MORE CHOICES, MORE CONVENIENCE

Restaurant Analysis and Visualization

TEAM FROM GEORGIA TECH

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MOTIVATION

To help people make decisions among a large amount of different kinds of restaurants, we implement a data analysis and visualization tool to solve this problem. Through this, people can analyze, visualize and obtain suggestions.

Person	Reason
Tourists	Find out delicious and affordable food
Residents	Have a comprehensive knowledge of diet in Las Vegas
City planners	Balance the development of Las Vegas
Proprietors	Make a preplanning for business

OUR APPROACH

We use colored dots to pinpoint restaurant location and implement a cluster map and heat map to make the map more clean and readable. After that, we use API for interactive visualization. We also incorporate textrank algorithm so that users can obtain key words in one click. Finally, we use Google Data Studio dashboard to visualize summery of data.

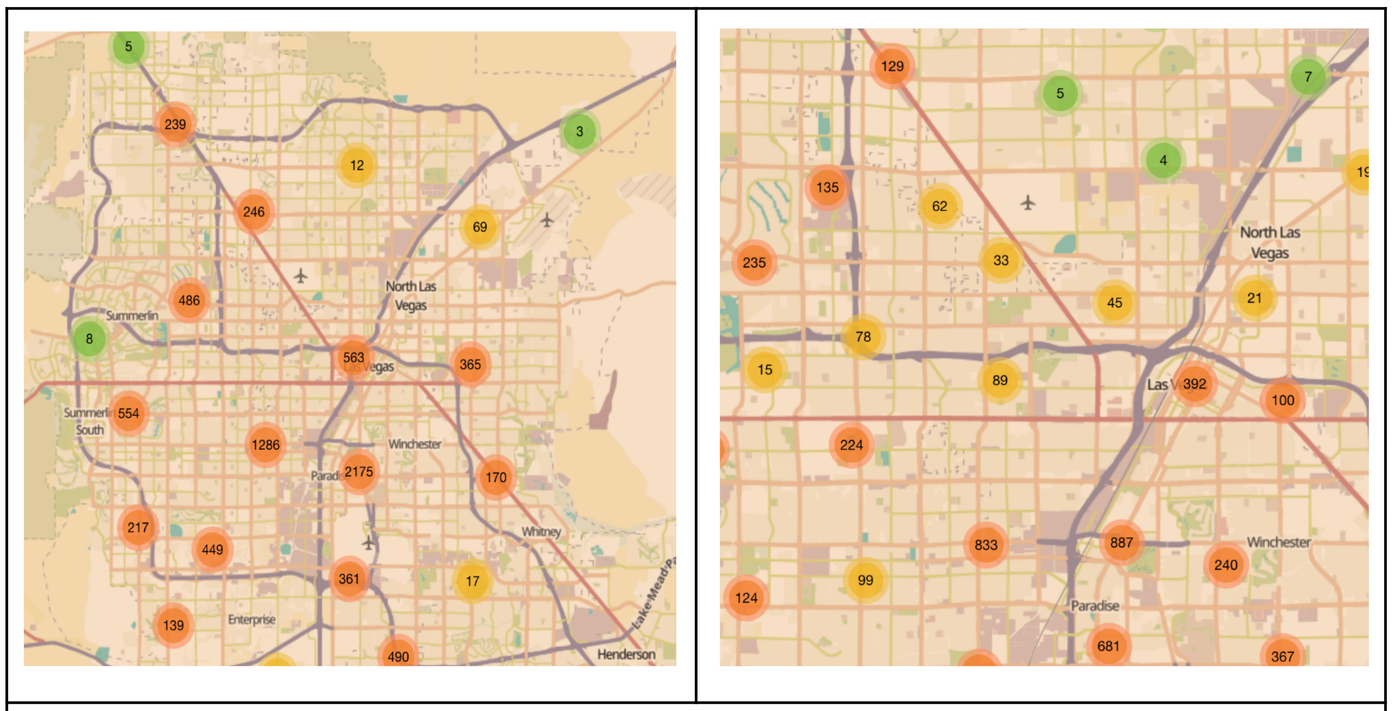
DATA

We use **YELP Dataset** from its official website and screen out all information about restaurants in Las Vegas. The subset contains a total of 7979 restaurants with name, business id, longitude, latitude, address, stars, review content and review count.

Data Studio Dashboard

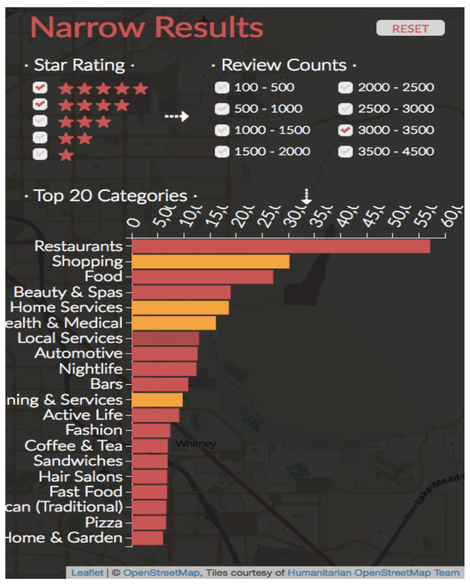
Cluster Map

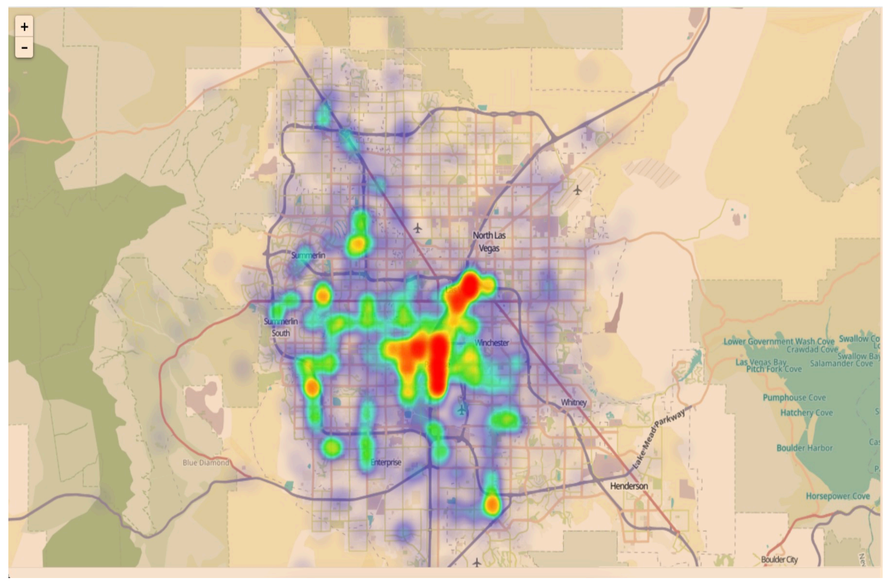
Apply Leaflet.markercluseter on the interface to make the data more readable and organized. It break the data apart as user zoom in.



Different cluster size based on the zoom-in scale

Filter panel and heat map





Textrank for Keyword Extraction and picture

Given the search keywords, we make the website more interatvie by visualizing the word distance as a graph. The expected result is a set of assiociated words based on the natural language text distance. The more related words are displayed as a bigger node on the detailed panel.