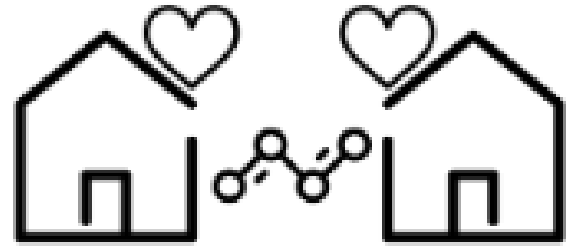


Welcome to Casa Connect



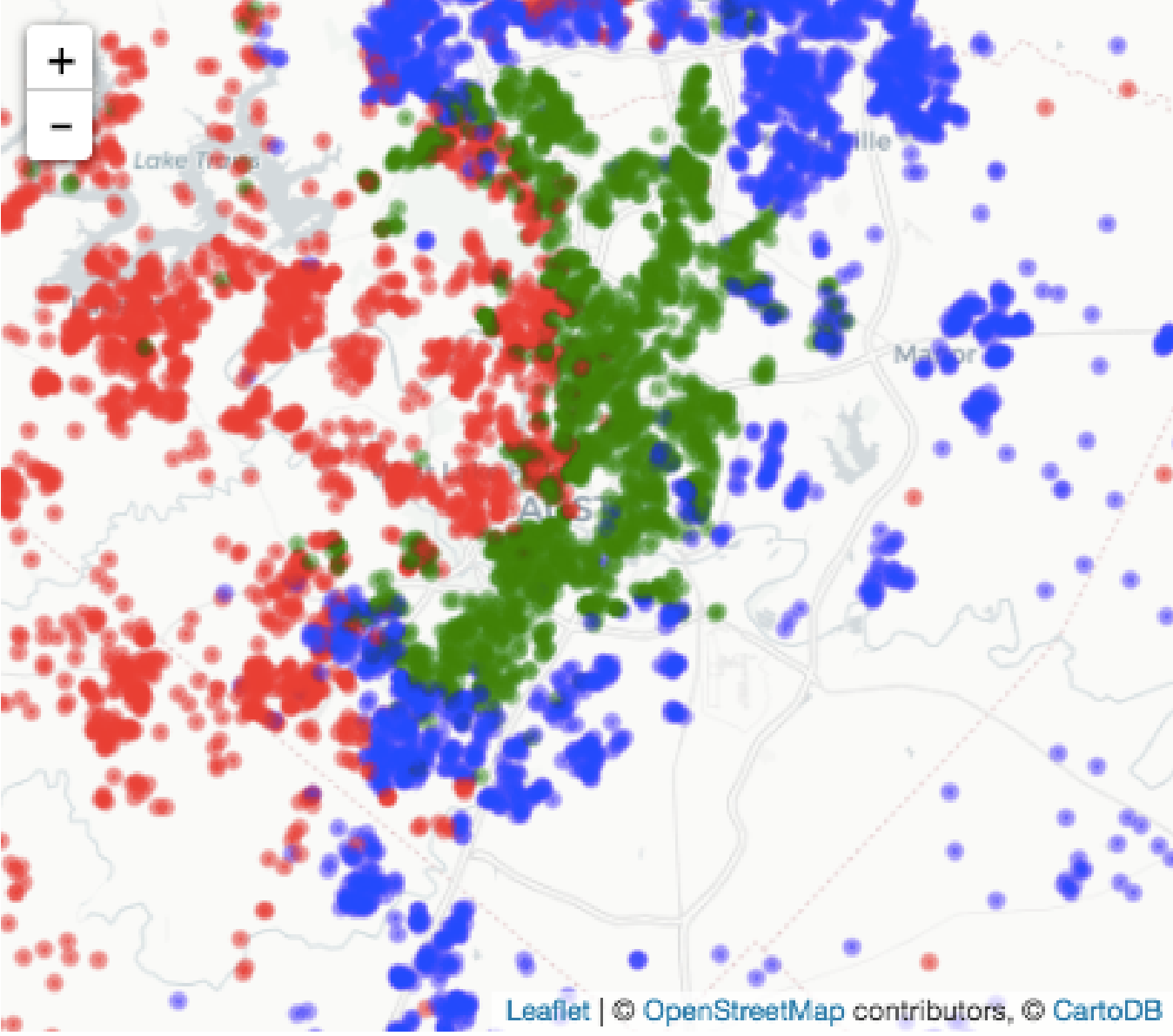
Welcome to Casa Connect

Connecting you to your Austin casa from your San Francisco home

Note: we provide a few example addresses to prototype this application

Want to start over? Press refresh the page.

| | | | |
|-----------------|----------------|--------------------|--------------------|
| Current Address | Groups | Clear Map | No. Bedrooms |
| Decade Built | List Price | No. Full Bathrooms | No. Half Bathrooms |
| View | No. Fireplaces | Covered Spaces | % of Renters |



Team HouseHunters (#40)

Taylor Gift, Katrina Green,
Shelly Kunkle, Melanie Laffin

Introduction

What: Moving has a lot of uncertainty. Using our app, "Casa Connect", we can find a home and neighborhood that matches your lifestyle in a new city.

Why: Existing apps for house shopping don't compare current lifestyle to target lifestyle. The burden falls on the mover to do their own heavy research or rely on information provided by unfamiliar real estate agents.

The Approach

We aggregate numerous data points about your current home and then apply clustering algorithms to find your match. We used k-means clustering with $k = 3$ and used the metric silhouette for choosing the model.

The novelty in our approach is using multiple data points about a person's current home/lifestyle beyond home listing details, such as percentage of houses owned vs. rented. We also allow the user to change important features of the house matching process so the perfect home. This makes the home buying process less stressful and more intuitive than current sites.

Data

The following data was acquired by either API or download.

| | |
|----------------------|--|
| Real Estate MLS Data | <ul style="list-style-type: none">San Francisco: 3,975 recordsAustin: 190,584 records |
| Census Data | <ul style="list-style-type: none">2010 Census DataStored at Zip Code level |
| IRS Data | <ul style="list-style-type: none">Tax return dataStored at Zip Code level |
| Cost of Living | <ul style="list-style-type: none">Overall Cost of Living IndexHousing Index |

Experiments & Results

Evaluated the approach by performing the following:

| | |
|----------------------------------|---|
| Unit Testing | <ul style="list-style-type: none">Page loads and returns relevant resultsResults appropriately filterMap clears correctly |
| Functional Testing | <ul style="list-style-type: none">Returns correct datasetMap updates appropriatelyLoads in an reasonable time |
| Modified User Acceptance Testing | <ul style="list-style-type: none">Visually pleasingResults are meaningfulApp is easy to utilize |

Method Comparison

Our method is innovative compared to the standard house search websites because they only allow a user to search for homes with explicit features such as bedrooms, bathrooms and lot size. We allow the user to utilize extra features like the percentage of renters or number of fireplaces that aren't included in sites such as Zillow or Trulia.

References

"Research on social data by means of cluster analysis"