

# Individual Project Report

CSC 805

Fall 2023

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Role: FrontEnd

## Task 1: Data Exploration and Identifying key factors and pivots

Analyzed data statistically, understanding its distributions, and exploring potential factors that can be used to support visualizations. The aim was to identify useful data and uncover insights that would guide us in deciding which aspects of the data to focus on for our visualizations.

This also included preprocessing tasks on data like cleaning, filtering, interpolating etc.

Additionally, learning D3, a key component for creating impactful visualizations, was an integral part of this phase.

## Task 2: Using multiple data files to make a synchronous master data object

Even with the data preprocessed by another team member, incorporating it into visualizations posed certain challenges. Upon receiving the processed data, I employed various functions and operations to transform the data into objects, variables, and other hierarchical structures. This transformation was essential to ensure that the data seamlessly served as input for our visualizations.

Functions such as counting members, calculating averages, and applying sorting and mapping operations were crucial steps in preparing the data and storing it in usable variable values.



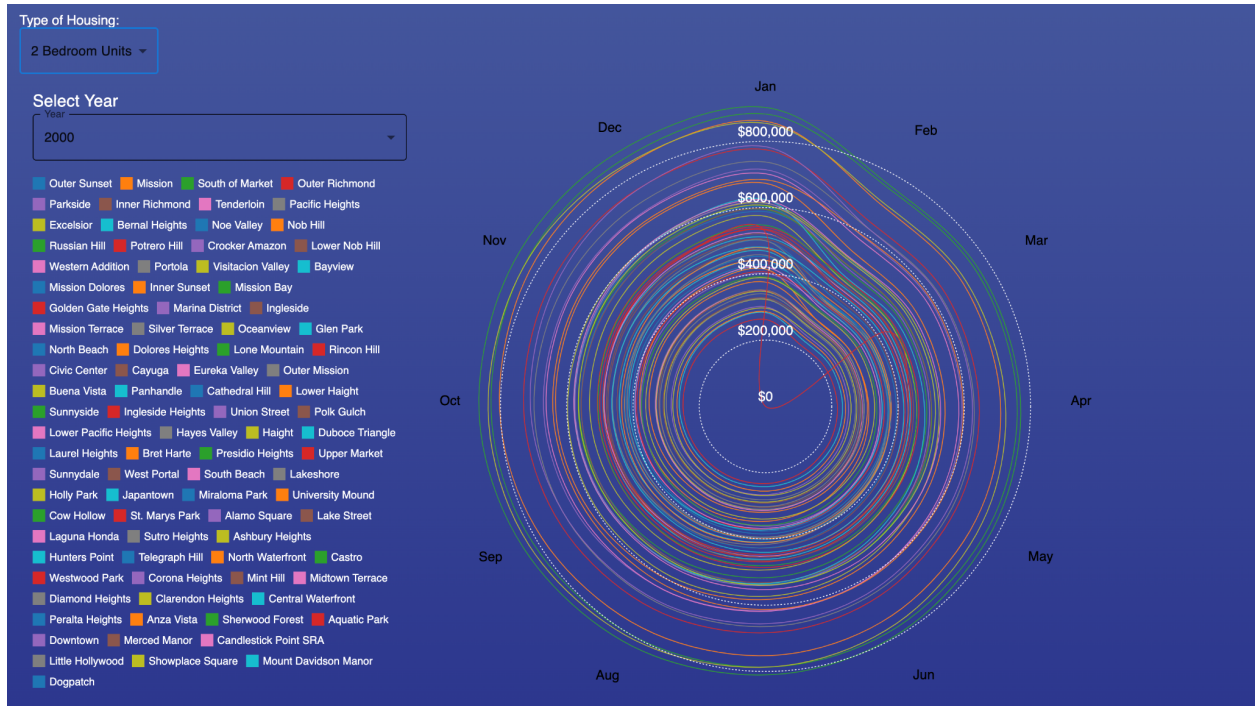
## Task 3: Designed and created a React app and dashboard for the project

- Integrated processed data and charts from other team members into the dashboard.
- Prepared Figma dashboards; the design can be accessed at the following link: [Figma Dashboard](#).
- Created React Projects using Mui and d3.

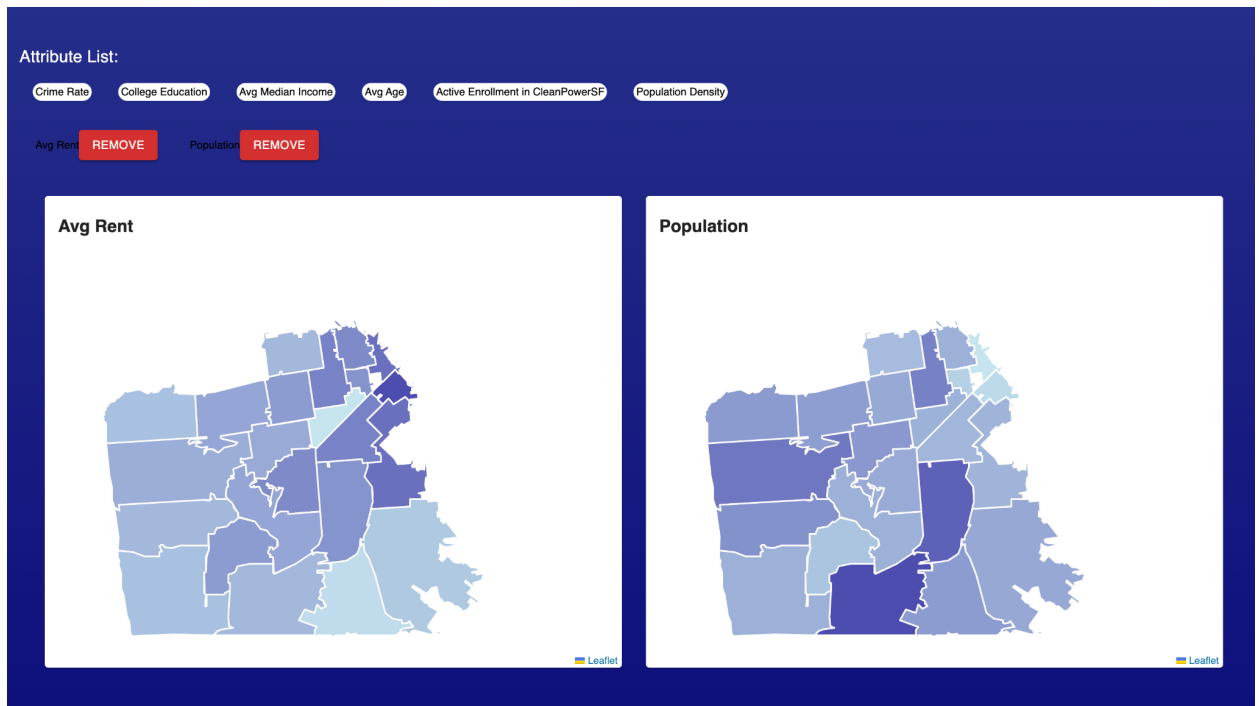


## Task 4: Created d3 charts

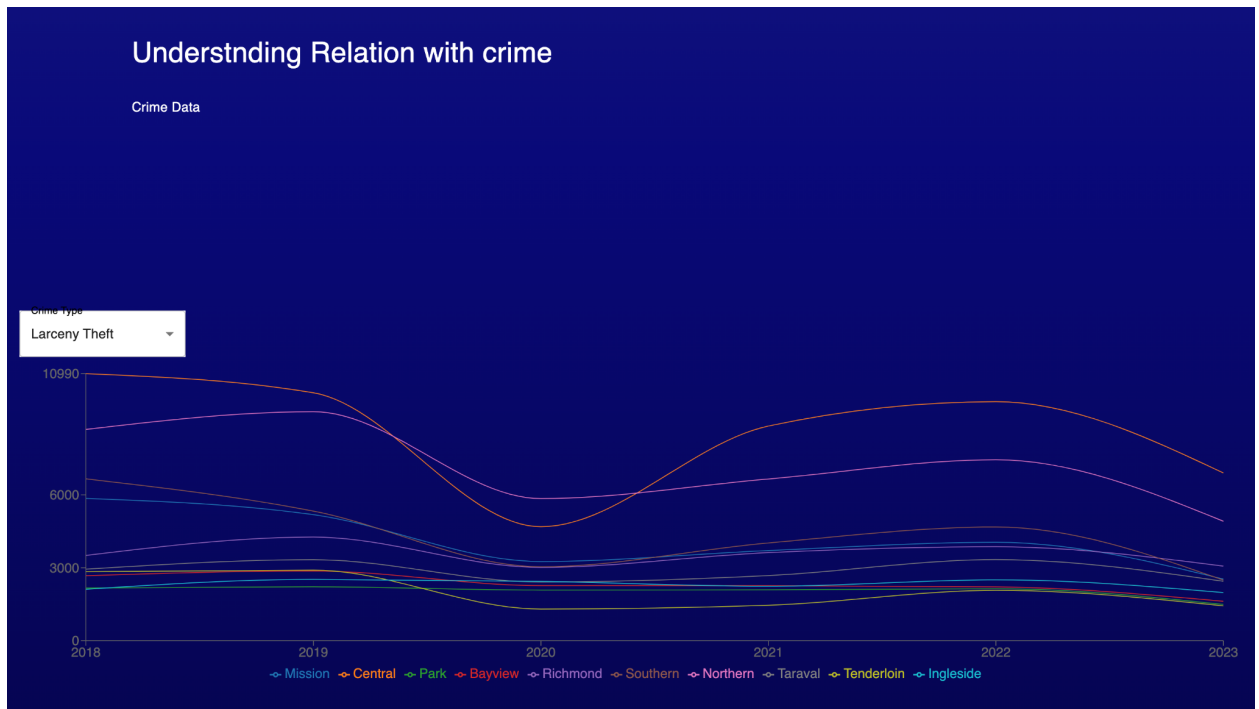
### 1) Circular Calendar Chart



### 2) Choropleth Math



### 3) Stacked Line Chart



## Task 5: Managing git Repository

Github link:

<https://github.com/Kahl-d/DataWizard>

## Task 6: Video Presentation

Made the video presentation of the project.

Demo Video:

[https://drive.google.com/file/d/1GALbvpyFRbwwm\\_pOHgpVs9bqmTpdgyG1/view?usp=sharing](https://drive.google.com/file/d/1GALbvpyFRbwwm_pOHgpVs9bqmTpdgyG1/view?usp=sharing)