



MILESTONE 1 : PROJECT PROPOSAL

1. LIST OF GROUP MEMBERS

NAME	EMAIL	GITHUB
Ramanpreet Bhatia	rpbhatia@seas.upenn.edu	rpbhatia
Jasmine Jian	yuejian@seas.upenn.edu	JasmineYJ
Cayde Roothoff	croot22@seas.upenn.edu	croot22
John Hentrich	hentrich@seas.upenn.edu	johnhentrich

2. WEBSITE IDEA

- Find the preferred zip code to live in and historical listings in that zip code based on housing cost (Real Estate transfers) and factors important to the user, e.g.: educational quality, lifestyle conveniences, and safety.
- Compare historical listings to the FMV for similar properties

3. SELECTED DATA SETS

A. Lifestyle:

a. School Information:

- i. Description: Data from the School District of Philadelphia that includes metrics on school performance, location, and overall operations.
- ii. Link: [link](#)
- iii. Query:
 1. Select and count all schools(High School, K-8) within a given zip code
 2. Calculate average school rating(High School, K-8) within a given zip code
- iv. Size Statistics:
 1. Space: 700 kb
 2. Rows: 322
 3. Attributes: 293
- v. Summary Statistics (for School Ratings Attribute):
 1. Mean: 36.9
 2. Standard Deviation: 19.1

b. Cuisine based on user interest & Top Review from Yelp

- i. Description: Data from yelp containing the details regarding local business and user reviews, further details regarding attributes can be found [here](#).
- ii. Link: [Yelp Dataset : business.json JOIN review.json](#)

- iii. Query:
 - 1. Ask user to select a type of cuisine
 - 2. Recommend a restaurant that is opening at the moment, with good average rating and close to the zip code that user's looking at.
- iv. Summary Statistics for Business.json :
 - 1. Space: 9MB out 153MB (limited to PA)
 - 2. Rows: 12376
 - 3. Attributes: 66
- v. Summary Statistics for Review.json :
 - 1. Space: 6.33GB (will be limited to PA after parsed and joined with Business.json)
 - 2. Rows: 8021122
 - 3. Attributes: 9
- c. Things to do when & Photo from Yelp
 - i. Description: based on the intended schedule, recommend activities available nearby, further details regarding check-in can be found [here](#), reuse dataset from above.
 - ii. Link: [Yelp Dataset : business.json and check-in.json JOIN ON business_id](#)
 - iii. Query:
 - 1. Ask user to select a range of time
 - 2. Recommend activities for the given time with good average rating and close to the zip code that user's looking at. Potentially we will attach photos of the business.
 - iv. Summary Statistics for CheckIn.json:
 - 1. Space: 26MB out of 450MB (limited to PA)
 - 2. Rows: 37127
 - 3. Attributes: 2

B. Safety:

- a. COVID Test Cases:
 - i. Description: A list of COVID test counts (positive and negative) per zip code.
 - ii. Link: [link](#)
 - iii. Query:
 - 1. Count the number of positive test cases per zip code
 - 2. Calculate the average positive test rate per zip code
 - iv. Size Statistics:
 - 1. Space: 5 kb
 - 2. Rows: 126
 - 3. Attributes: 5
 - v. Summary Statistics (for Positive Test Cases per Zip Code):
 - 1. Mean: 2310
 - 2. Standard Deviation: 1434

C. Real Estate Transfers:

- a. Description: A set of houses sold in 2020 containing the appraised and fair market value.
- b. Queries
 - i. Select houses by zip code that match a certain price range
 - ii. Find the average of a zip code or multiple zip codes
- c. Housing Costs: [link](#)
- d. Rows 140,198
- e. Space 56.2 MB
- f. Attributes 12

4. OPTIONAL FUTURE DATA SETS

A. Lifestyle:

- a. Pre-Ks: Count per zip (JOIN ON zip): [link](#)
- b. Parks: Count per zip (JOIN ON zip): [link](#)
- c. Historical Landmarks: Count per zip (JOIN ON zip): [link](#)
- d. Farmer's Market Locations: Count per zip (JOIN ON zip): [link](#)

B. Safety:

- a. Crime Incidents: [link](#)
- b. Police Station Locations: [link](#)
- c. Fire Department Locations: [link](#)
- d. Hospital Locations: [link](#)

C. Current Listings

- a. Zillow, Craigslist, Trulia for Philly - [link](#)

D. General:

- a. Other Census Data: [link](#)