Architecture Simulator

*Game Design Document*

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# INTRODUCTION

Architecture Simulator is a simulation which focuses on giving the player the ability to design their own house and walk around in. They can select between different models to interact with and do as they see fit.

# DESCRIPTION

You are dropped into a main hub area what looks like to be middle of now where. However, you notice this tablet on your left hip. You pick up the tablet and notice there are two different inputs. You click one of them an are teleported to this neighborhood where there seems to be an empty lot. You then teleport back to the area you arrived at and notice different rooms and models you can pick up and interact with. Once you place the object down you teleport back to the neighborhood to see if anything has changed and the model you had just placed has appeared in a section of the empty lot. You continue to do this repeatedly until you are satisfied with what you created. You finally created someone you will be proud to live in one day.

# KEY FEATURES

* **Teleporting:** The player will have the ability to teleport between two separate areas, one is a main hub room where you can interact with models and so on and the other where you can walk around those models.
* **Grabbing and Placing Objects:** This is the key feature of my game as it will allow the player to pick up, inspect each model, and then place them in a desired location.
* **Scalability:** The main mechanic is going to be a scale feature. How this will work is the player will place down an object and then that model will spawn to actual scale in another location.
* **Building System:** I want there to be two ways player can interact with models and things such as furniture. This building system will be something like Valheim or Minecraft or a version of it.
* **Different Build Site Areas:** I am planning on adding three different environment the player can choose between. This environment will be used to put the house on display. The three environments will be city, forest, and the beach.

# GENRE

A simulation of building a house in VR.

# PLATFORM

Platforms: PC, Oculus Rift

Will have a VR component, which will allow users to play as the player in a VR setting.

No Multiplayer, Will be strictly a single player game.

# SIMILAR GAME

I would compare my game to Super Mario Galaxy because of its setting and unique puzzles that the game has. It is also a good example of the kind of platforming I would like to have in my game.

Super Mario Galaxy Trailer: <https://www.youtube.com/watch?v=8Mng-r3D20Y>

**Actions**: The actions are the things players do while playing the game. Often, these involve using the objects in varying ways.

The actions between my game and SMG are very similar. They are both platformers with puzzles on the side. However, one action that SMG has that my game does not include is boss fights. Mario fights multiple different bosses throughout his travels through the galaxy.

**Rules**: The rules define how the game is played. The rules determine the use of the objects, the permissible actions, the play space, the number of players, the goals of the game, even the length of the game.

The rules in my game are simple. The player will have a set area they are allowed to explore with their house they create. That is the only real rule.

**Goals**: The goal(s) of a game establish what the players are trying to achieve.

The goals for my game are for the player to create a house they could one day build in real life and live in, with the help of a professional architect of course.

**Objects**: The objects in a game are the elements with which the game is played.

The objects of my game will be modeled out rooms, furniture, and cabinetry. There will also be stationary objects that the player will not be able to pick up or interact with.

**Play Space**: The play space is the area within which a game is played.

The play space will be a main hub area where players will interact with objects and a separate space for them to walk around these objects.

**Players**: The players are the participants in the game.

There is not really a “character” to play as. The character is the person playing the game.

# OBJECTIVES

The player will have one objective and it is to create something they will one day, hopefully, be able to build in real life. My game focuses around creativity and personal expression. Players will be able to arrange models how they see fit. Given that these models will be pre created something may look out of place and that is perfectly fine.

# MECHANICS

* Teleporting
* Scalability
* Building System
* Grabbing objects
* Placing objects
* Destroying objects
* Standard movement

# RULES

The rules in my game are simple. The player will have a set area they are allowed to explore with their house they create. That is the only real rule.

# CONTROLS

Controls will be simple. Players will be able to move around and be able to pick up and place objects.

# STORY

There is no story for this game. The idea behind it however stems from people walking through houses in VR. I wanted to take that a step further and allow them to build what their future house might look like.

# GRAPHICS STYLE



I want to go for a very simple graphics style. One that gets the job done but also looks good at the same time. I would like to try and do one of the styles above. The style for Link would be very good to use as I like its cartoonish aspect but also looks amazing to look at. The same goes for the Mario game. It has vibrant colors and looks good.

CHARACTERS

There is not a character for my game. The “character” is the is player themselves.

DEVELOPMENT DIFFICULTIES

I think the hardest thing to do in this game is going to be coding a building system. Also, textures. Drawing really is not my strong suit. I much rather prefer coding as I find it to be a lot of fun.

DEVELOPMENT SCALE

Smaller

If the project seems to be too ambitious, I would most likely scale back how many models are in the game. Most of what this game is going to be is models are I will have to create all of them my self to give the player a sense of variety. If I am unable to meet the standards set for myself then this is what I will scale back.

Larger

If my game proves to be too small than I would add more environments for the player to choose from. I think what makes any house awesome is where it is located. Giving the player more option to choose what their dream house will look like in a certain location would be awesome.

APPENDIX 1: Ten Ideas

* Snowboarding/Skiing game
* Puzzle game
* Tower defense
* Card fighting
* Shooter survival
* Platform shooter
* Sandbox
* RPG single player
* Treasure hunting