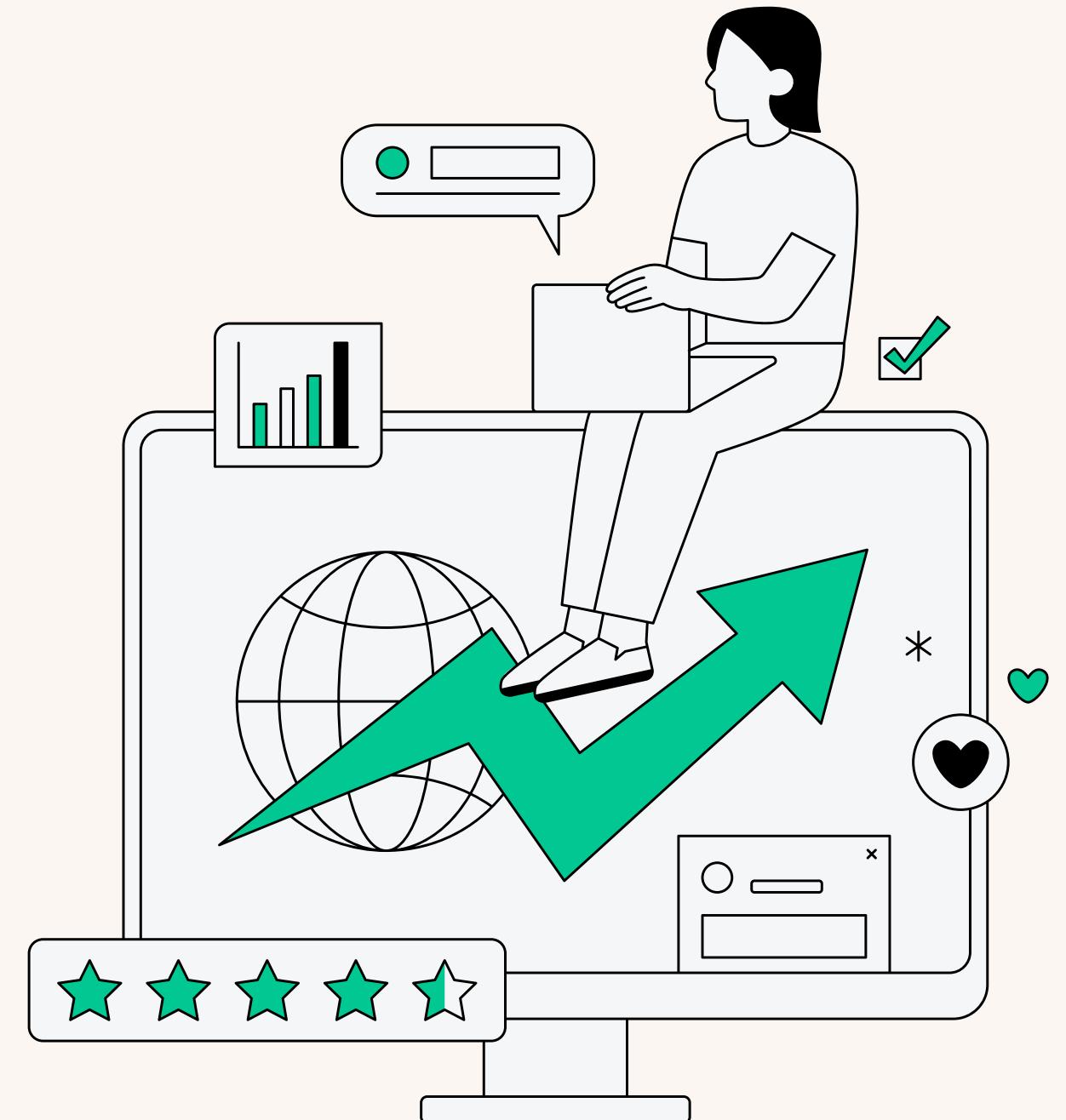


Uber Trips

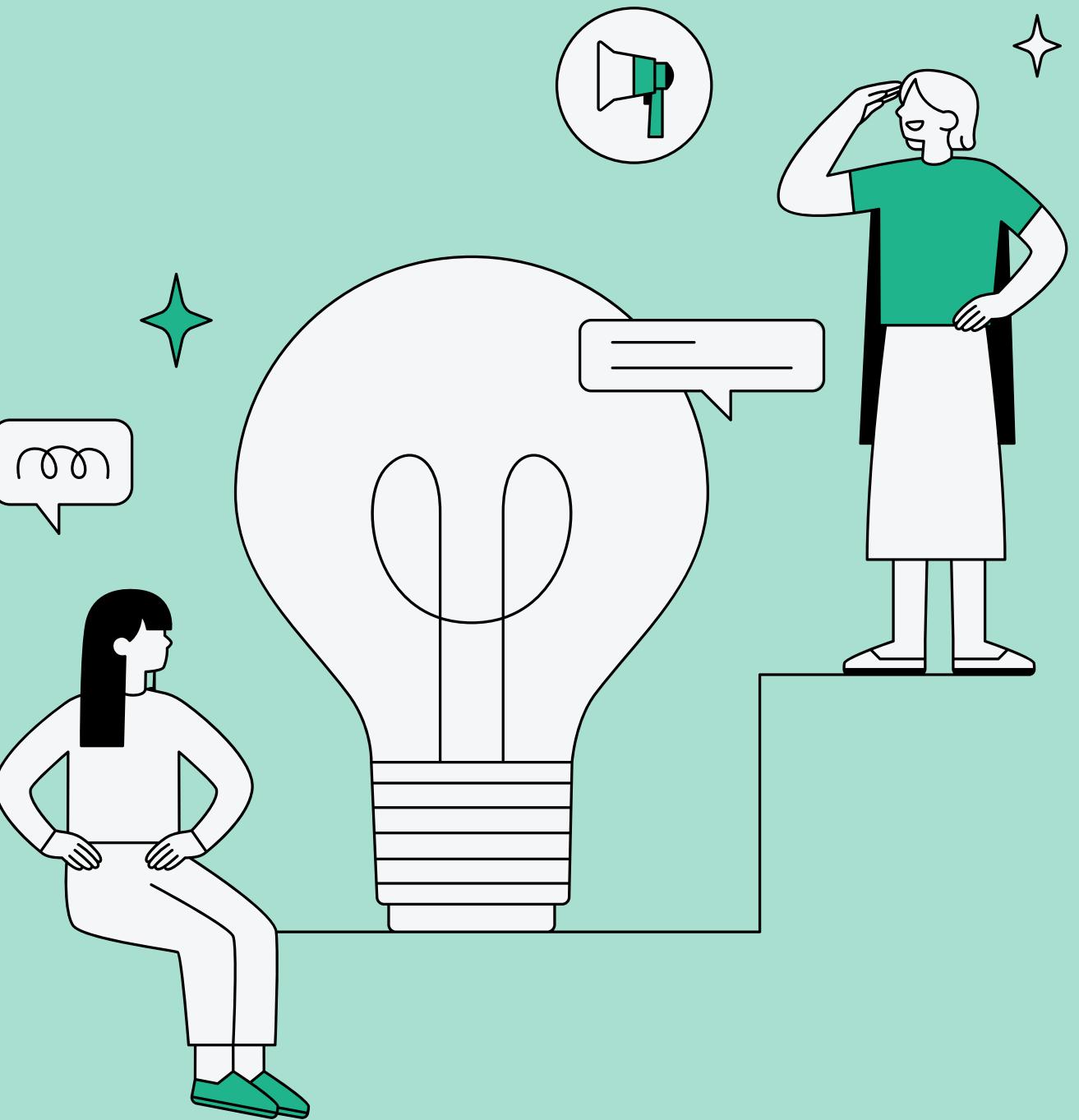
Analysis and Classification

www.reallygreatsite.com



Objectives

- Analyze Uber Trips and uncover different patterns
- Visualize Key Insight
- Classify Trips based on distance
- understand key features



Dataset Overview

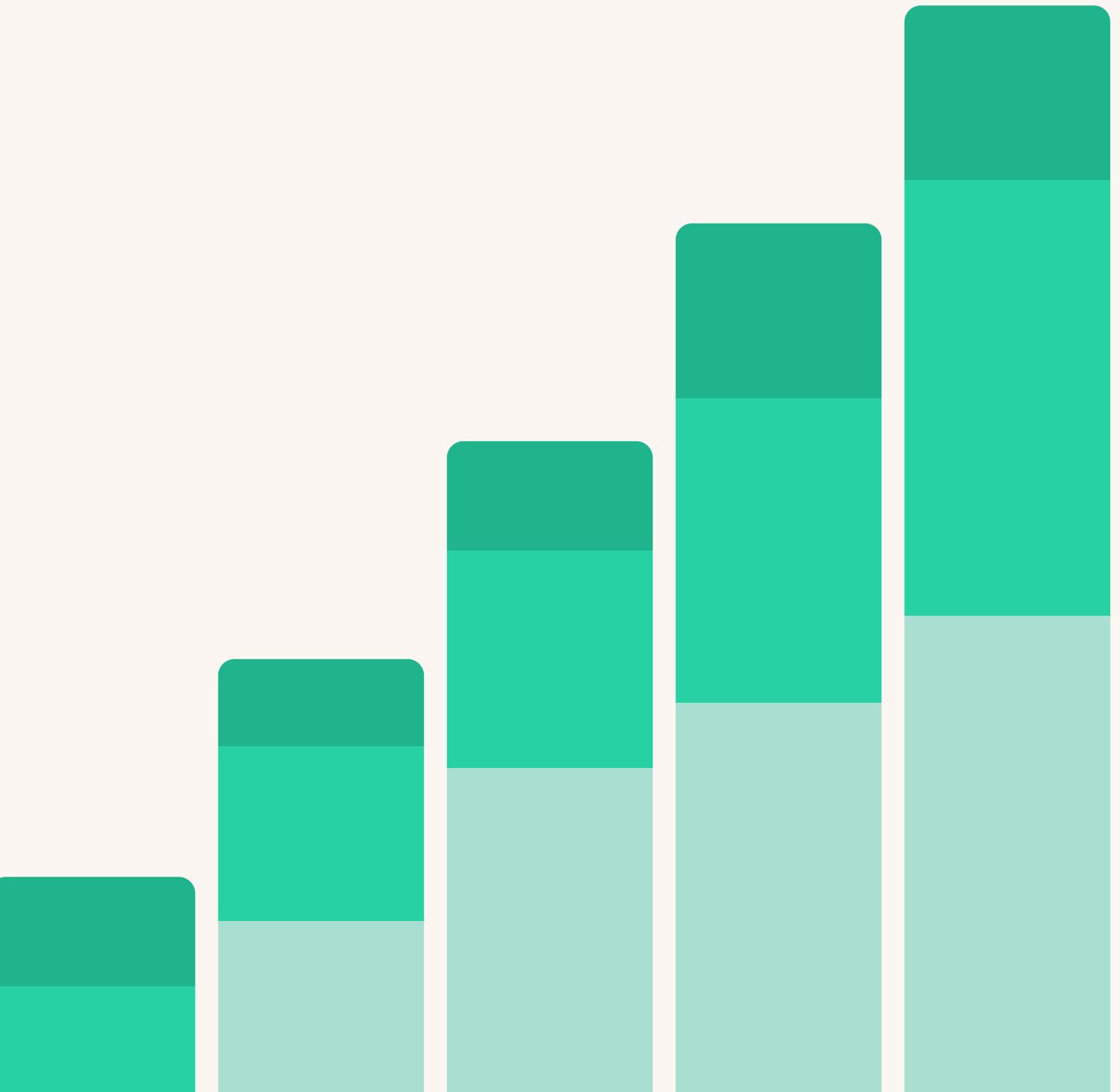
Columns :

- 7 Columns
[START_DATE, END_DATE, CATEGORY, START, STOP, MILES, PURPOSE]
- 1156 Rows



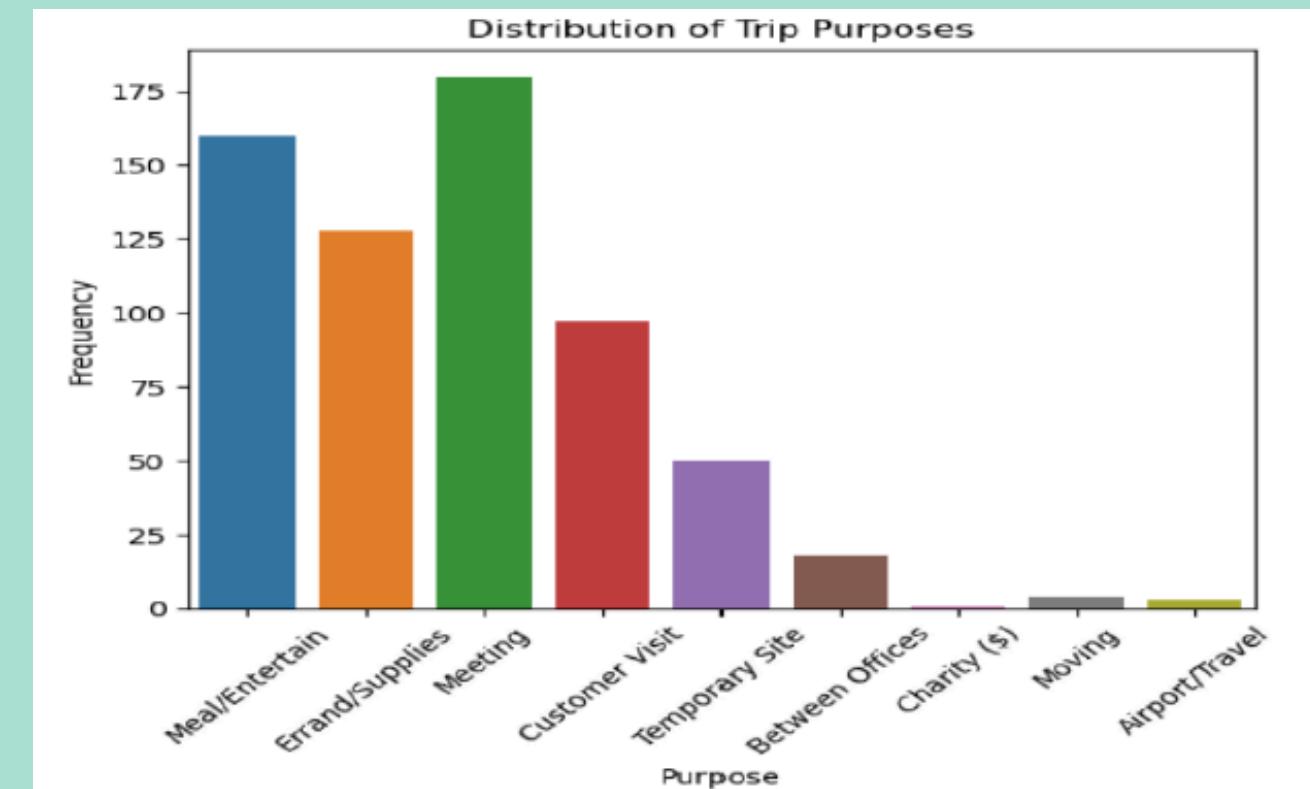
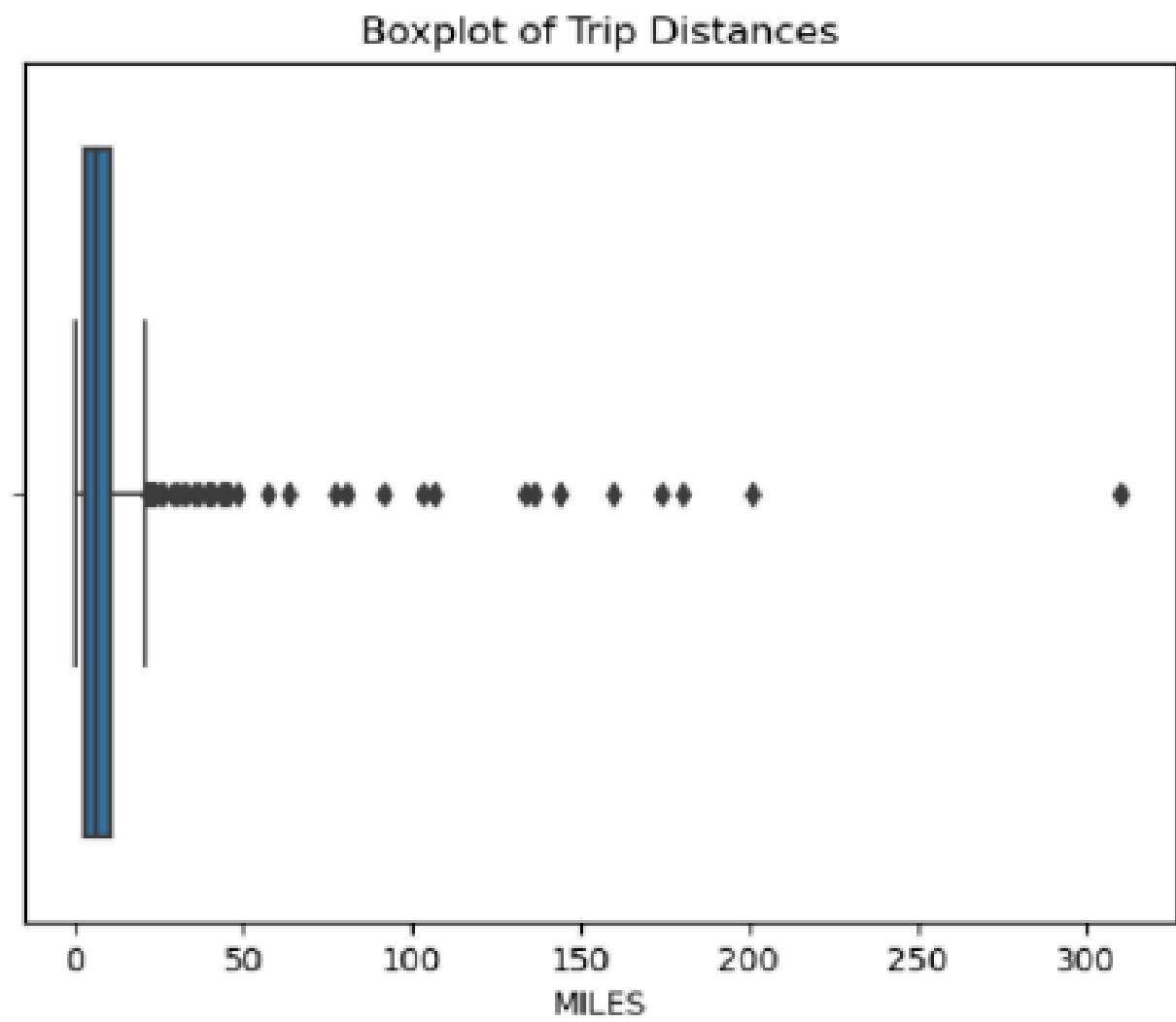
Data Cleaning and Processing

- Removed missing values “Purpose”
- encoded categorial features “Categorey & purpose”
- Normalized Miles using min-max scaling



Data Exploration

- Most trips are short (under 20 miles).
- Dominant purposes: "Meetings" and "Customer Visits."
- Outliers identified in Miles.



Modeling

model
used

RANDOM FOREST CLASSIFIER

Why?

- Handles Both Numerical and Categorical Data
- Accuracy and Robustness
- Built-In Feature Importance

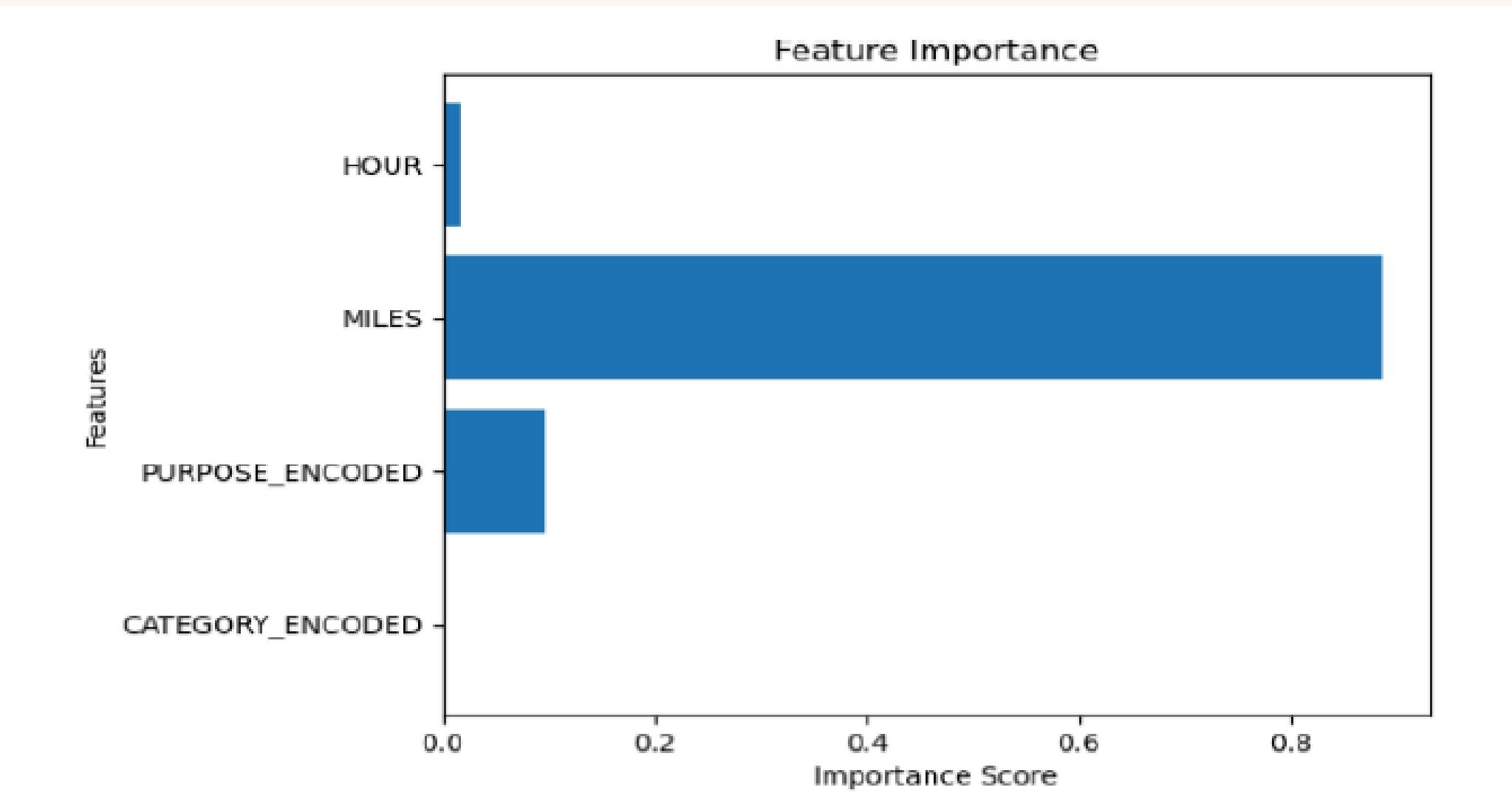
Process

- Data Cleaning
- Preprocessing
- Training
- Evaluation

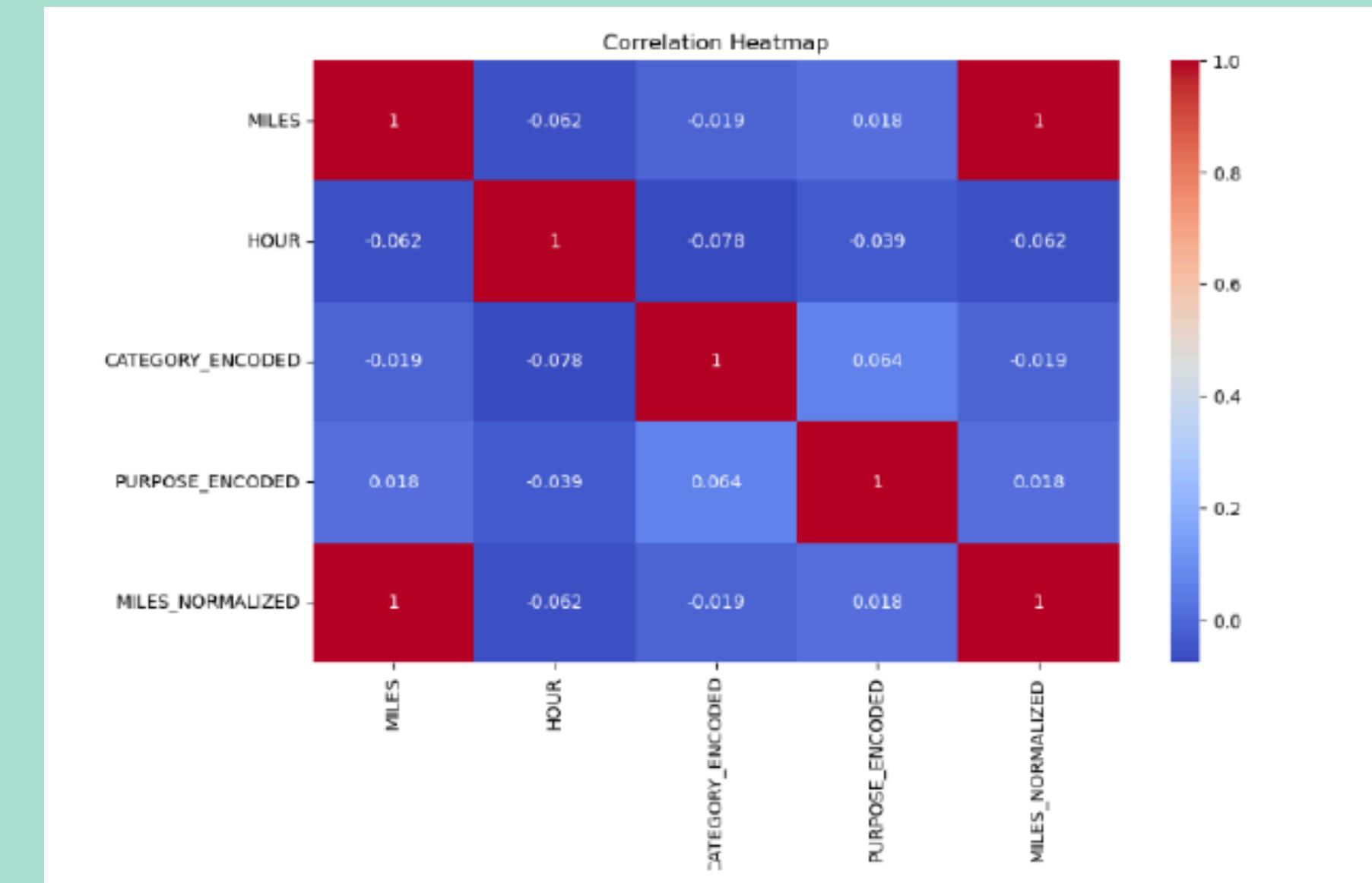
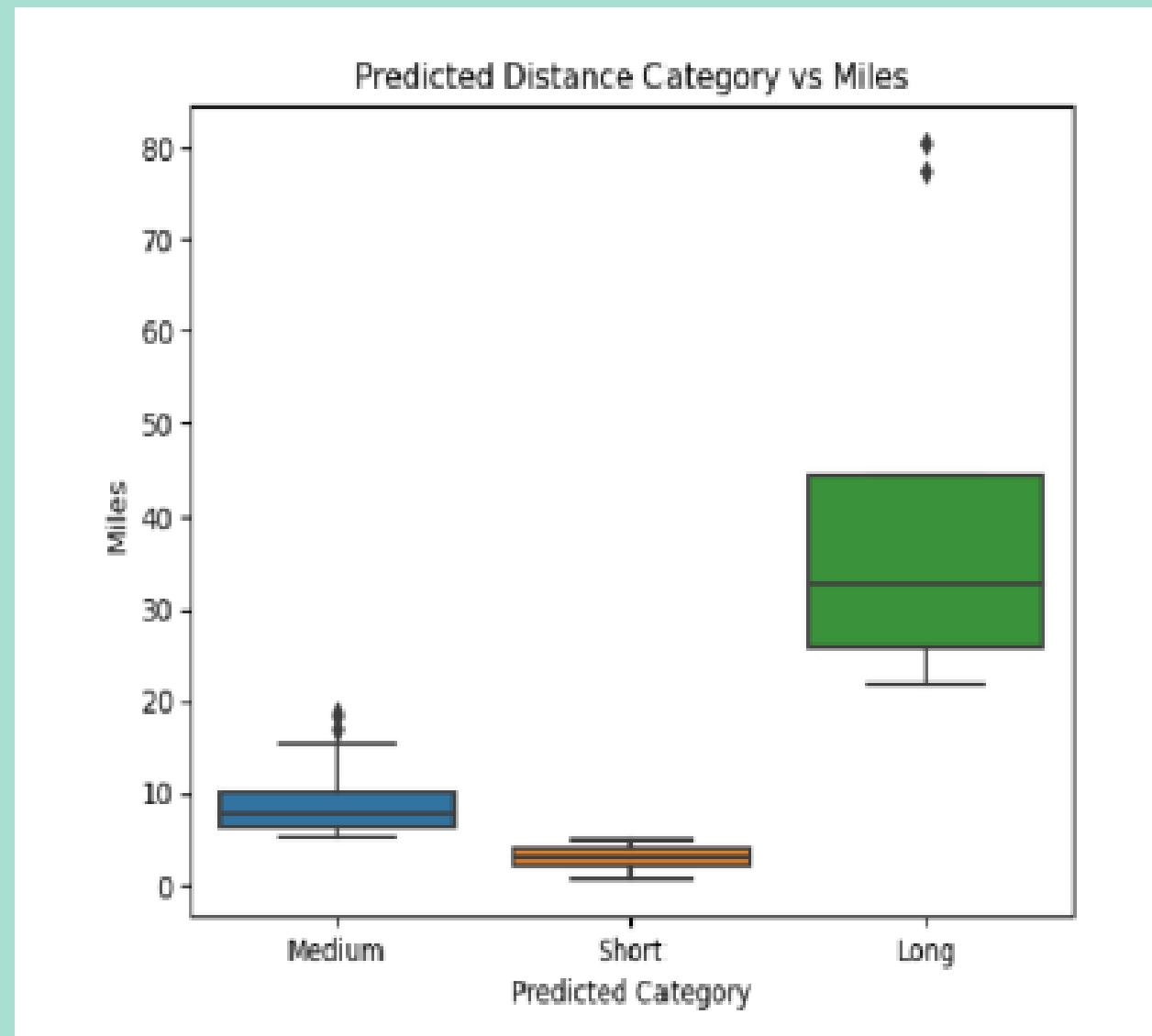
Results

Metrics:

- 100% accuracy on test data.
- Precision, recall, and F1-scores: 1.0 for all categories



Visualizations



Conclusion

Thank you very much!

Hussain Ibrahim

