Exploring Omaha – a tourist's guide

Coursera capstone

Problem statement

Nebraska is a state that is bordered by South Dakota to the north; Iowa to the east and Missouri to the southeast and Wyoming to the west. It has Omaha and Lincoln as two biggest cities in the state. Omaha is the largest city with an estimated population of 944,316 (2018),

Nebraska is a flat land and mostly farmland and as a matter of fact many people see Omaha as a boring city. As years go by Omaha has been growing at an increasing rate and now it is home to the headquarters of Fortune 500 companies: TD Ameritrade, First National Bank of Omaha Valmont Industries, Werner Enterprises, mega-conglomerate Berkshire Hathaway; one of the world's largest construction companies, Kiewit Corporation; insurance and financial firm Mutual of Omaha; and the United States' largest railroad operator, Union Pacific Corporation. Berkshire Hathaway is headed by local investor Warren Buffett, one of the wealthiest people in the world.

As corporations are building offices in Omaha, many people who are newly employed must relocate to 'boring cold Omaha'. In response to this, it is the opposite of what people have read or heard. The city is home to several interesting museums and public art displays, including the Spirit of Nebraska's Wilderness. More family-focused attractions include the Children's Museum and the extremely popular Henry Doorly Zoo and Aquarium.

- This report sought to explore Omaha to new residents and tourists who want to live happily and have the best time of their lives in Omaha.
- It sought to guide new residents to which neighborhood they should live if they are into nightlife
- Also, tourists will know the best neighborhoods to have fun depending on what they deem fun.

Data

To consider the problem, we can list the data as below:

List of neighborhoods and zip codes were sourced from the Douglas County's historical data. Data can be downloaded here

https://data-dogis.opendata.arcgis.com/datasets/neighborhood-associations-1?geometry=-97.137%2C41.110%2C-95.051%2C41.471

I used Google Map (Geolocating API) to obtain the various geographical coordinates, longitudes and latitudes of the various neighborhoods.

I used Foursquare API to obtain the various venues and locations in every neighborhood in Omaha. More about Foursquare here: https://foursquare.com/

Methodology

In this analysis, I started by cleaning the dataset. Using the Google API, I was able to obtain the latitudes and longitudes of the various neighborhoods which was then merged. Using Folium, the map of Omaha was visually created with the latitudes and longitudes.

Secondly, using the foursquare API, I obtained the geographical coordinates of all venues within 5000 meters and limited the search to only 300 venues from each neighborhood, creating another dataset which was merged to the previous dataset.

Thirdly, I divided the most popular venues into five clusters and combined the data with the neighborhood dataset.

Lastly, I found nightlife places, bars and steakhouses and ranked them according to neighborhoods to see which neighborhood has the largest number of bars and steakhouses

Results and discussion

The goal of this research was to provide information to new residents and tourists on venues in Omaha to have the best and fun life they want. It also was to make people know the best neighborhoods in Omaha that have the largest number of popular steakhouses and bars. Armbrust Acres and Banyan Hills are neighborhoods noted for popular American Restaurants. These neighborhoods have a serene atmosphere and it is not surprising they have food restaurants as their next most popular venues. For a cluster of bars in Omaha, the best neighborhoods to go to are the Benson area, saddle creek, Blackstone and north Omaha neighborhoods and downtown areas.

Conclusion

The purpose of this analysis was to explore the various popular venues in Omaha that people can really have fun. It has shown the various neighborhoods. This report and analysis will guide new residents who are coming to Omaha for employment and tourists who are coming to Omaha for fun. Omaha is not the best city in USA neither is it boring. With this analysis and exploration, people should come and witness how fun the city of Omaha is.