



PROJECT

Visualization of Doctor Locations

FOR

Front-End / Full-Stack Candidates

The goal of this project is to create an interactive visualization of where doctors are located, geographically.

We'll show you where to find the data for this project, and we have a few additional specifications, but you have creative freedom for most of this project – we want to see what you can create!

SPECIFICATIONS / RECOMMENDATIONS

- Use the data found here: http://download.cms.gov/nppes/NPI_Files.html. Specifically, use the “Full Replacement Monthly NPI File”. Once unzipped, this should be about 5 GB of data. This is a public data set with information about medical professionals (doctors, nurses, etc.) in the US.
- Parse the data. You can use any language you want, although Python is recommended. This step will probably take the longest, especially if you're not already familiar with healthcare data, as you'll need to figure out the context of each data field.
- Subset the data to keep only doctors (i.e. we do not want to include nurses or other kinds of providers).
- Create an interactive visualization of this data to allow the user to see where these doctors are located geographically. Allow the user to filter for certain specialties and/or search for particular locations. We encourage you to use visualization libraries such as d3, Leaflet, etc.
- Preferably, keep this project written in Javascript, and use MongoDB as your database. We use the MEAN stack (minus Angular) at Accordion.
- To “submit” this project, you have two options:
 - Email us the relevant files, a shell script we should run to initialize it (i.e. set up the database), and the command we should run to launch the visualization locally. You can assume that we already have MongoDB installed and that we have the data file downloaded and unzipped.
 - Provide us a link to your visualization if you are able to host it yourself (i.e. on AWS or a personal server), as well as a link to the code on github.

Please ask us questions along the way! We are here to help, and a major part of this project is for us to learn how we work and communicate together.