Guide to Using the London Bike Share Dashboard (2015-2017)

Introduction 🚲

Welcome to the London Bike Share Dashboard! This dashboard provides insightful visualizations and key performance indicators (KPIs) to help you understand bike-sharing patterns in London from 2015 to 2017.

Main Metrics

You can analyze two main metrics:

- **Total Bike Shares**: The total number of bike shares.
- **Average Bike Shares**: The average number of bike shares per day.

Select the desired metric from the **Select Measure** drop-down menu.

Dashboard Components 🚲

1. Line Chart: <Select Measure> Trends

This line chart displays the <Select Measure> over the time span from 2015 to 2017.

Features:

- **Circle Markers**: Hover over a marker to see a tooltip with detailed information, including Date, Weekday, Season, <Select Measure> for the day, and Bike shares by weather conditions.
- **Purpose**: This chart helps identify long-term trends and seasonal patterns in bike-sharing usage over the years.

2. Line Chart: 7 Day Moving \<Select Measure>

This line chart shows the 7-day moving sum (for Total Bike Shares) or 7-day moving average (for Average Bike Shares) based on your selection.

Features:

- **Moving Average/Sum**: The 7-day moving calculation smooths out short-term fluctuations to highlight underlying trends.
- **Purpose**: This chart provides a clearer view of short-term trends and helps identify peaks and troughs in bike-sharing demand.

3. Heatmap: \<Select Measure> by Hour and Weekday

This heatmap visualizes the \<Select Measure> based on the hour of the day and the day of the week.

Features:

- **Color Intensity**: Darker shades represent higher values of the selected measure.
- **Purpose**: This chart helps identify peak hours and days for bike-sharing, providing valuable insights for optimizing bike availability and distribution.

Key Performance Indicators (KPIs) 🚴

The following KPIs are displayed as a banner under the dashboard title:

- **Total Bike Shares**: Cumulative number of bike shares.
- **Average Humidity Level (%)**: Average humidity level.
- **Average Wind Speed**: Average wind speed.
- **Average Actual Temperature (°C)**: Average actual temperature.
- **Most Popular Day**: The day with the highest total bike shares.
- **Peak Time**: The hour with the highest total bike shares.

Purpose of KPIs

These KPIs provide a quick overview of key metrics that affect bike-sharing usage. They update dynamically based on the quick filter selections.

Quick Filters 🚴

Customize the dashboard view using the following quick filters:

- **Season**: Select a season from the drop-down menu.

- **Year**: Choose a year (2015, 2016, 2017).
- **Month**: Select a month.
- **Is Weekend**: Filter by weekends (yes or no).
- **Is Holiday**: Filter by holidays (yes or no).

Purpose of Filters

Quick filters allow users to drill down into specific time periods and conditions, making it easier to analyze bike-sharing patterns under different scenarios.