DSCI 510 Final Project Proposal

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1. Name of your final project and a short synopsis/description
Title: Grocery Store Affluence Map: Correlating Store Locations with LA Property Prices

This project looks at whether the locations of certain grocery stores—Erewhon, Whole Foods, Trader Joe's, and Ralphs—are linked to the cost of renting nearby properties in Los Angeles. These stores cater to different budgets and lifestyles, so the goal is to see if the type of grocery store in an area is reflected in local rental prices.

- 2. What problem are you trying to solve, which question(s) are you trying to answer? Do the locations of grocery stores correlate with property prices in the same area? Grocery stores often target specific groups of people. For example, Erewhon is known for its upscale organic products, which might appeal to wealthier customers. This makes me wonder: do areas with certain grocery stores have higher or lower rental prices? This project will explore that question by comparing rental costs near these four types of stores in Los Angeles.
- 3. How do you intend to collect the data and where on the web is it coming from?

Web-scraping from the following website:

- I. Apartments.com
 - Information about rental properties in Los Angeles, including the name, location (zip code), rent price, and number of bedrooms.
- II. <u>Erewhon</u>, <u>Whole Foods</u>, <u>Trader Joe's</u>, <u>Ralphs</u> Locations (zip code) of Erewhon, Whole Foods, Trader Joe's, and Ralphs in Los Angeles.
- 4. What type of data cleaning and/or analysis are you going to perform on the data?
 - I. Data Cleaning:
 - a. Calculate rent per bedroom to make properties easier to compare.
 - b. The locations of Ralphs include Food 4 Less. Delete the data of Food 4 Less or count them as the fifth grocery store.
 - II. Data Analysis:
 - a. Find the average rent price for areas near each grocery store type.
 - b. Compare these averages to see if any patterns emerge.
- 5. What kind of visualizations are you going to use to illustrate your findings? To present the results, I'll create:
 - I. Bar Charts: Show the average rent price near each type of grocery store.
 - II. Maps: Display where the grocery stores and rental properties are located in Los Angeles.