

# Airbnb Linear Regression

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## - Introduction:

The second project for Data science Bootcamp T5 on Regression. Through the project by building a machine learning linear regression model, we will shed light on the company that we study to assist with their issue, dataset description, and finally, the tools used in this project.

## - Background:

- **Company information:** Airbnb, Inc. is an American company that operates an online marketplace for lodging, primarily homestays for vacation rentals, and tourism activities. The platform is accessible via website and mobile app.
- **Problem statement:** For brands and international companies, it is important to have the best product on websites home page. It's always confusing for the website visitors chose a place to stay in and the search may take hours to find the best product.
- **Value for the company:** The data service will predict the best products; it helps to get the customer attention by displaying the highest ratings. This will make the choice more easier and faster with the best product.

## - Dataset:

The used dataset scraped from [airbnb.com](https://www.airbnb.com) with 10 features will be helpful for the study. Sample size is 4 major cities (London, Paris, Praha, and Berlin) that are located in the continent of Europe.

## - Tools:

- **Technologies:** Python, Jupyter Notebook.
- **Libraries:** Pandas, NumPy, Matplotlib, Seaborn, BeautifulSoup and Selenium.