values and be vertically clamped so that the player's viewport is prevented from inverting.

#### World Interactions

The player will need the ability to interact with various assets in the world showing a text box that describes the asset.

### Platform

The application is to be developed for desktop computers (PC) that run on the Windows operating system. A web-compatible build will also need to be produced that has been confirmed to be operational with the Google Chrome and Mozilla Firefox browsers.

## Visuals

### 3D Models

You have been provided with all of the necessary 3-D assets as well as a completed scene file that integrates them. Any potential modifications to the provided 3-D assets or scene file will need to be confirmed with the client.

### Audio

Audio assets for the following gameplay events will be required.

- Interact (activate/deactivate)
- Looping island ambience

### Control Scheme

| Game Mechanic | Input Mapping |
|---|---|
| Camera control | Mouse movement |
| Navigation | WASD keys |
| Interaction | Left mouse button |
| Quit application | Escape key |

## Gameplay

The following list details a range of gameplay elements that have not yet been implemented into the project. It is a requirement that you implement *All* of the following gameplay mechanics.

| Mechanic | Description |
|---|---|
| Movement | Character should be able to move forward, backwards, left and right using conventional control schemes |
| Asset Dialogue | Using a cursor in the center a of the screen, clicking on assets should cause a text box to pop up, describing the asset. Assets to be interactable:<br>-    Kitchen Table<br>-    Queen Size Bed<br>-    Toilet |