Master of Data Science - University of British Columbia Okanagan

Minutes for June 8, 2020 - 11:00 AM - 12:15 PM PST via Microsoft Teams Meeting

Present: Bruno St-Aubin (Statistics Canada), Sofia Bahmutsky, Ngan Lyle, Kaitlyn Hobbs (Minutes), Shreeram Murali

Agenda

Discussion Points

1 — D3-projections - choosing a fitting projection for our data.

2 — D3-speed - improving reactive time.

3 — D3-LTC - adding visualization points.

4 — D3 - amenity score colour discretization to avoid outlier (Toronto) masking scale of other regions.

5 — D3 - creating additional visualizations.

Meeting Notes

- **1** — Mercator is used most commonly used on the web and by Google. azimuthalEqualArea - better for Northern hemisphere, preserves area but not angles. Alternatively, you could use unprojected data but we are using WS84.

- **2** — simplify file to 3% using mapshaper.

- **3** — better to keep LTC data as separate data set (CSV). Will be easier to draw with D3. Just an X and Y column (longitude, latitude). Can add attributes to this CSV but do not add unneccessary decimal spaces in co-ordinates (6 or 7 digits is ideal) - too many will lag the responsiveness.

- **4** — use natural breaks or percentiles in the quantize function (use **d3.scale.quantile()**) to give map visual variety. Percentiles were used for proximity measures by Statistics Canada. Sort data by percentile then discretize and colour using CSS. D3 built-in colour scales and interpolateOrRd() to colour via D3.

- **5** — bootstrap is a library for building multiple containers and positioning them relatively such that view will fit regardless of device. Positioning done in CSS. For side-by-side containers, set width to 49% to account for border and padding. Can put border inside the element in the element-style code block. Should add margins and padding. display: inline-block; width = 50%;

- could use D3 version 5 and **debugger;** . To walk through each step click F10 or F11.

- **Cleaning code** — To reference in JS: **variable.function** and reference the script in HTML. Global functions are not assigned to variables/objects and are available wherever in the code. If we want duplicate functions (multiple on-clicks).

- Separate map and chart in JS files.

Action Items

- Shrink geojson.

- Clean code by putting functions into object variables.

- Separate map and chart in JS files.

- Add LTC points.

Next Meeting: Wednesday, June 9, at 11:00 AM PST with Bruno and Marian via Microsoft Teams Meeting