

HomePairs

Tommy, Eeron, Cesar, Sarah, Adam

Problem Statement

Goal : Make it quick and easy for property managers and tenants to get repair services.

- Developed directly with Roopairs to connect their service providers with property managers who need repair services.
- Although we are not working directly with PolyRents, they are our target source of demand in the housing market.



Problem Statement

Property Managers:

- No easy way of streamlining service requests from tenants.
- Can be a lot of paperwork to handle.



Tenants:

- Waiting for property managers to be available to ask them about a broken appliance.
- Hard to schedule for service provider and property manager availability to fix appliance



2pairs

Sign in to your account

EMAIL

PASSWORD

Sign In

New to 2pairs? [Sign Up](#)

2pairs

Create your account

ACCOUNT TYPE

Tenant

Landlord

FIRST NAME

LAST NAME

EMAIL

PASSWORD

CONFIRM PASSWORD

Sign Up

Already have an account? [Sign In](#)

Horizontal Prototype

2pairs

Service Requests [New Request](#)

872 Higuera St, San Luis Obispo, CA

Search requests... All Requests

[View Completed Requests](#)

Pending (2) Scheduled (3) **In Progress (1)**

ACTIVE

Hot Equipment Repair
Fix N Fix
(805) 555-0133
Oct 4, '19 6:37pm PDT

2pairs

New Service Request

ADDRESS
345 Santa Lucia Dr, San Luis Obispo, CA

CHOOSE A SERVICE CATEGORY

Lighting and Electrical Plumbing Heating and Air Conditioning Appliance

2pairs


New Service Request

ADDRESS
345 Santa Lucia Dr, San Luis Obispo, CA

SERVICE CATEGORY
Lighting and Electrical

CHOOSE A SERVICE PROVIDER

Preferred Network

 **Klaus and Sons**
Hot Equipment, Plumbing,
Lighting and Electrical
872 HIGUERA ST, SAN LUIS
OBISPO, CA 93401

\$32.75 / hour
starting cost



Properties

[Add Property](#)[View Property](#)[View Property](#)

San Luis Obispo, CA / 345 Santa Lucia Dr

**345 Santa Lucia Dr**
San Luis Obispo, CA

Max Tenants

5

Bedrooms

4

Bathrooms

2

[Edit Property](#)**Primary Contact**

Questions about this property? Contact the landlord:

NAME

Alex Kavanaugh

EMAIL

alex+landlord@polyrents.com

[Add Appliance](#)**Current Tenants**

AK

Alex Kavanaugh
alex@roopairs.com
(310) 555-0122[Edit](#)

DB

David Bartolomucci
david@roopairs.com
(916) 555-0121[Edit](#)

RB

Ray Bartolomucci
raymond@roopairs.com
(916) 555-0120[Edit](#)[Add Tenant](#)**Service Requests**

Pending

2

Scheduled

3

In Progress

1

[View Requests](#)

Tech Stack



Travis CI

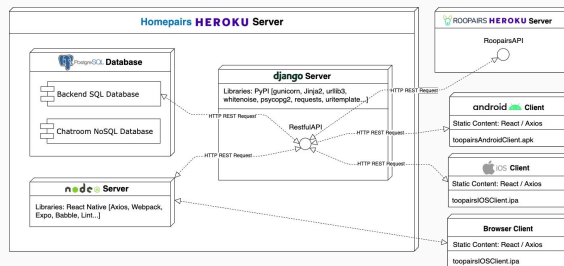


django

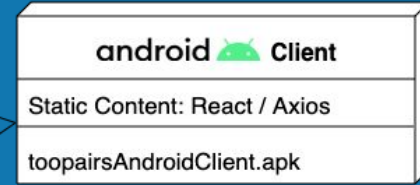
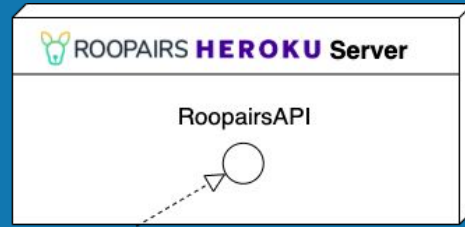
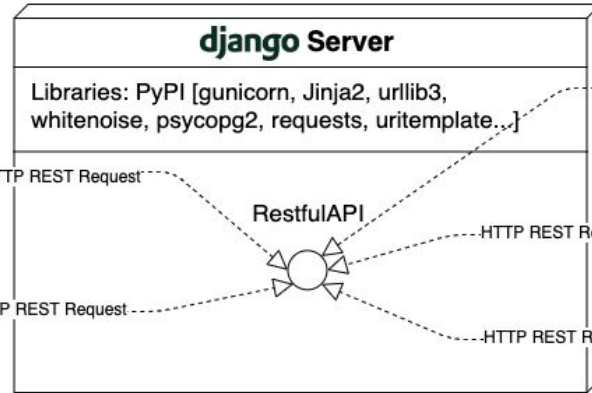
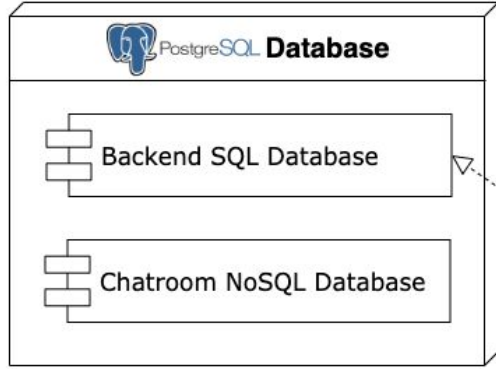


Deployment diagram

Let's take a closer look...





Homepairs HEROKU Server



Vertical Prototype

DEMO

Testing Framework

 YellowRainBoots / 402_TestTravis  build passing


[Current](#) [Branches](#) [Build History](#) [Pull Requests](#) > [Build #27](#) More options

✓ **backendTests** run db, api, AND frontend tests at once

Commit 3f0cc75

Compare e1bf6ff...3f0cc75


Branch backendTests

 Sarah Rain MacDougall

↻ #27 passed











Ran for 1 min 30 sec

Total time 2 min 24 sec

 12 hours ago

Restart build

[Build jobs](#) [View config](#)

✓ # 27.1	 AMD64	 </> Node.js: node	 no environment variables set	 1 min 30 sec	
✓ # 27.2	 AMD64	 </> Python: 3.7.4	 no environment variables set	 54 sec	

Testing Framework

```
233 added 1343 packages in 11.219s
234 The command "npm ci" exited with 0.
235 $ npx jest --ci
236 PASS ./App.test.tsx
237   <App />
238     ✓ true === true (3ms)
239
240 File      | % Stmts | % Branch | % Funcs | % Lines | Uncovered Line #s |
241 -----|-----|-----|-----|-----|-----|
242 All files |       0 |       0 |       0 |       0 |                   |
243 -----|-----|-----|-----|-----|-----|
244 Test Suites: 1 passed, 1 total
245 Tests:       1 passed, 1 total
246 Snapshots:   0 total
247 Time:        2.313s
248 Ran all test suites.
249 The command "npx jest --ci" exited with 0.
250 store build cache
256
257
258 Done. Your build exited with 0.
```

3.37s

cache.2

Top ↕

Testing Framework

```
308 $ unittests/runTests.sh
309 ...
310 -----
311 Ran 3 tests in 4.193s
312
313 OK
314 .
315 -----
316 Ran 1 test in 1.261s
317
318 OK
319 The command "unittests/runTests.sh" exited with 0.
320
321
322 Done. Your build exited with 0.
```

Run.sh

```
#!/bin/bash
python unittests/apitests.py
python unittests/dbtest.py
```

Testing Framework

Job 1: Frontend Tests

- Clean build
- True=True Jest Test

Job 2: Backend Tests

- 1 Database Test
- 3 API Tests

(both homepairs & roopairs, only homepairs, no match)

YellowRainBoots/402_TestTravis:travis.yml@3f0cc75

```
1 jobs:
2   include: #frontend tests, node_js
3   - language: node_js
4     node_js:
5       - node
6       - lts/*
7     cache:
8     directories:
9       - ~/.npm
10    before_script:
11      - npm install -g npm@latest
12    script:
13      - npm ci
14      - npx jest --ci
15
16  #backend tests, python
17  - language: python
18    python:
19      - "3.7.4"
20    install:
21      - pip install -r unittests/requirements.txt
22    script:
23      - unittests/runTests.sh
```

Cost proposal

Development

<i>Django</i>	Free, open-source
<i>React Native</i>	Free, open-source
<i>PostgreSQL</i>	Free, open-source
<i>Heroku</i>	Free for hobby dynos
<i>Travis</i>	Free for public Github repos (unlimited builds, 3 concurrent jobs)
	\$0

Deployment

<i>Heroku</i> <i>(hosts everything)</i>	\$7/mo for web dyno \$9/mo for database server
<i>Google Play Store</i>	\$25 registration fee (one-time)
<i>iOS Store</i>	\$99/year to publish
	~\$285/year (10k users)

Yearly Cost Breakdown

10,000 Users

Technology	Cost (\$)
Web hosting	78
Database hosting	108
iOS App Store	99
Total:	285/year

100,000 Users

Technology	Cost (\$)
Web hosting	78
Database hosting	300
iOS App Store	99
Total:	477/year

1,000,000 Users

Technology	Cost (\$)
Web hosting	300
Database hosting	600
iOS App Store	99
Total:	999/year

Reflection

1. Touching all of our different technologies in our VP was harder than expected
 - Janzen was right!
2. Being able to choose our own technologies reduced a lot of overhead
 - Using technology we are comfortable allowed us to avoid wasting time and effort learning new technologies

Reflection

3. Foggy requirements + changing features can cause problems
 - Development teams need to be transparent and flexible
4. Utilize a teammates strength, but don't rely on it
 - Team members should contribute to a part of a project they are strong at, but should also learn how to develop other parts of the project they don't know well
 - No one got away without learning something

Q&A

Sample questions:

How did we accomplish so much with so little time?

How does Alex make his hair look so good?

Why is Roopairs such a good company?

How are we not being paid for this?