**DS420, Fall 2022, Project #1**

**Proposal**

For this proposal part of the assignment, submit this document, or a separate document, with the requested information below filled in.

* Team members: Carson Ward, Isaac Habben, Darren Kremer, Tanuj Guha
* Data set to analyze – London UK Airbnb Open Data  
  o Description/background:

Since 2008, guests and hosts have used Airbnb to expand on traveling possibilities and present more unique, personalized way of experiencing the world. This dataset displays historical listing activity and metrics in London UK from 2008 to the end of October 2022.

o Link: <https://www.kaggle.com/datasets/whenamancodes/london-uk-airbnb-open-data>  
o Label variable – Can be qualitative or quantitative. If qualitative, list the categories 

* Price (Quantitative)

o Predictor variables (features). Can be a mixture of quantitative and categorical.

* Latitude - Quantitative
* Longitude - Quantitative
* Room Type - Qualitative
* Minimum Nights - Quantitative
* Number of Reviews - Quantitative
* Reviews Per Month - Quantitative
* Number of Listings by Host - Quantitative
* Availability 365 - Quantitative
* Number of Reviews (Last 12 months) – Quantitative

o Question(s) to answer

* Can we predict the price to stay at an Airbnb in London based on geographical location, review information, and establishment information?
* Does a Airbnb with more reviews lead to higher prices?
* Does less availability of the room lead to higher prices?