

# Welcome

Welcome to the **Research Analyst Tableau Focus** candidate test.

In this test you will help Wheelie Wonka, a hypothetical bike sharing company in Boston, solve a critical business problem. As such, you are encouraged to tackle the problem with this client in mind.

## Challenge

Wheelie Wonka put their users first. To enhance their mobile app experience, they would like to show bike availability in the future to their users. An important component in achieving this goal is understand deeply the dynamics of bike *trip durations* and *bike routes*.

Wheelie Wonka has given us data about the bike trips, the bike stations and weather information as recorded by a nearby weather station.

For the test, using the attached data, please carry out the following tasks:

- Explore and derive insights from the data for the purpose of understanding trip duration and destination.
- Write between 300 and 500 words along with visualizations to justify your workflow — for example, given the data available would you expect to be able to consistently predict trip duration / destination?

## Data

The data for this test is a set of CSV files with the following self-explanatory names:

- `hubway_stations.csv`
- `hubway_trips.csv`
- `weather.csv`

You can find these files in the data folder, together with two documents that you may use to better understand the data.

The data is not perfect and sometimes inconsistent, as you would expect real-world data to be. This is part of the challenge of this test. The bike trip data comes from the Hubway public bicycle sharing system in Boston, United States, and the weather data can be pulled from the NOAA.

# Evaluation Criteria

Data analysts must be strong across a wide set of knowledge areas including general business administration, statistics, data wrangling, visualisation and presentation writing. As such, we will evaluate this test on the above topics.

You may use a combination of Python, R & Tableau to solve this assignment, with Tableau being the expected means of final delivery of the visualisations.

There are many ways to present the trip duration and route data and we do not expect you to cover all of them. Instead, we prefer one clear narrative where you string together a set of visualisations into a coherent story about how people are using the bikes.

# Deadline

On the email, we have provided you with a deadline. You can send it earlier than that if ready.

# How to submit

Once finished the test, please compress your files in a zip file, and email it back to the email address you received it from.

For any question or clarification, feel free to write an email to Juliana (CRISIL)

We hope you do well!