Project Two Proposal

Plan Your Divvy Trip

Hotwheels Team

Ruth Hinkle - Git Master
Charlie Denys - Front End
Nabila Farooqi - Dev Ops, Deployment
Drew McBride - Backend, Database Connections
Andrew Neher - Project Manager, Design Assist

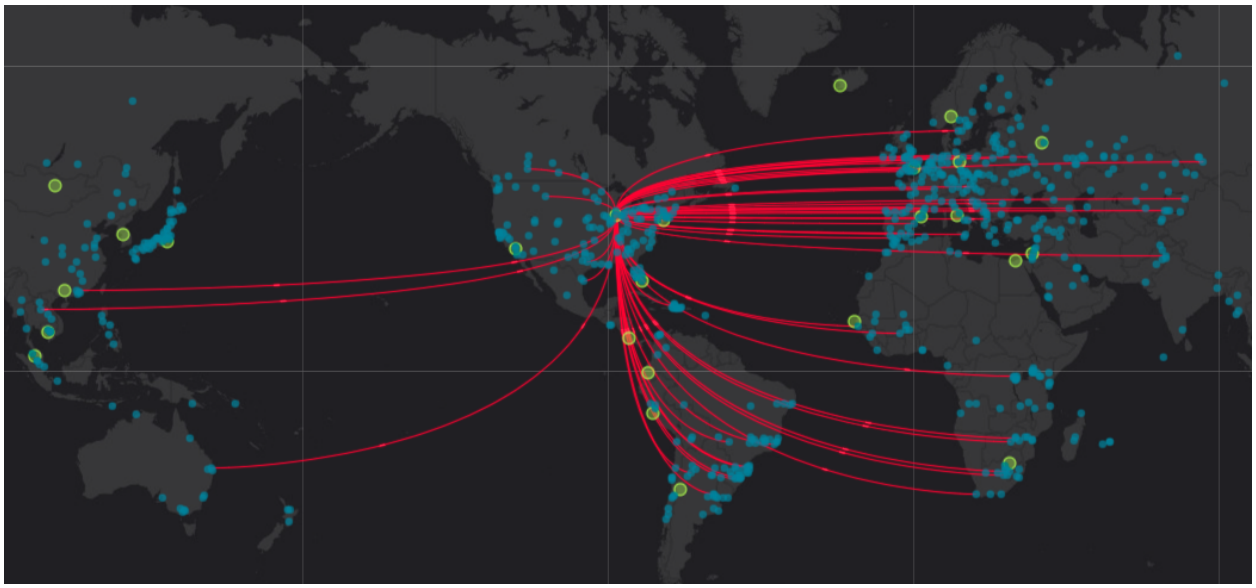
For the **Group Project Two**, the Hotwheels Team proposes to use the Divvy JSON Feed to create an interactive web dashboard/portal to help tourists plan their Divvy bike tours of Chicago. We hope to use HTML, CSS, JavaScript, Jupyter Notebook, Pandas, SQL, Flask, Flowmap (a Leaflet plugin), JSON, D3, OpenStreetMap and Plotly to achieve this goal. The data we will use is publicly available via Divvy's website.

The user is planning a biking trip around Chicago and uses the visualizations to identify routes & stations near landmarks, bikes available in real-time (toggling e-bikes and electric), and identifying top 20 stations (as a nod to project 1).

Visual Inspiration:

Route Popularity in Chicago

- Routes identified by popularity
- Custom icons for landmarks/popular destinations along routes

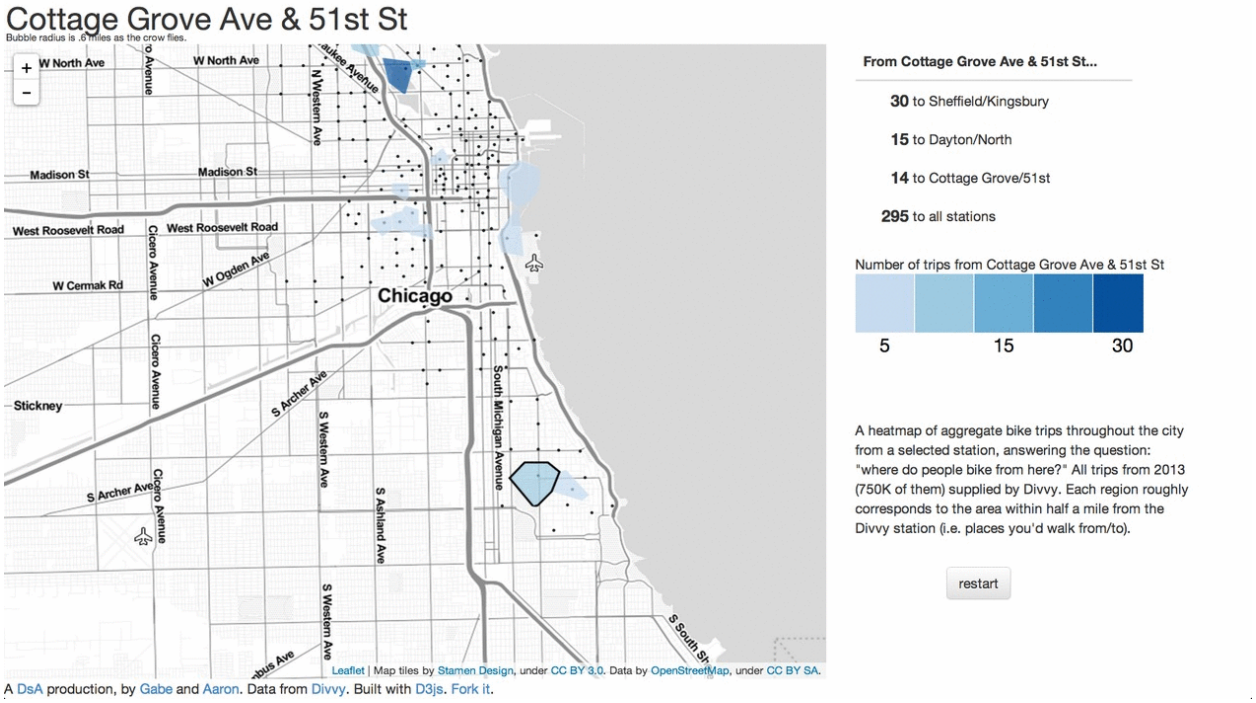


Bike Availability at Each Station

- Toggle between e-bikes and regular bikes

Popular Stations

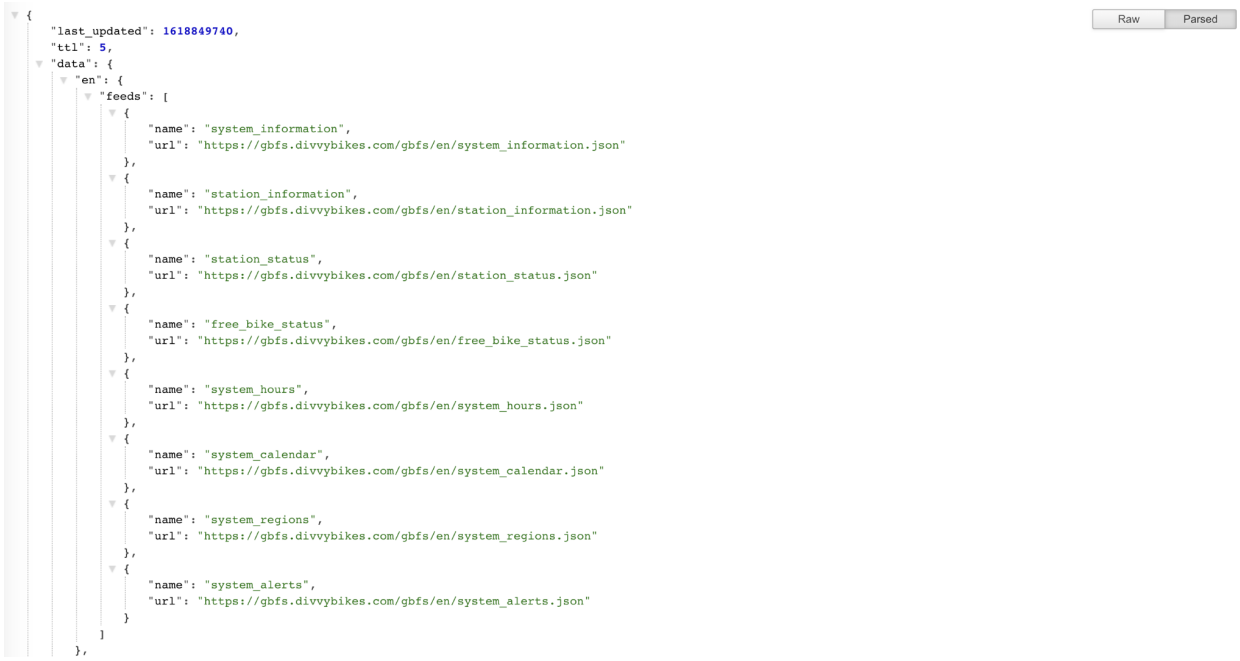
- Heatmap of most used/trafficked stations



Possible Visualization Tools:

- Dropdown menus to toggle views
- TaffyDB
- TweenJS
- Voca
- TypeScript

API Example Data:



Schedule:

Wed 04/14: Submit Proposal

Sat 04/17: Class Project Work

- Charlie - first pass on webpage
- Drew - first pass on flask app (w/ group support in class)
    - Connecting API & pulling in appropriate fields
- Plan visualizations based on actual data

Mon 04/19: Class Project Work

- Live data pulled in and working

- Stretch - connecting flask & webpage

Wed 04/21: Class Project Work

- 2 visualizations complete - heatmap, bikes available,

Sat 04/24: Class Project Work

- 3 visualizations complete
- Presentation outline complete

Mon 04/26: Class Lessons

Wed 04/28: Class Lessons

Sat 05/01: Presentation Day