

## Projet : Uber

You will work with the Uber dataset, which contains data generated by Uber for the city on New York. Uber Technologies Inc. is a peer-to-peer ride sharing platform. Don't worry if you don't know too much about Uber, all you need to know is that the Uber platform connects you with (cab)drivers who can drive you to your destiny.



The dataset contains raw data on Uber pickups with information such as the date, time of the trip along with the longitude-latitude information. The data when monitored over time can help us identify rush hours, holiday season, impact of weather, etc. This knowledge can be applied for better planning and traffic management. This can at a large, impact the efficiency of the city and can also help avoid disasters, or at least faster redirection of traffic flow after accidents. However, this is all looking at the bigger problem. In this project, you will try to better understand the data. Please, find and concentrate in the following files :

- `uber-raw-data-apr14.csv`
- `uber-raw-data-may14.csv`
- `uber-raw-data-jun14.csv`
- `uber-raw-data-jul14.csv`
- `uber-raw-data-aug14.csv`
- `uber-raw-data-sep14.csv`

## Understanding The Data

Q : Load in R the .csv file ?

Q : bind all the data files into one. For this, you can use the `bind_rows()` function under the `dplyr` library in R.

Q : get a summary of the data to get an idea of what you are dealing with.

help : The dataset contains the following columns (confirm if it's that for you ?)

- `Date.Time` : the date and time of the Uber pickup;
- `Lat`: the latitude of the Uber pickup;
- `Lon`: the longitude of the Uber pickup;
- `Base`: the TLC base company code affiliated with the Uber pickup.

## Data Preparation

This step consists of cleaning and rearranging your data so that you can work on it more easily. It's a good idea to first think of the sparsity of the dataset and check the amount of **missing data**.

You can see that the first column is `Date.Time`. To be able to use these values, you need to separate them. So let's do that, you can use the `lubridate` library for this. `Lubridate` makes it simple for you to identify the order in which the year, month, and day appears in your dates and manipulate them.

Lat	Lon	Base	Year	Month	Day	Weekday	Hour	Minute	Second
40.7690	-73.9549	B02512	2014	4	1	3	0	11	0
40.7267	-74.0345	B02512	2014	4	1	3	0	17	0
40.7316	-73.9873	B02512	2014	4	1	3	0	21	0

Awesome! More analysis Please ? Thanks