**{Project\_Logo} (**[**Free online logo maker**](https://www.google.com/search?client=firefox-b-1-d&q=free+logo+maker)**)**

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**Team Members**

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| --- | --- | --- |
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**Background**

* The purpose of the project is to understand the impact between having an influx of organic grocery stores vs. fast-food establishments on homeownership and rent prices in America in the last 20 years.

**Motivation**

The motivation of this project is to identify when and where to buy/rent a home in the United States based food access.

**Questions to answer**

* What is the trend of housing prices over the last 20 years in the United States between communities with organic grocery stores versus fast-food restaurants??
  + - What is the difference appraisal value among these two groups?
    - What is the difference listing value among these two groups?
    - What is the difference selling value among these two groups?
* What is the difference in demographics among the two groups?
  + Who owns more homes in areas with more organic grocery stores vs fast-food restaurants?

Machine Learning Questions:

* Can the model accurately predict the housing prices and rent prices in locations where there is an influx of organic grocery stores vs fast-food restaurants?
  + What will be the predicted housing interest rate?
  + When is the best time to buy a house in these two groups?

**Misc. Information**

* Audience: Homebuyers, renter, investors, retailers
* Indicators: Housing prices, rent prices, grocery store types, housing ownership rate, interest rate

**Tools/Modules to use**

* Python
* Pandas
* Matplotlib
* NumPy
* SciPy
* etc.

**Data sets to use**

|  |  |
| --- | --- |
| Reviewed by | Data Source |
|  | ###Zillow : Mortgage Rates Current mortgage rates from Zillow Mortgage Marketplace broken down by state and loan type (30 year fixed, 15 year fixed, 5/1 ARM).  API calls of interest   * **GetRateSummary API**: <http://www.zillow.com/howto/api/GetRateSummary.htm> * **GetMonthlyPayments API**: <http://www.zillow.com/howto/api/GetRateSummary.htm> |
| Yahel | * <https://www.zillow.com/howto/api/APIOverview.htm> |
|  | ####Zillow: Home Valuations  Search results list, Zestimate®, Rent Zestimate®, home valuations, home valuation charts, comparable houses, and market trend charts.  API calls of interest:   * **GetSearchResults API**: <http://www.zillow.com/howto/api/GetSearchResults.htm> * **GetZestimate API**: <http://www.zillow.com/howto/api/GetZestimate.htm> * **GetChart API**: <http://www.zillow.com/howto/api/GetChart.htm> * **GetComps API**: <http://www.zillow.com/howto/api/GetComps.htm> |
|  | * https://catalog.data.gov/dataset?tags=homeless |

**Tasks Breakdown**

* All of us: Collect/Clean the data.
* Student 2: Dashboard (tableau) and
* Student 3: Visualization and….
* Student 4: Presentation and … .
* Student 5:

**Tasks and timeline**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Date** | **Task** | **Notes** |
| **Seg-1.1** | **May 9** | Made group, established purpose, formulated questions | Group Roster and Project Idea Proposal Due |
| **Seg-1.2** | **May 10** | Look through the data, identify the variables, see if the variables are applicable |  |
| **Seg-1.3** | **May 11** | Look through the data, identify the variables, see if the variables are applicable |  |
| **Seg-1.4** | **May 12** |  |  |
| **Seg-1.5** | **May 13** |  |  |
| **Seg-1.6** | **May 14** |  |  |
| **Seg-1.7** | **May 15** |  |  |
| **Seg-2.1** | **May 16** |  | 1st Segment Due |
| **Seg-2.2** | **May 17** |  |  |
| **Seg-2.3** | **May 18** |  |  |
| **Seg-2.4** | **May 19** |  |  |
| **Seg-2.5** | **May 20** |  |  |
| **Seg-2.6** | **May 21** |  |  |
| **Seg-2.7** | **May 22** |  |  |
| **Seg-2.8** | **May 23** |  |  |
| **Seg-2.9** | **May 24** |  |  |
| **Seg-2.10** | **May 25** |  |  |
| **Seg-2.11** | **May 26** |  |  |
| **Seg-2.12** | **May 27** |  |  |
| **Seg-2.13** | **May 28** |  |  |
| **Seg-2.14** | **May 29** |  |  |
| **Seg-3.1** | **May 30** |  | 2nd Segment Due |
| **Seg-3.2** | **May 31** |  |  |
| **Seg-3.3** | **June 1** |  |  |
| **Seg-3.4** | **June 2** |  |  |
| **Seg-3.5** | **June 3** |  |  |
| **Seg-3.6** | **June 4** |  |  |
| **Seg-3.7** | **June 5** |  |  |
| **Seg-4.1** | **June 6** | Finalize the project  Mock Presentation | 3rd Segment Due |
| **Seg-4.2** | **June 7** |  |  |
| **Seg-4.3** | **June 8** | PROJECT PRESENTATION | 4th Segment and  Self Assessment Due |

**Presentation**

Divide your presentation steps to tasks and assign it to members.

Suggested by:  
Khaled Karman