Project Proposal

UCIRV201902DATA3 Group 5

Project Title

An Analysis of the Factors that Impact Housing Costs in the US

Team Members

Kim Harrison, Kent Hazen, Tim Tang, Laura De Morneau

Project Description/Outline

It's widely understood that one of the most important factors of real estate prices is location, but what other factors can impact housing costs in the United States? We will utilize various datasets from both government and commercial sources related to the US housing market to analyze different factors.

Research Questions to Ask

Throughout this project, we will attempt to answer:

- How do location demographics impact housing prices? What is the impact of gentrification? (Lead by Kent)
- What are the features of the houses & properties that can impact the price of houses? We'll look specifically at data from LA, Orange, and Ventura counties. (Lead by Kim)
- What is the impact of weather and/or environmental factors on housing prices? (Lead by Laura)
- What factors impact the decision to rent or buy? (Lead by Tim)

Data Sets to be Used

The following data sets will be utilized for this project (will be updated as sources are utilized):

- US Housing and Urban Development (HUD)
- US Census
- Zillow Amenities Data (from Kaggle Zestimate ML Competition) (https://www.kaggle.com/c/zillow-prize-1/data)
- Zillow Research Data (https://www.zillow.com/research/data/)
 - o Housing prices by zip code
 - o Rental Info

Project Roles

Each team member will be involved in the researching, cleaning & visualization of data sets related to one of the research questions outlined above. Team members will be responsible for presenting their

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data in the final presentation. In addition, team members will assume the following roles & responsibilities related to the final deliverables of the project:

Project Management / Proposal Lead (Kim)

Kim assumes project management responsibilities, including the maintenance of the project scope. Responsible for submitted final proposal.

Technical Lead (Kent)

Kent assumes the project technical lead role, and is responsible for the upkeep of the project repository on Github, including delivery of the final project jupyter notebook file.

Presentation Lead (Laura)

Laura assumes the presentation lead role, and is responsible for managing the overall development and execution of the final presentation.

Analysis Lead (Tim)

Tim assumes the role of analysis lead and is responsible for the final write up summary of of trends observed from data analysis.