**Patch Notes:**

- added Bluetooth controls to virtual reality tour

- List View, Map View, Mix View names have been modified to Listing, Locations, Combination for clients

- Changed combination list item clicked to go lower on location to fit on smaller phones

- Fixed a bug where if you press the cluster marker it would re-center automatically

**Future Features:**

* User profiles where users can save their favorite properties and pull the list later.
* User Login Page to keep track of user’s profiles.
* Replace Firebase with TD’s database also add MLS ‘multiple listing service’ to get other features such as descriptions and pictures as well as location.
* Automate the Augmented Reality/Virtual Reality.
* An NFC card will be placed near the front door of the property where clients can walk up to the tag a scan it with their phones and get a more detailed description of the property.

**Is this scalable?**

This project can be fully scalable. The way you can automate the process to 90-100% with augmented reality/ virtual reality. Is you would need 3 things:

1. Image recognition for a blueprint

2. Model Detection such as walls, windows, doorways, stoves, sinks, tables, baths, and stairs.

3. Model Creation

Step 1: Image recognition

The tool that you could use is Python with OpenCV. OpenCV is an Open Source Computer Vision Library. Just grab the blue print from a picture programmatically. Also, for testing you could use homeplans.com. I have played around a bit with OpenCV before to check the license plate values from a picture.

Step 2: Model Detection

The model detection you would have to use a neural network because not all blueprints are the same. It will have to detect what is supposed to show at a given time.

Step 3: Model Creation

This can be done with python as well because blender actually has a way to create 3D model’s programmatically.

**Use Cases:**

A few use cases for this would be for displaying a model of a new building in 3D for potential buyers. Also, models can be used in CGI movies as well as video games. It would save a huge amount of time with development. As well as simulations for natural disasters, or pretty much anything.