Bike-Share Navigation

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This case study is made for **Google certificate program** as a graduation case study.

The Business task: Identifying How annual and casual riders use cyclitic bikes differently?

The Data used: A records of a data have been used over a full year to be able to discover the trends and the behavior of the riders the data have been divided into spreadsheets; each one contains the data for 3 months and it contains every detail about the riders and you can check the [data sources](https://divvy-tripdata.s3.amazonaws.com/index.html)  .

The date was organized and clean so let’s jump to the analysis phase.

A summary of the analysis:(the analysis and the data cleaning were conducted on RStudio).

* Make the columns have a consistent heading and the variables (the members and the casuals had a different naming).
* Combining all sheets into single spreadsheet to conduct the analysis over entire year.
* Insert a new column to calculate the rides durations of all the trips to know the behaviors of the members and the casual riders.
* Insert another column to the data set represents the day to know the behavior over a week.
* Calculate the average of the ride’s duration for the members and the casuals per each day.
* Represent the durations for each type of the riders over the week using RStudio.

Results of the analysis:

The casual riders were using the system more than the members over the entire week. The average of the casuals’ riders is about 3 times for the members.

This visualization reveals how the casual and members of the bike-share use the bikes differently.

