**Describe what the various elements for the code for the GeoJSON file reference (explicitly list these, using your file as an example)**

FeatureCollection contains all the vector features in the GeoJSON file; each {} contains an individual feature. Under ‘geometry’ is ‘coordinates’, which will include a set of spatial attributes (coordinates) that corresponds to that shape. ‘type’ after the coordinates refer to what shape it is. For example, the first vector object in the file is a ‘Polygon’ type and has five sets of point coordinates that create a closed polygon.

**Compare the structure and size of the GeoJSON with the corresponding shapefile**

The GeoJSON file is much smaller in size when compared to the shapefile (4 KB vs. 33 KB, respectively). The GeoJSON file is singular, while the shapefile comes in a folder with different file types in it for the polygons. Shapefile stores the data using binary formats whereas GeoJSON uses a text-based format.

**Describe the advantages and disadvantages of using GeoJSON**

GeoJSON is a text-based format, meaning that it is accessible by nearly all software. This is in contrast to shapefiles, where the file cannot be easily read – it requires additional software that can visually map out the contents. Thus, while a GeoJSON file can be read and understood, file contents of shapefiles are harder to interpret due to its binary format. GeoJSON are also smaller in size which is advantageous for loading times. However, GeoJSON can be an inefficient way for storing large amounts of data and can lead to poor scaling. Another disadvantage is that GeoJSON files are not as information-rich as shapefiles, which, when viewed using GIS software, can show attribute tables and plotted data in a clean and straight-forward manner.

<https://github.com/kshoester/Lab-1>

<https://kshoester.github.io/Lab-1/>