**Project** **Proposal -** Due Sunday, March 22, 11:59pm

**Project** **Members -** Alexander Brown, Curt Boone, Philip Harmon, Spencer Harrison, Erika Berry

**​ • A brief articulation of your chosen topic and rationale**

* We wanted to build a space for thirsty beer-lovers across North Carolina to easily find a brewery that serves the types of beer they prefer. We plan to build a SQL database that matches breweries and types of beer along with locations on a map. We plan to include an interactive filter that allows anyone to select the type of beer, location, etc. that best suits their preferences.

​ • **A link to your dataset(s) and screenshot of metadata if it exists**

* We will be using SQL to merge APIs pulled from [The Beer Spot](http://www.thebeerspot.com/), [BreweryDB](http://brewerydb.com) (this is where we will obtain information for over 400 breweries in North Carolina) with a [GeoJSON that specifies brewery locations](https://data.opendatasoft.com/explore/dataset/open-beer-database%40public-us/api/).
* We found several other APIs which we may use and are listed below.
  + <https://github.com/beercsv>
  + <https://www.programmableweb.com/api/beer-mapping-rest-api>
  + <https://punkapi.com/documentation/v2>
  + [https://www.openbrewerydb.org/documentation](https://www.openbrewerydb.org/documentation/01-listbreweries)
  + [https://beermapping.com](https://beermapping.com/account/pharmon9847)
  + [https://api.brewerydb.com/v2/breweries](https://sandbox-api.brewerydb.com/v2/breweries)

**• 3-4 screenshots of relevant "inspiring" visualizations that frame your creative fodder**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| A) This visual impressed our group because of the consistent design. | B) The filters from this visual from class inspired us. | C) One main purpose of this project will be to create easy-to-read pin maps. |

**​ • A sketch of the final design**

* Our final design will include an interactive visual that allows filters based on preferences like example B from above, an easy-to-read pin map like example C above, and a consistent design like example A above.

**​ • A link to the primary GitHub repository you'll be housing your work in**

* https://github.com/awbrown404/north\_carolina\_breweries.git

**Project Notes**

**1.Your visualization must include a Python Flask–powered RESTful API, HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.).**

* BreweryDB
* SQL database to merge a [GeoJSON with brewery locations](https://data.opendatasoft.com/explore/dataset/open-beer-database%40public-us/api/) (not types of beer) and one other database that has the types of beer
* <https://github.com/beercsv>
* <https://www.programmableweb.com/api/beer-mapping-rest-api>
* <https://punkapi.com/documentation/v2>
* [https://www.openbrewerydb.org/documentation](https://www.openbrewerydb.org/documentation/01-listbreweries)
* [https://beermapping.com](https://beermapping.com/account/pharmon9847)
* <https://sandbox-api.brewerydb.com/v2/breweries>
* <http://www.thebeerspot.com/>
  + Use to search by type

**2. Your project should fall into one of the below four tracks:**

**○ A custom “creative” D3.js project (i.e., a nonstandard graph or chart)**

<https://github.com/d3/d3/wiki/Gallery>

**○ A combination of web scraping and Leaflet or Plotly**

**○ A dashboard page with multiple charts that update from the same data**

**○ A “thick” server that performs multiple manipulations on data in a database prior to visualization (must be approved)**

**3. Your project should include at least one JS library that we did not cover.**

* chartjs <https://www.chartjs.org/samples/latest/>

**4. Your project must be powered by a data set with at least 100 records.**

**5. Your project must include some level of user-driven interaction (e.g., menus, dropdowns, textboxes).**

* Dropdowns
* Markers with popups

**6. Your final visualization should ideally include at least three views.**