Where To Live In NYC

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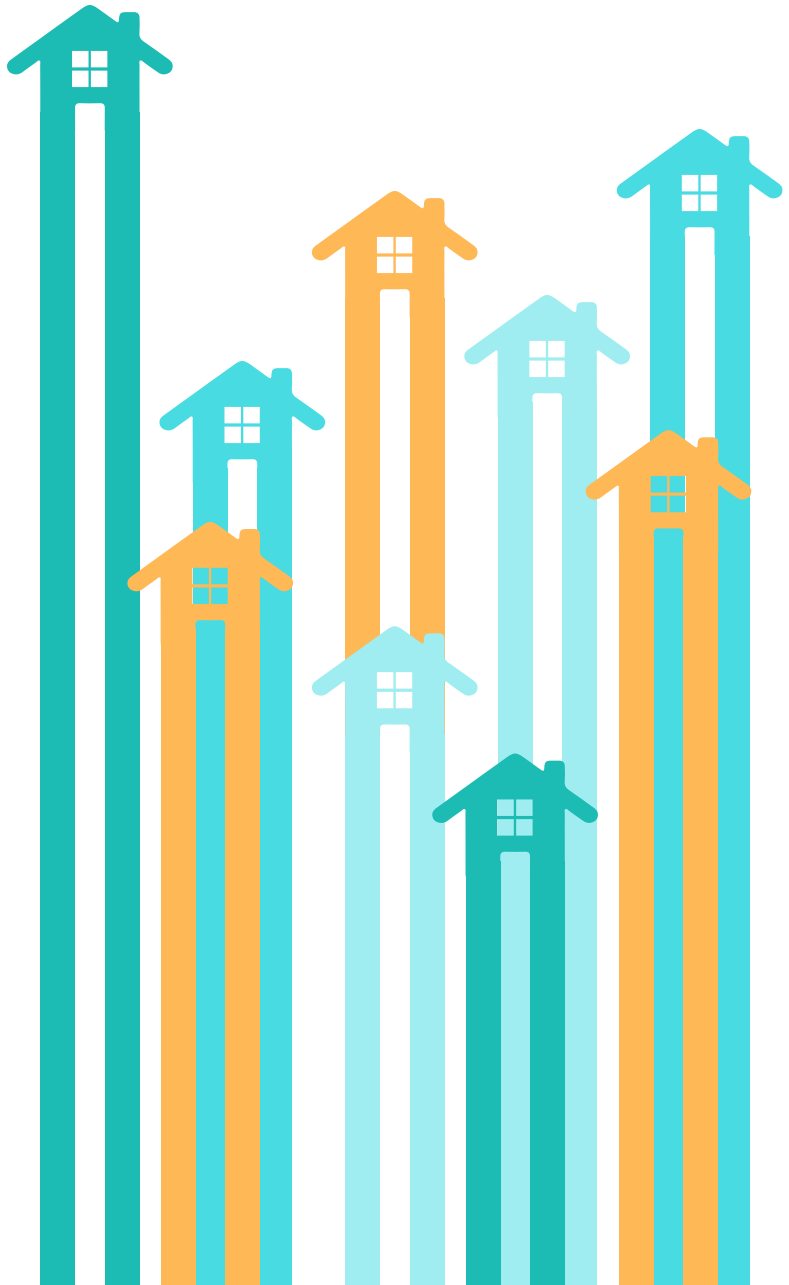


Agenda

01 Introduction

02 Methodology - User Input

03 Methodology - Regression Analysis

04 Demonstration

05 Challenges & Final Thoughts

06 Q & A

INTRODUCTION

- **Goal: Find the best place to live in Manhattan!**
- **Two Parts**
  - **User Input and Analysis**
    - **User can tell the program up to 36 parameters of which criteria matters to them the most**
  - **Regression Analysis**
    - **Specifically looked at 3 parameters: Arrest Rate, Rental Price, and Medical Facilities**
- **Key to connect it all: Zip Codes**

METHODOLOGY - USER INPUT

The most ideal place to live

Finalized on 8 data sets

Dealt with data handling and interface

- Tkinter - GUI Standard Library
- Pandas - Data Analysis Library

Separated functions for each of the major 6 parameters

Connected all the parameters to the main code that controls output based on user interests

Regression Analysis

Ran statistical analysis to see if there is any correlation

- Number of Arrests v.s. Count of Medical Facilities
- Rental Rate v.s. Count of Medical Facilities
- Rental Rate v.s. Number of Arrest

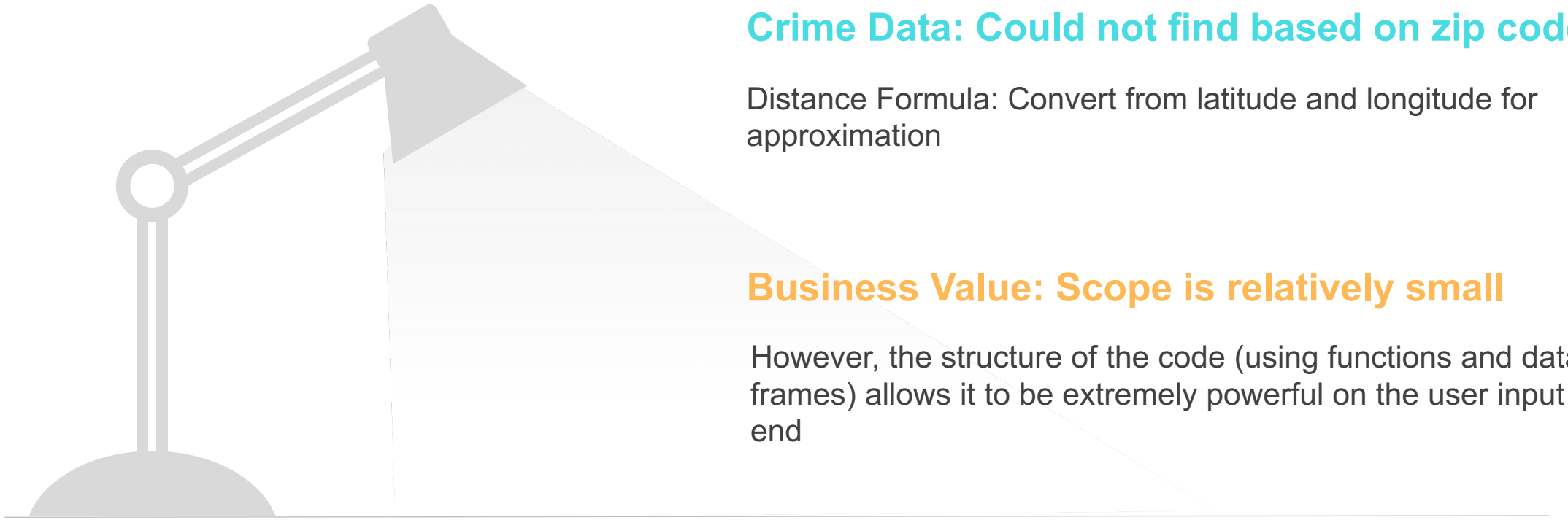
Dealt with data handling and plotting

- Seaborn – Statistical Data Visualization Library
- Pandas – Data Analysis Library

Crime Rate | Medical Facilities | Rental Rate

Demonstration

CHALLENGES & FINAL THOUGHTS



Certain zip codes were not represented by all data sets

Crime Data: Could not find based on zip code

Distance Formula: Convert from latitude and longitude for approximation

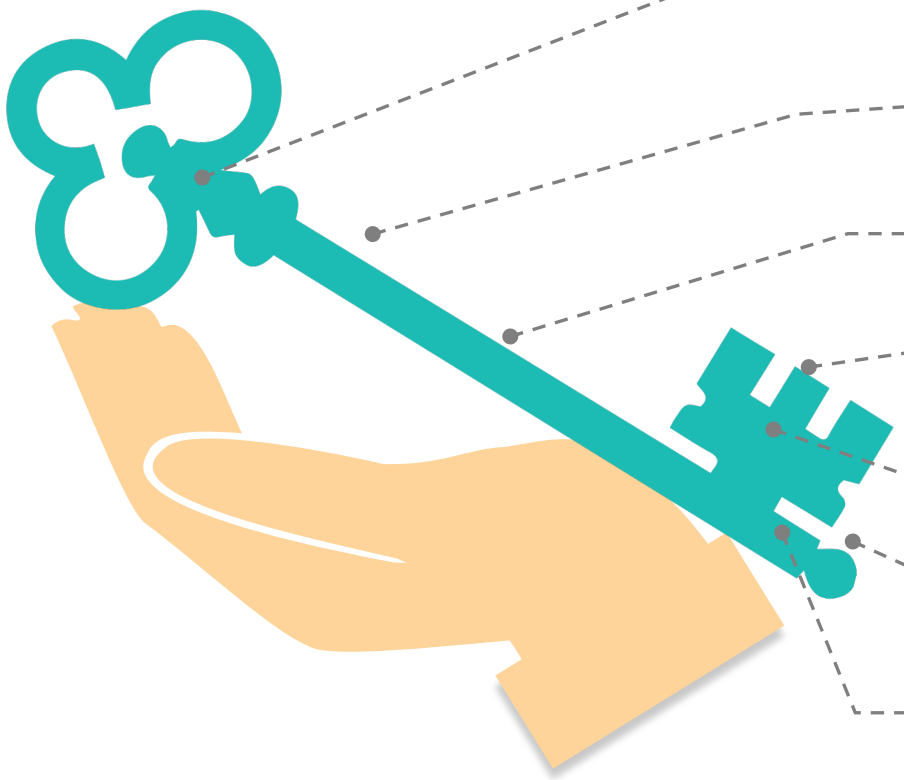
Business Value: Scope is relatively small

However, the structure of the code (using functions and data frames) allows it to be extremely powerful on the user input end

Questions?

See our project on GitHub at:
https://github.com/YuboC/CIS9650_TeamProject

Data Resources



Crime: data.cityofnewyork.us (NYC Open Data)

Demographics: data.census.gov (US Census Data)

Housing: nyc.gov/site/finance (NYC Department of Finance)

Retail Food: data.ny.gov (NYS Office of Information Technology Services)

Restaurants: data.cityofnewyork.us (NYC Open Data)

Medical Facilities: health.data.ny.gov/ (NYS Office of Health)

Latitude/Longitude-to-Zipcode:
gist.github.com/erichurst/7882666


Thank You!
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