**Introduction about Los Angeles:**

Los Angeles officially the City of Los Angeles and often known by its initials L.A., is the [most populous city](https://en.wikipedia.org/wiki/List_of_California_cities_by_population) in [California](https://en.wikipedia.org/wiki/California); the [second most populous city](https://en.wikipedia.org/wiki/List_of_U.S._cities_by_population) in the [United States](https://en.wikipedia.org/wiki/United_States), after [New York City](https://en.wikipedia.org/wiki/New_York_City); and the [third-most populous city](https://en.wikipedia.org/wiki/List_of_North_American_cities_by_population) in [North America](https://en.wikipedia.org/wiki/North_America), after [Mexico City](https://en.wikipedia.org/wiki/Mexico_City) and New York City. With an estimated population of nearly four million people,[[11]](https://en.wikipedia.org/wiki/Los_Angeles#cite_note-PopEstCities-11) Los Angeles is the cultural, financial, and commercial center of [Southern California](https://en.wikipedia.org/wiki/Southern_California). The city is known for its [Mediterranean climate](https://en.wikipedia.org/wiki/Mediterranean_climate), ethnic diversity, [Hollywood](https://en.wikipedia.org/wiki/Hollywood), the entertainment industry, and its sprawling metropolis.

Los Angeles lies in [a basin](https://en.wikipedia.org/wiki/Los_Angeles_Basin), adjacent to the [Pacific Ocean](https://en.wikipedia.org/wiki/Pacific_Ocean), with [mountains](https://en.wikipedia.org/wiki/San_Gabriel_Mountains) as high as 10,000 feet (3,000 m), and [deserts](https://en.wikipedia.org/wiki/High_Desert_(California)). The city, which covers about 469 square miles  is the [seat](https://en.wikipedia.org/wiki/County_seat) of [Los Angeles County](https://en.wikipedia.org/wiki/Los_Angeles_County), the most populous [county](https://en.wikipedia.org/wiki/County_(United_States)) in the United States. The [Los Angeles metropolitan area](https://en.wikipedia.org/wiki/Los_Angeles_metropolitan_area) (MSA) is the [second-largest metropolitan area](https://en.wikipedia.org/wiki/List_of_Metropolitan_Statistical_Areas) in the nation with a population of 13.1 million people. The [Greater Los Angeles](https://en.wikipedia.org/wiki/Greater_Los_Angeles) metropolitan area (CSA) is the second-most populous CSA metropolitan area with a 2015 estimate of 18.7 million people.

Los Angeles has a diverse economy and hosts businesses in a broad range of professional and cultural fields. It is also famous for its movie, television, and recording industry. A [global city](https://en.wikipedia.org/wiki/Global_city), it has been ranked 6th in the [Global Cities Index](https://en.wikipedia.org/wiki/Global_Cities_Index) and 9th in the [Global Economic Power Index](https://en.wikipedia.org/wiki/Global_Economic_Power_Index). The Los Angeles metropolitan area also has a [gross metropolitan product](https://en.wikipedia.org/wiki/Gross_metropolitan_product) of $1.0 trillion (as of 2017), making it the [third-largest city by GDP](https://en.wikipedia.org/wiki/List_of_cities_by_GDP) in the world, after the [Tokyo](https://en.wikipedia.org/wiki/Greater_Tokyo_Area) and [New York City](https://en.wikipedia.org/wiki/New_York_metropolitan_area) metropolitan areas. Los Angeles hosted the [1932](https://en.wikipedia.org/wiki/1932_Summer_Olympics) and [1984 Summer Olympics](https://en.wikipedia.org/wiki/1984_Summer_Olympics) and will host the [2028 Summer Olympics](https://en.wikipedia.org/wiki/2028_Summer_Olympics).

**Problem**

* To analyze all restaurant venues and extract their major delivery providers if any, to get information on major competitor and at the same time to focus on those restaurants which don't have any delivery providers and might be potential customers for any new delivery providers in future
* To analyze and categorize different cuisines which might provide valuable input for online delivery providers and to new startups planning to open new restaurants

**How it will be useful:**

* The project will provide in depth information of various restaurants and major competitors in the area.
* It will also be beneficial to startups who want to start any new restaurants in the area to get information regarding which major cuisines are there in the area. It could give valuable input on which cuisines are not present in a particular neighborhood and starting those cuisines in the areas might prove highly profitable as Los Angeles is a city of diversity and people tend to look for diverse cuisines.

**Example :**

Let us xyz investors need to open an restaurant in Los Angeles. Considering the client’s requirement we start to pull the neighborhood data of Los Angeles. We get the data of latitude and longitude of near by regions. We made preliminary analysis and created clusters.Based on 10 clusters, we categorized them based on venue category. Based on the results we can come with better conclusion.