**TrempBoss Dashboard**

TrempBoss is a web-based data analysis and visualization tool designed to help users analyze carpooling (tremps) trip data with ease. The tool allows users to upload their data in Excel format, and it provides various insightful statistics and visualizations based on the uploaded data. This documentation serves as a guide on how to set up and use TrempBoss effectively.

**Introduction**

TrempBoss is built using Python and Streamlit, leveraging the power of Plotly for data visualization. It provides an intuitive user interface to interact with the data, making it suitable for users with varying levels of technical expertise.

**Uploading Data**

* Upon launching the application, you will see a sidebar on the left-hand side.
* Use the "Upload Excel File" button to upload your carpooling trip data in Excel format.
* Once the data is uploaded, it will be processed automatically.

**Applying Filters**

* TrempBoss allows you to apply various filters to the uploaded data to customize your analysis.
* Use the available filter options to choose specific tremp types, routes, creators, and users in tremps.
* The data will update dynamically based on your filter selections.

**Viewing Statistics and Visualizations**

* After uploading the data and applying filters, TrempBoss will display insightful statistics on the dashboard.
* You can explore different charts, such as horizontal bar charts, pie charts, and grouped bar charts, by interacting with the dashboard.
* The statistics and visualizations will help you gain meaningful insights into your carpooling trip data.

**Project Structure**

The TrempBoss project follows this directory structure:

* **main.py**: The main script to run the Streamlit application.
* **initialize.py**: Contains the **init\_statistic\_bord()** function to initialize the statistic board and load the data.
* **sidebar.py**: Handles the sidebar components and user inputs.
* **data\_processing.py**: Performs data manipulation tasks like merging, filtering, and grouping.
* **data\_visualization.py**: Contains functions to create interactive data visualizations using Plotly and Streamlit.
* **constants\_joined\_column\_names.py**: Defines constant column names used in the project.

Run by 🡪 **streamlit run main.py**