

Washington DC Bike Rental Project

Questions:

1. **Rental Numbers**
 - a. Calculate for every day hourly rental numbers by member types.
 - b. Explore the hourly rental patterns for all member types on different days.
2. **Rental Duration**
 - a. Explore the relation between the rental duration and member types.
3. **Effect of the weather**
 - a. Find the most important weather features that effects the total (casual + member) number of daily rentals.
 - b. Explore the hourly rental numbers on different weather conditions for all member types.
 - c. Find abnormal days.
4. **Busiest Station**
 - a. Find the busiest stations for every month and for every member type.
 - b. Do the stations found make sense?

These questions help Bike Rental Company in Washington DC improve and expand their awareness about their customers. This in its turn help in further actions an future plans.

Data Description:

1. Download the capital bike share trip data for the year of 2017 at the link <https://s3.amazonaws.com/capitalbikeshare-data/index.html> which consists of 4 CSV files.
2. Scrap the weather information for Washington DC from the website <https://www.wunderground.com/history/daily/us/dc/washington/KDCA> for the year 2017
3. Predict the member type based on several features.

Tools:

1. Python packages
2. Visualization using python libraries