Week Four Write-up

# Introduction

Our consulting firm would like to know if we should continue our purchase of FourSquare data. The firm has asked me to perform preliminary analysis QA analysis on the available data.

# Data Sources

I used FourSquare data to check suggested locations in Chicago, IL.

I compared some basic location data with google location data.

Then i used some generic demographic data to identify possible bias.

I also used an open source geojson to map out Chicago and its communities.

I also used FourSquare Documentation

# Methodology

The methodology is as follows:

* Compare the API with the API docs to make sure they line up.
* Make sure the data collected from FourSquare is accurate
* Identify any biases in the data.

# Results

After reviewing the API documentation and comparing them to the API query results, I found that the documentation is off, and would need further explanation from the api team.

After plotting essential locations provided by FourSquare, I found that their location data seems to be off. The API puts N/E Chicago in the middle of Lake Michigan, and it puts South/West Chicago, outside of Chicago.

After plotting out the suggested locations, I found that there is a clear line that favors locations in North Chicago. After looking at demographic data, I found that locations in predominantly black locations are not suggested by FourSquare.

# Results

The FourSquare API seems to have bad location data, poor documentation, and data biases. I would recommend moving to a different vendor.