

PROJECT SPECIFICATION

Explore US Bikeshare Data

Code Quality

CRITERIA	MEETS SPECIFICATIONS
Functionality of code	All code cells can be run without error.
Choice of data types and structures	Appropriate data types (e.g. strings, floats) and data structures (e.g. lists, dictionaries) are chosen to carry out the required analysis tasks.
Use of loops and conditional statements	Loops and conditional statements are used to process the data correctly.
Use of packages	Packages are used to carry out advanced tasks such as reading and writing files and creating visualizations.
Use of functions	Functions are used to reduce repetitive code.
Use of good coding practices	Docstrings, comments, and variable names enable readability of the code.

Responses to Analysis Questions

CRITERIA	MEETS SPECIFICATIONS
Q1: Pose questions about the data	Q1: At least two questions are posed regarding bike-share system use that can be answered with data.
Q2: Inspect the structure of the original data	Q2: Code is written that can read in the original data and print out the first element of each file.
Q3: Perform data wrangling to clean the data	Q3: Each of the original data files is converted into new data files that allow for information to be accessed consistently between cities.
Q4: Use descriptive statistics to answer questions about the data	Q4: Descriptive statistics are correctly computed and used to answer the questions posed about the data.
Q5: Visualize the data	Q5: Visualizations are created that show the distribution of trip durations for both subscribers and customers. Qualities of these distributions are described in the report.
Q6: Perform additional exploratory data analysis	Q6: The dataset is explored in one additional way starting from a posed question. The exploration includes at least two variables, computed statistics, and at least one visualization.
Q7: Applications of data analysis to other fields	Q7: One field where data analysis techniques can be applied is described, including a specific potential application.