Meghan Kolin

Student #1006355882

GGGR472H1-S: Developing Web Maps

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For this project, I created a small GeoJSON file depicting subway stations and lines in downtown Toronto. I included Lines 1 and 2 in the map and also chose to include the proposed Ontario Line to get an idea of how the downtown core might change with the addition of a new subway line. I selected points on the map between Bloor and the waterfront and included three lines to make the direction of the subway clearer.

In the GeoJSON file, the various elements of code control different parts of the feature or feature collection that is produced. The first few line of code defines what kind of feature appears in the file: in this case, the line "type": "FeatureCollection" indicates that the GeoJSON contains multiple features. The tag "features" then acts as a container to hold these features. The "properties" tag, which recurs multiple times throughout the code, then holds data that would be found in the attribute table. Most of the data included in this part of my GeoJSON is not necessarily important for this assignment, but might be useful for some sort of analysis should I integrate my file into a GIS project or expand the dataset, such as "name": "Bloor-Yonge", "status": "Proposed", or "type": "Subway". The only things under the "properties” tag that visibly change something in the file are the "marker-color” and "marker-size” tags, which change the appearance of the marker. The "geometry" tag then describes where the point is in space and what it is: it includes latitude and longitude coordinates under the "coordinates" tag and another "type" tag that describes what kind of feature should be shown, in this case a point.

The GeoJSON file stores all of this information in one file, and the file is relatively small at around 10KB. The shapefile, however, included eight different files of varying sizes, ranging from 100 bytes to 62KB. When working on a project where size is a factor, it might be better to use a GeoJSON file simply to keep things smaller and more organized; a shapefile might take up more space and is easier to break if you accidentally delete a file. However, GeoJSON files do not lend themselves well to spatial analytics, so a project requiring more focused analysis would fare better using a shapefile.

(384 words)