



Professional Staffing and Recruiting

## Node.js Coding Challenge

Thanks for taking the challenge. We hope you find this a fun and thought-provoking exercise. You have been asked to create an API for the Chicago Divvy Bike Rental platform using the Divvy API and the provided trip data.

### Explanation of the Models

Station - Where the bikes can originate and end

Trip - the dates, times, station, and rider info

Rider - the person renting the bike

### Requirements

Create a restful API that returns the following data:

1. Return the information for one station given a station id
2. Given one or more stations, return the number of riders in the following age groups, [0-20,21-30,31-40,41-50,51+, unknown], who ended their trip at that station for a given day.
3. Given one or more stations, return the last 20 trips that ended at each station for a single day
4. Require every API request to include an API token and handle the case where this is missing.
5. Add a test for at least one of the api calls.
6. Use whatever node packages you like but don't install a 3rd party databases, caching, or other server apps.
7. Optimize the app as best as possible for performance and assume your app will run in a multiprocessor or multicore environment.
8. Setup your app so it can be run locally.

**Really Nice To Have:** Containerize your app so it can be deployed using Docker.

**Data Sources:** Station Information. *This url should be called at least once by your app*

[https://gbfs.divvybikes.com/gbfs/en/station\\_information.json](https://gbfs.divvybikes.com/gbfs/en/station_information.json)

**Trip Data:** The **unzipped** version of this data should be loaded from the filesystem into your app

[https://s3.amazonaws.com/divvy-data/tripdata/Divvy\\_Trips\\_2019\\_Q2.zip](https://s3.amazonaws.com/divvy-data/tripdata/Divvy_Trips_2019_Q2.zip)

### Resources

Divvy Data Home Page <https://www.divvybikes.com/system-data>

### Submission

- Provide the source code to your project through a file or code repository.
- You can share the container through a container management system or export the docker image and share the file with us. If you know of a better way to share it, feel free to do that.
- Please include a README in the project that has information about how to access the API endpoints.