

JavaScript Libraries for Web Mapping Applications

The purpose of this assignment was to create a simple web mapping application that allows the user to explore the attributes of a rich dataset. This dataset would be placed on a cartographically customized basemap, styled after an image of the student's choosing. I utilized Mapbox's technologies and JavaScript libraries to create an interactive, engaging, and visually appealing web map. I acquired a dataset from Transport for London that catalogues all available bicycle parking areas in the city, categorized by type and capacity. I used QGIS to produce a GeoJSON file, which was imported into Mapbox and added to the basemap. I customized the basemap based on a hand-drawn map, and added custom SVG icons to the dataset. Then, I implemented several plugins from Mapbox's JavaScript library to add a navigation widget, scale bar, zoom controls, full screen functionality, and cursor customization.

Produced a GeoJSON file in **QGIS** by clipping the point data to the area of interest, projecting the data, and converting from a JSON file.

Edited a custom SVG icon for the web map in **Adobe Illustrator**.

Customized the basemap using **Mapbox Studio**, creating a cartographically sound and visually cohesive project.

Implemented **JavaScript** libraries to add additional functionality to the web map.

Created a completed web page by linking **HTML** files, scripts, and **CSS** customization.

