# **WEJAPA BIKESHARE PROJECT**

# **Project Overview:**

This project focuses on pandas library usage and simple statistics methods to perform a rudimentary analysis on the bikeshare data from three major U.S. cities - Chicago, Washington, and New York City - to display information such as most popular days or most common stations.

**Program Details:**

The program takes user input for the city (e.g. Chicago), month for which the user wants to view data (e.g. January; also includes an 'all' option), and day for which the user wants to view data (e.g. Monday; also includes an 'all' option).

Upon receiving the user input, it goes ahead and asks the user if they want to view the raw data (5 rows of data initially) or not. Following the input received, the program prints the following details:

* Most popular month
* Most popular day
* Most popular hour
* Most popular start station
* Most popular end station
* Most popular combination of start and end stations
* Total trip duration
* Average trip duration
* Types of users by number
* Types of users by gender (if available)
* The oldest user (if available)
* The youngest user (if available)
* The most common birth year amongst users (if available)

Finally, the user is prompted with the choice of restarting the program or not.

# **Requirements:**

* Language: Python 3.8 or above
* Libraries: pandas, numpy, time

# **Project Data:**

* chicago.csv - Stored in the data folder, the chicago.csv file is the dataset containing all bikeshare information for the city of Chicago provided by Udacity.
* new\_york\_city.csv - Dataset containing all bikeshare information for the city of New York provided by Udacity.
* washington.csv - Dataset containing all bikeshare information for the city of Washington provided by Udacity. Note: This does not include the 'Gender' or 'Birth Year' data.

# **Built with:**

* Python 3.8 - The language used to develop this.
* [pandas](https://pandas.pydata.org/) - One of the libraries used for this.
* [numpy](http://www.numpy.org/) - One of the libraries used for this.
* [time](https://docs.python.org/2/library/time.html) - One of the libraries used for this.

# **Acknowledgements:**

* Stackoverflow - solutions on stack overflow helped me understand the structure for some modules used in this project.
* zayzay- zayzay's repository also added to better understanding of the structure for this project.
* [pandas docs](http://pandas.pydata.org/pandas-docs/stable/) - pandas documentation was immensely helpful in understanding the implementation of pandas methods used in this project.
* Mi yang- mi yang, WeJapa's Data Analyst Internship program instructor was extremely helpful while I was pursuing this project.
* Finally, I’d like to mention