# Project Title

## Hedonic pricing model applied to Airbnb in Los Angeles

# Teammates

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# Project Objective

We are going to do a price analysis for Airbnb dataset in Los Angeles. The following questions will be investigated:

1. Which neighborhood is least/most expensive in LA?
2. How is price impacted by reviews, descriptions, summaries, a Natural Language Processing (NLP) case?
3. How popular is Airbnb in LA?
4. How do offered amenities influence price?
5. Does host accessibility influence price? (host response time)
6. Create a dashboard with breakdown of a neighborhood by room type and number of reviews across years.

# Data Sources

<https://data-analytics-airbnb.s3.us-east-2.amazonaws.com/Data/calendar.csv>

<https://data-analytics-airbnb.s3.us-east-2.amazonaws.com/Data/listings.csv>

<https://data-analytics-airbnb.s3.us-east-2.amazonaws.com/Data/reviews.csv>

# Tools

We will utilize AWS to upload our data, then connect to the Postgres, to set up our dataset. We then use HTML, CSS, D3 and JavaScript to design a dashboard to show our graphs for Airbnb for Los Angeles. We will utilize Leaflet Cluster and Heatmap, and Tableau Dashboard for visualizations. Natural Language Processing will be used to train our price model. The goal is to analyze key words in categories such as reviews, descriptions, summaries, or host response rates to see if there is a correlation with price.

# Resources

Cox, Murray(2020). Inside Airbnb, adding data to the debate. [Retrived from <http://insideairbnb.com/get-the-data.html>](file:///C:\Users\Home%20Laptop\Downloads\Retrived%20from%20http:\insideairbnb.com\get-the-data.html%3ffbclid=IwAR3oQMff1KDiNgy_0SY50yW7ai5NqaKyo_coqher_olYMTx8mJbonX-8KVQ)

Gibbs, Chris & Guttentag, Daniel & Gretzel, Ulrike & Morton, Jym & Goodwill, Alasdair. (2017). Pricing in the sharing economy: a hedonic pricing model applied to Airbnb listings. Journal of Travel & Tourism Marketing. 1-11. 10.1080/10548408.2017.1308292.