HOuseME

Great Deals on Great Places by ABC

Our mission is to help people make better decisions on where to live

The problem

When people are searching for new places to live, they are limited in the range of factors they can consider (Usually only rely on narrow scope of knowledge, including the houses proximity to workplace/school and their basic perceptions on the neighborhood) Some of these questions can be answered by visiting houses and exploring the neighborhood, but this will be time-consuming and costly.

The solution

Build a software that takes into account relevant data on the communities that they are considering moving in

Data Sources

City of Chicago Portal

- (<u>https://data.cityofchicago.</u><u>org</u>)
- This would be our main source of public data on the various neighborhoods in Chicago.

Zillow

- (http://www.zillow. com/howto/api/GetSearchRe sults.htm)
- Zillow is an online real estate database company that provides open API for getting search results. By typing in address or state+city / zip code, the API would return estimates for rent or real estate and other relevant information in an xml format.

Yelp Dataset

- (https://www.yelp. com/dataset_challenge/dataset_et)
- We will use the dataset provided by Yelp to show what types of restaurants and other businesses are present in each neighborhood.

New Tools to Use

Display in map	Web Interface	Algorithm for weighting search conditions	Algorithm for extracting data
We will use a tool that will allow us to display the houses that meet the search conditions on the map as dots.	In order to allow the users to use our software via web browsers, we will use Django to create a web interface.	We want our software to weight the search conditions based on how a user sets the priority.	Data on neighborhoods, houses, amenities, etc. that are within a certain distance from a point specified by the search query.

Milestones

Jan 24th - Jan 30th

Scrape the data form each dataset and understand how each dataset is structured.

Find additional useful data sources if available

If real-time data is needed (Zillow's price estimate), determine how to update the existing data.

Feb 7th - Feb 13th

Work on algorithm for weighting the search conditions and ranking/filtering housing options. Make the software to extract data on neighborhoods, houses, amenities, etc. that are within a certain distance from a point specified by the search query. (To avoid unnecessary tasks)

Jan 31st - Feb 6th

Format the dataset so that each dataset can be linked via geographical information.

Determine where to store the processed data in which structure.

Determine what search conditions the users can use and what information would be provided as an output.

Feb 14th - Feb 20th

Find other ways to improve the processing speed.
Create a web interface based on the

python program we created.

Milestones

Feb 21st - Feb 27th

Scrape the data form each dataset and understand how each dataset is structured.

Find additional useful data sources if available

If real-time data is needed (Zillow's price estimate), determine how to update the existing data.

Mar 6th - Mar 12th

Work on algorithm for weighting the search conditions and ranking/filtering housing options. Make the software to extract data on neighborhoods, houses, amenities, etc. that are within a certain distance from a point specified by the search query. (To avoid unnecessary tasks)

Feb 28th - Mar 5th

Format the dataset so that each dataset can be linked via geographical information.

Determine where to store the processed data in which structure.

Determine what search conditions the users can use and what information would be provided as an output.