**Project Idea #1 Satellite / Space Station Tracker**

API Link:<https://www.n2yo.com/api/>

Summary:

Tracking Satellites and Space Stations in real time. Data is sent back in the form of JSON strings. It returns a lot of useful info, but the main info we need to know at the moment is the satellite ID, Satellite Name, Latitude, Longitude, and the altitude above sea level etc. Transactions limited to 1000 per hour. NASA also has the same API.

When people come to a new place, they type in where they're from, and they come up with some good local restaurants of their hometown style based on some reviews, and they come up with some interesting local places.

(Can map out when satellites are overhead specific restaurants, for conspiracy theorists?)

NASA API Link: <https://sscweb.sci.gsfc.nasa.gov/WebServices/REST/json/>

Expanding:

→ Implements a predictive algorithm to tell where the objects are going.

→ NASA has many other API options including:

1. AsteroidsNeoWs: Near Earth Object Web Service.
2. APOD: Astronomy picture of the day
3. EONET: The Earth Observatory Natural Event Tracker

And many more

Link to NASA APIs: <https://api.nasa.gov/>

→ Incorporate the planets

→ Google Maps API to show the locations of the objects

Link to Google Maps API

**Project Idea #2 Brewery “ROAD TRIP!!” planner**

API Link: <https://api.openbrewerydb.org/>

Summary:

Creating a Road trip map for for people who love breweries. Data is sent in the form of JSON string. The user would select from a list of breweries inside of the desired range, then the algorithm would find the shortest possible path in between the selected locations. We would also allow for the user to sort the breweries into subsets that match their style such as pubs, breweries, cider houses, and so on.

The api for that we could use for this, that is listed above, is free.

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Expanding:

→Implements shortest path (Dijkstra's Algorithm)

→ Road conditions map into the algorithm

→ Maybe: Uses weather API to get current weather at locations

→ Uses Yelp API to show information about the place, as well as a few reviews.

Yelp API Link: <https://www.yelp.com/fusion>

→ Maybe: Uses Eventbrite API. Allows users to create and search for events around the places they are planning to go.

Link to API page: <https://www.eventbrite.com/platform/api>

Link to creating an event through API instructions: <https://www.eventbrite.com/platform/docs/create-events>

**#4**

API’s: Yelp

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