**PROJECT 4 PROPOSAL**

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1. What is your dataset and why did you choose it:
2. Kaggle datasets: Airplane Passenger Satisfaction <https://www.kaggle.com/datasets/teejmahal20/airline-passenger-satisfaction/data>
3. Inspiration/reasoning: Some of us travel fairly frequently and we are curious about the trends that make flights seem more enjoyable. Airlines could use a model for prediction of customer satisfaction to better the user experience they offer.
4. What are we going to predict? Any biases or limitations?
   1. We want to create a model that predicts if a customer will be satisfied with their flight based on metrics they can input such as age, gender, flight distance, etc.
   2. Limitations and biases of our dataset:
      1. It does not list the airline so we can track trends
      2. It does not include dates so we don’t know if any of the data would present differently before/after covid.
      3. We don’t know which countries or airports any of these flights are departing from or arriving to, and there could be some bias based on individual airport function and layout.
5. What do we want to visualize?
   1. Bar chart: Top/bottom 5 airlines by customer satisfaction rating
   2. Correlation between length of flight and satisfaction rating
   3. Line graph: Satisfaction trends over time
   4. Donut charts: Classes or ages
6. Inspiration - other code/articles similar to our dataset:
   1. Original dataset: <https://www.kaggle.com/datasets/johndddddd/customer-satisfaction>
   2. Sample use of dataset with visualizations: <https://www.kaggle.com/code/bejondbirthday/flight-satisfaction-prediction>
   3. Additional dataset for visualizations: <https://www.kaggle.com/code/viceriomarinowski/how-was-their-flight?select=Airline_Reviews.csv>
   4. Sample Tableau dashboard: <https://public.tableau.com/app/profile/gandes.goldestan/viz/HRDashboard_16284874251120/Overview>
7. Color palette

Website: Bootswatch theme: Quartz

Tableau: red-blue diverging

A pink and blue rectangle with black text

Description automatically generatedA blue and pink rectangle with black numbers

Description automatically generatedSlide deck: Coolors.co pallette:

1. Roles & responsibilities
   1. All: data cleaning, notes on individual sections, about us page, write up sections
      1. ML: Marta and Sarah
      2. Tableau: Elizabeth and Gabriela
      3. Flask app lead: Marta
      4. Slide deck lead: Gabriela
      5. Write up finalizing: Sarah
      6. Read Me: Elizabeth
   2. GitHub link: https://github.com/martabaker/ds\_project\_4\_group\_02