Application Walk-through - Main Page

Bike Sharing in Washington DC · About · Explore all Stations · Predict Bikes · Potential Rush Hours

Designed by: Risberg(Yixuan Luo, Zixia Luan, Steve Kim, Jie Luo)

Welcome to Bike Sharing

This app helps you check the information for each bike station

How it works:

Explore all stations: Interactive map showing selective information from real-time data (Station name, available docks, etc).

Predict Bikes: The number of available bikes in station chosen by users using our predicting models.

Potential rush hours: Popular time during the day in station selected by users

BIKE SHARING
Easier Than Ever

Follow Up
Share   Locate

capital bikeshare

Functionality

- Start page (About tab)

- Basic information on each station (Explore all Stations tab)

- Prediction on the available number of bikes by station on given day (Predict Bikes tab)

- Distribution of the flow of bikes throughout the day (Potential Rush Hour tab)

5

Application Walk-through -Real-time Interactive Map
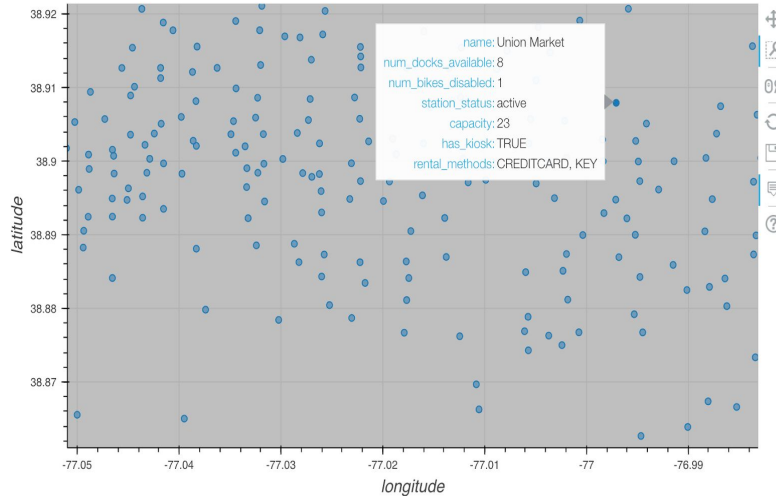

Hover over the point (each station) for information

Functionality

- Display the informative data using the real-time data. Each station has unique longitude and latitude. (could be used in a map)

Information includes:
- Available docks: Number of functional docks physically at the station
- Disabled bikes: Number of disabled bikes at the station
- Station status: active/inactive
- Station capacity: Number of total docking points installed at this station
- Has kiosk: Whether station has a kiosk
- Rental method: Payment method

Application Walk-through -Bike Prediction

Functionality

- Prediction of the number of bikes at a specific station at a given Month, day, and hour.

- Prediction model also accounts for whether the time is a weekend and whether is is a holiday.

- Three nearest stations and the respective predicted number of bikes also presented

Application Walk-through -Rush Hours Illustration
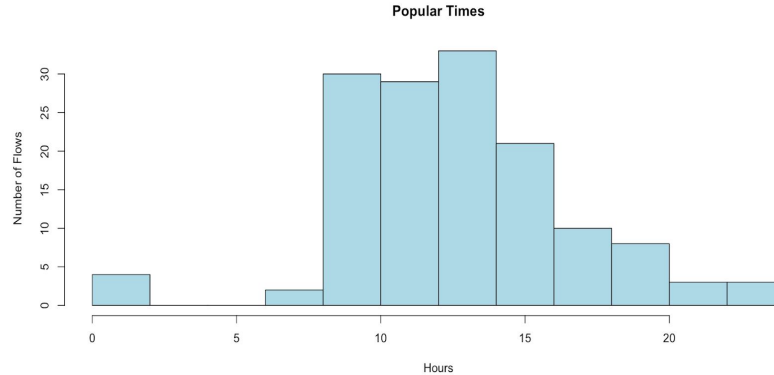

Functionality

- Distribution of the flow of bikes at a specific station - high flow means that the station is busy (high frequency of bikes coming in and going out)

- Choose a Period: Either the Usual Days (from 2019) or Covid Days (from 2020)

- Choose a Station: Select the desired station to view

- Choose a Month: Select the desired month to view

- Is it a Weekend: View different flow for weekend vs. weekdays