## 🧰 Tools Used

- \*\*SQL (BigQuery)\*\* – For data cleaning and transformation

- \*\*R\*\* – For exploring and visualizing trends

- \*\*Tableau Public\*\* – For an interactive dashboard

- \*\*GitHub\*\* – For version control and project documentation

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## 🧹 SQL Data Cleaning

The raw trip data was cleaned using SQL:

- Removed null values and ride\_id duplicates

- Removed trips <1 minute or >24 hours

- Extracted:

- `trip\_duration\_mins`

- `day\_of\_week`, `month`, `hour\_of\_day`

🧾 Final dataset: `updatedlast.csv`

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## 📈 R Visualizations

R was used to generate quick EDA (exploratory data analysis) visuals:

### 1. 📊 Average Ride Duration by Rider Type

- Compares casual vs member ride times

- 📄 [CSV Output](r-outputs/average\_ride\_duration.csv)

### 2. 📅 Monthly Ride Trends

- Reveals seasonal ridership patterns

- 📄 [CSV Output](r-outputs/monthly\_ride\_trends.csv)

### 3. 📆 Ride Distribution by Day of Week

- Which days see the most rides

- 📄 [CSV Output](r-outputs/ride\_distribution\_by\_day.csv)

### 4. 🚴 Total Rides by User Type

- Breakdown of total rides taken by casual vs members

- 📄 [CSV Output](r-outputs/total\_rides\_by\_user\_type.csv)

## 📊 Tableau Dashboard

Explore the interactive version here:

🔗 [UrbanRide Dashboard on Tableau Public](https://public.tableau.com/authoring/urbanrideshareanalysis/urbanridesharemay2024-25sheet12#1)

![Dashboard Preview](screenshots/dashboard-preview.png)

### Dashboard Includes:

- Rides by day of week

- Ride duration by user type

- Monthly trends

- Bike preference by rider

## 🧠 Key Insights

- \*\*Casual riders\*\* take longer rides on average than \*\*members\*\*

- \*\*Weekends\*\* are busier for casuals; \*\*members\*\* ride more during weekdays

- Ridership peaks in \*\*summer\*\* (July), dips in \*\*winter\*\* (January)

- \*\*Classic bikes\*\* are the most used, especially by members

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## 🧑‍💻 Author

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📫 [LinkedIn or Portfolio URL]

🔍 Seeking opportunities as a Junior Data Analyst

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## 🧾 Credits

Inspired by the Google Data Analytics Capstone structure.

Bike-share data is fictional and used for educational purposes only.