

# Airbnb NYC Analysis Project

## Overview

This project provides a comprehensive analysis of Airbnb listings in New York City, based on a dataset sourced from Huggingface Hub. The dataset encompasses over 20,000 listings, offering insights into room prices, reviews, availability, and host information.

## Contents

- **Airbnb\_NYC\_Analysis\_Report.txt:** Detailed report summarizing the findings from the analysis.
- **Visuals:** Folder containing data visualizations.
- **Data:** Folder containing the original and processed datasets.

## Analysis Phases

Data Cleaning and Preprocessing: Addressing missing values and outliers.

Exploratory Data Analysis (EDA): Investigating distributions, room types, and basic statistics.

Geographical Analysis: Analyzing the distribution of listings and price trends across neighborhoods.

Host Analysis: Examining the impact of host activity on listing prices and reviews.

## Key Findings

- Varied price ranges and availability across neighborhoods.
- Distinct patterns in the number of listings and reviews based on host activity.
- Manhattan emerges as the most expensive neighborhood, with notable price differences across neighborhoods.

## Tools Used

- Python for data analysis and manipulation.
- Libraries: Pandas, Seaborn, Folium for visualization and mapping.

# Usage

This project can serve as a resource for:

- Hosts aiming to optimize their pricing and listing strategies.
- Guests seeking to make informed booking decisions.
- Researchers and analysts studying the short-term rental market in urban settings.

# Acknowledgements

- Dataset provided by Huggingface Hub.
- Analysis and report by Mohamad Chokr.

For more detailed insights and specific data points, refer to the accompanying detailed analysis reports and visual materials.