



# Palo Duro Builders Home Construction Progress Viewer

Team JADAT: Ben Cramer, Blake Cox, Zach Thomas, Zayra Thomas  
Sponsors: Jeff Thomas of Palo Duro Builders



## Project

### Overview

The Home Construction Progress Viewer allows home construction companies a way to provide live progress updates to their clients. This application is meant to streamline and help bridge the communication gap between the customer and the contractor by allowing them to access a messaging system, track price changes as they arise, and upload/view fully immersive 360 degree images of any room or area at various stages of progress. This application proves to be especially useful during a time where COVID-19 may not allow the contractor and client to meet in person, thus providing a way for the client to view their home's progress remotely.

### Result

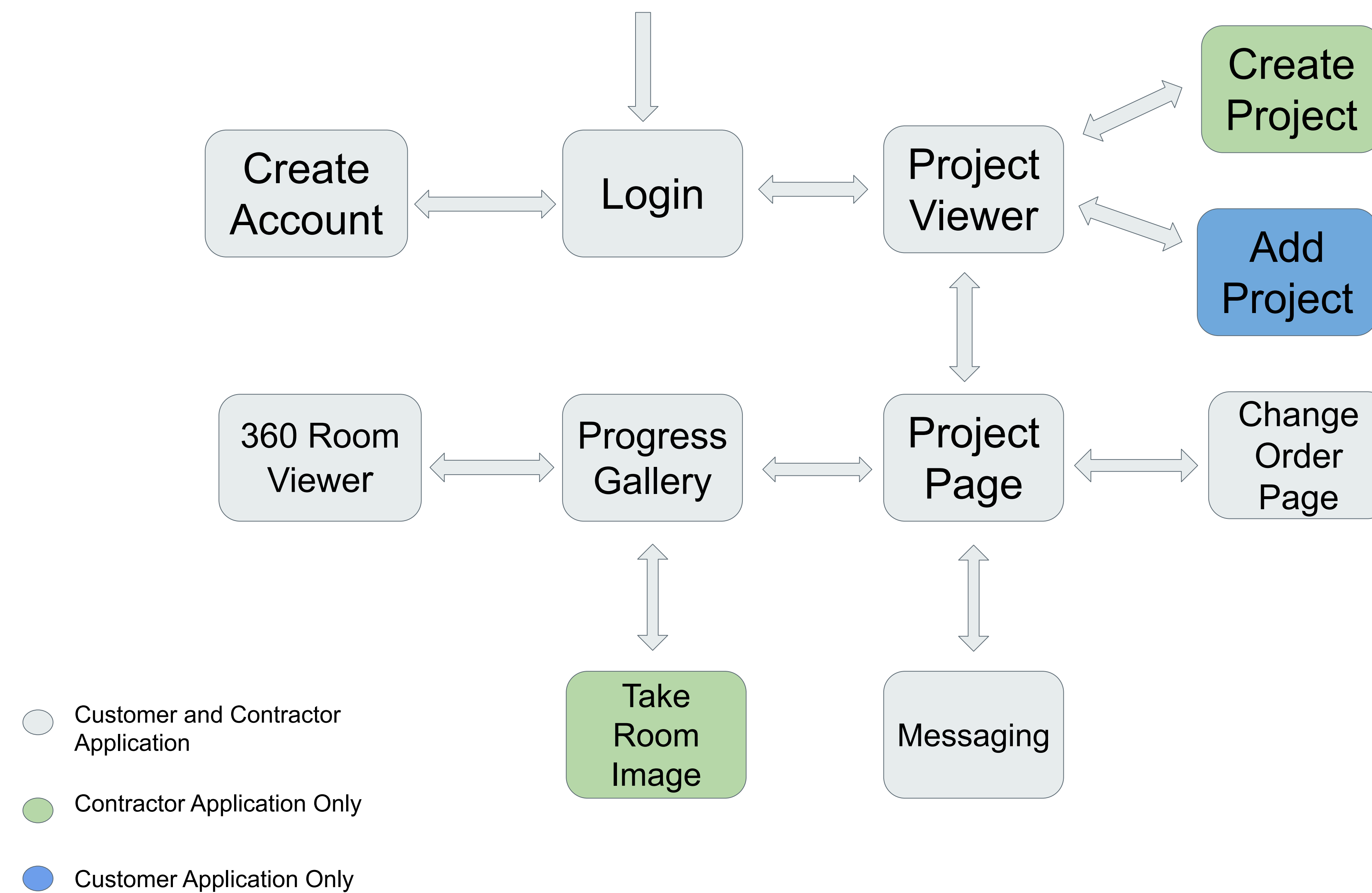
#### Contractor Application

Allows the user (contractor) to manage all projects that they add to their account.

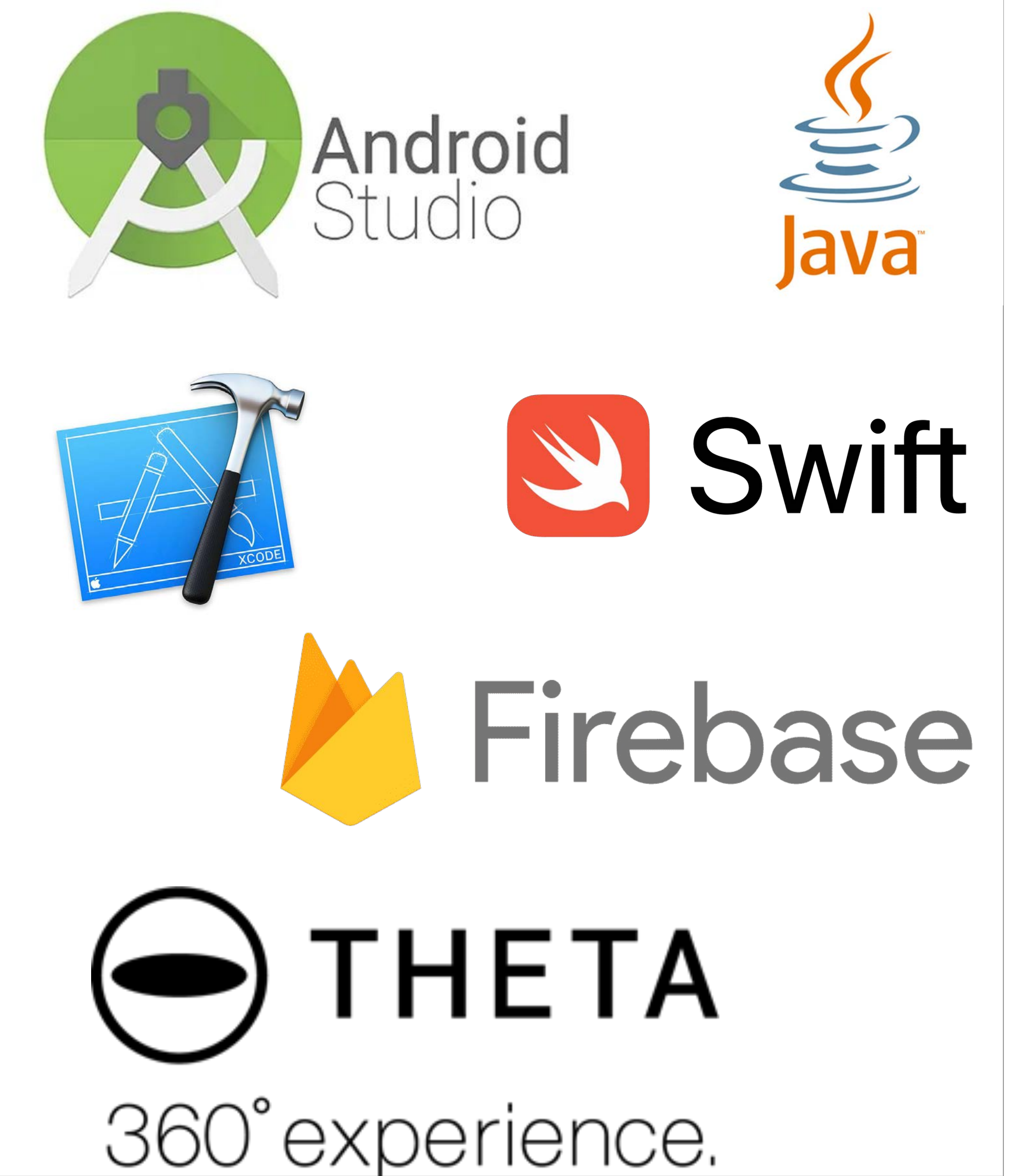
#### Customer Application

Allows the customer to have at-a-glance visual updates over their project that's being built.

## Design



## Technologies



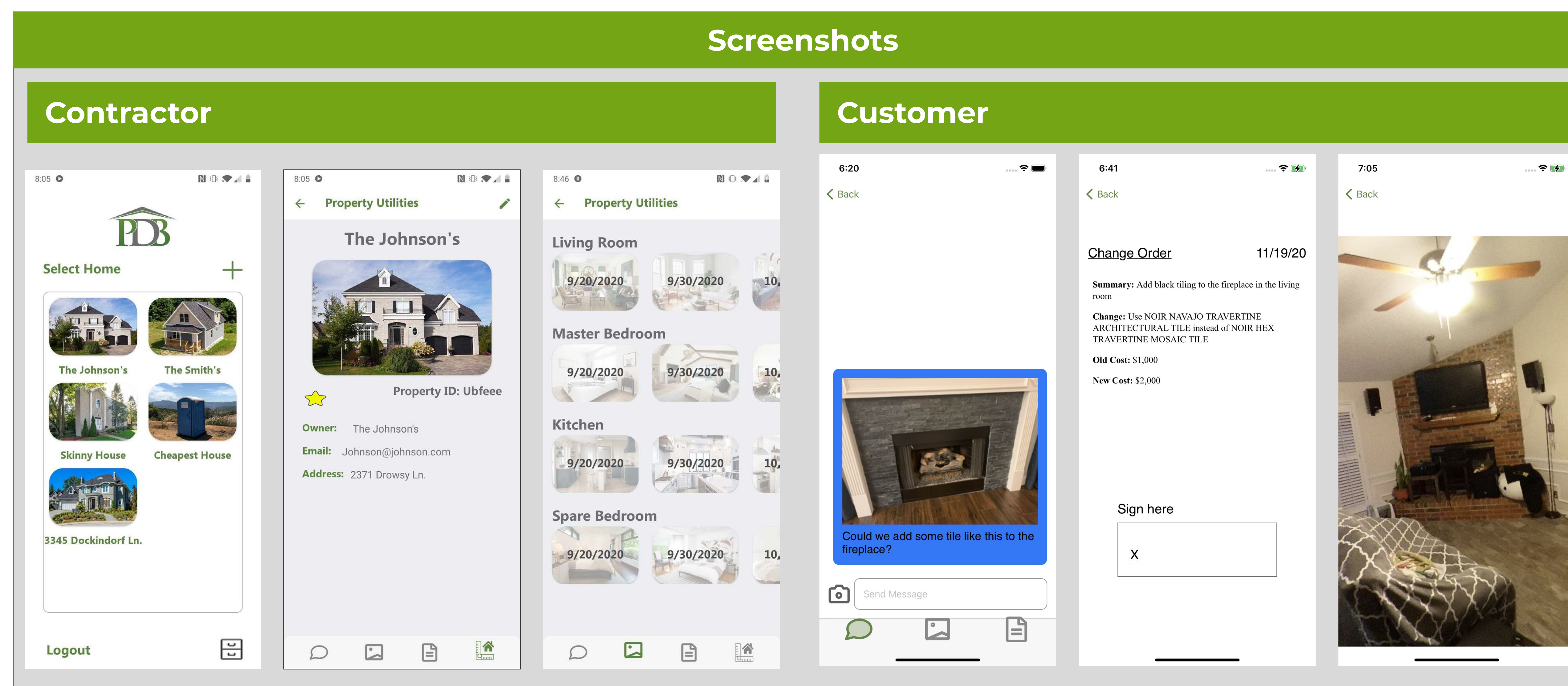
## Features

### Contractor App

- Create a new project that can be claimed by the customer app. Each property can be favorited.
- Can message the customer directly
- Upload images from device or use Rico Theta V to take 360° images that simultaneously updates the customer's Progress Gallery Page
- Create and upload a Change Order form that acts as a receipt for any price changes that are made.

### Customer App

- Add a new project using a code given by the contractor.
- Can message the contractor directly
- View images uploaded by the contractor, this includes any interactive 360° panoramic views.
- Review and sign any Change Order forms uploaded by the contractor.



## Testing

We primarily conducted a mixture of black- and white-box testing. At least one other team member was required to pull down a branch, perform the relevant tests, and make sure they passed before the feature could be merged into the master branch.

Throughout the project we performed usability testing by having friends and family members test the apps on their own devices and perform tasks. The feedback was used to revise the flow and visual design of the app.

The full suite of testing we conducted included:

- Black/White Box Testing
- UI Testing
- Usability Testing
- System Testing