CS 419 Winter, 2016

Group 18 Weekly Progress Report 2

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o Progress during the past week:

This week has been spent investigating other methods to handle data visualization. The first iteration utilized proved to be too much data to handle client side on a mobile device. It became clear that a different method to display the data (zip code areas) would be needed if it were to work on a mobile device. During the week Mapbox was investigated as a way to display the topoJSON files. Mapbox offers a few different means to display our data, with JavaScript libraries that work nicely with D3.js and Leaflet.js, should we still need those libraries as well.

o Plans for the upcoming week:

Continuing investigation and testing of alternate data visualization method. Prepare for a demonstration of the product as it stands.

o Any problems you encountered during the past week:

The first iteration of the the application produced a working prototype, but one that was really only suited to run in a desktop browser, not a mobile web browser. The first implementation relied on Leaflet.js to ingest the zip code areas as a topoJSON file, then parsing a .csv file with zip codes and fuel prices using D3.js. Leaflet would create a layer from the topoJSON file of the zip codes and the D3 parsing would then lead to assigning a color to each feature in the topoJSON layer. Drawing the data layer in this manner was far too expensive to be leaving up to the client; especially considering we're dealing with 30,000+ shapes. Initial testing of Mapbox has been promising, and quite a bit quicker than the previous method. Mapbox creates vector tiles from user's data, allowing for quicker display and data visualization.