

# Project Proposal

## Question/need:

- What is the framing question of your analysis, or the purpose of the model/system you plan to build?

**The purpose of the model that I plan to build is to create a recommendation system using NLP on Airbnb reviews and unsupervised models.**

- Who benefits from exploring this question or building this model/system?

**Airbnb and users benefit from exploring this question and building this system. Airbnb can better understand customer experience from NLP exploration while users can use the recommendation system to find the right Airbnb for them.**

## Data Description:

- What dataset(s) do you plan to use, and how will you obtain the data?

**I plan on using Airbnb dataset from Inside Airbnb, who provides publicly available information for Airbnb.**

- What is an individual sample/unit of analysis in this project? What characteristics/features do you expect to work with?

**An individual sample of analysis in this project is a document in the corpus. I expect to work with the text within reviews given by Airbnb users.**

## Tools:

- How do you intend to meet the tools requirement of the project?

**I intend to meet the tools requirement of the project by using those learned in lectures (including NLTK, spaCy, genism, sciki-learn).**

- Are you planning in advance to need or use additional tools beyond those required?

**I plan on using Plotly and/or Tableau for visualizations. I am watching Youtube videos on Flask/Streamlit right now so hopefully I can implement one of them in my project.**

## MVP Goal:

- What would a [minimum viable product \(MVP\)](#) look like for this project?

**A MVP for this project should include some results from topic modeling(NMF, LSA, or LDA).**