**Project 2 Proposal**

OVERVIEW

Members: Amol Bhatia, Jennifer Mattingly, Brianna Papparotto

Github Repo: <https://github.com/AIndian/earthquakeMLS>

Topic: Housing market values on west coast (Southern CA, Arizona, New Mexico) as compared to earthquakes with magnitude greater than 4 (mid-range and up).

Purpose: For those looking to move to the west coast, type in your city, state, or zip code of your desired location to see information regarding earthquake activity, housing value, and value-change over last year. A list of for-sale houses in the area will allow the user to filter for desired house specifications.

SPECIFICATONS

Datasets:

Earthquake Data - earthquate.usgs.gov

A picture containing background pattern

Description automatically generated

Real Estate Data - <https://www.homejunction.com/real-estate-data-api/>

Zip Code and Latitude/Longitude Data - <https://public.opendatasoft.com/explore/embed/dataset/us-zip-code-latitude-and-longitude/table/>

GeoJson California cities - https://public.opendatasoft.com/api/records/1.0/search/?dataset=us-zip-code-latitude-and-longitude&q=&facet=state&facet=city&facet=zip&geofilter.polygon=(37.81%2C+-124.49)%2C+(37.81%2C+-105.61)%2C+(32.06%2C+-105.61)%2C+(32.06%2C-124.49)

Zillow Housing Details - https://www.zillow.com/howto/api/GetSearchResults.htm

Text

Description automatically generated with low confidence

Map view options:

Light map

Earthquake activity (heatmap)

Housing values (heatmap)

User interactions:

Filter base maps by earthquake activity and/or housing prices

List available housing

Allow user to filter and sort based on price, etc.

Tools:

* + Leaflet
  + React
  + SQL (to link zipcodes together)
  + D3

INSPIRATION

Map

Description automatically generated

A map of the world

Description automatically generatedMap

Description automatically generated

IDEAL SKETCH

Diagram

Description automatically generated