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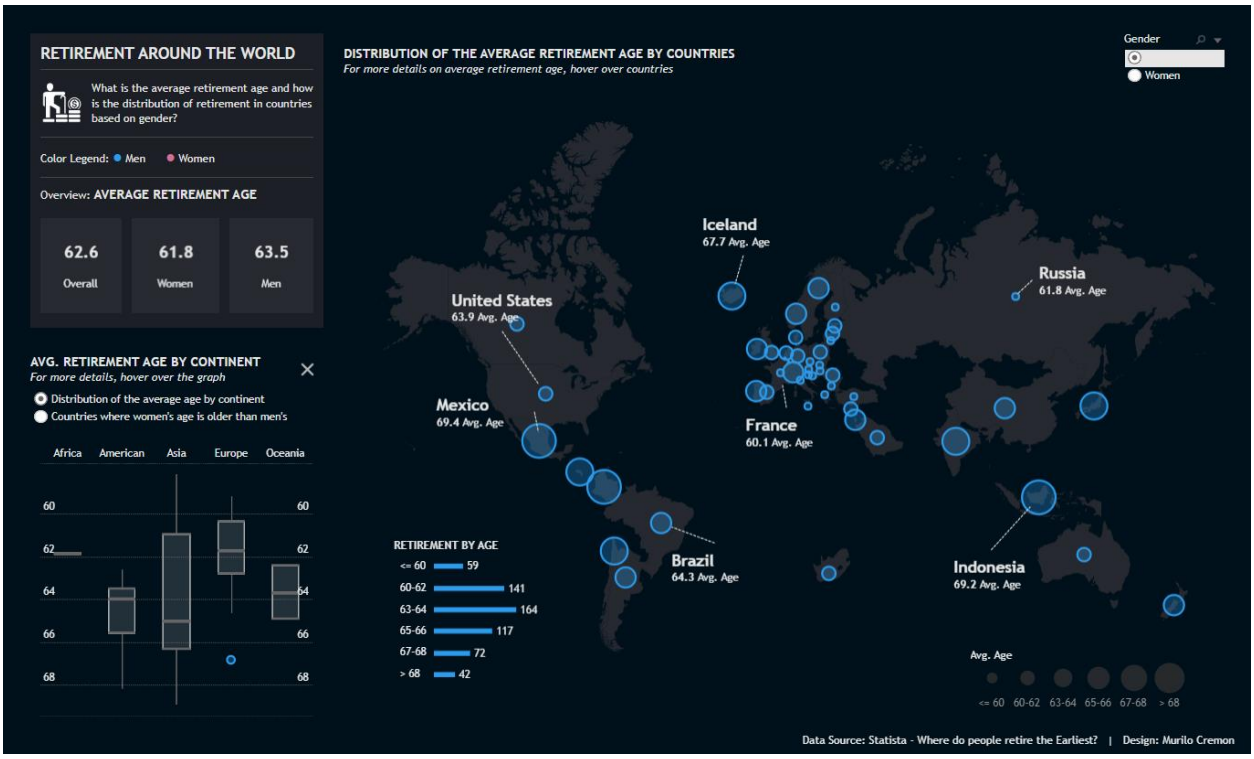
Assignment 3: Data Visualization Ethics

Visualization – Retirement Around the World

Link:
https://public.tableau.com/app/profile/murilo.cremon/viz/RetirementAroundtheWorld/Dashboard



First of all, this data visualization is (somewhat) accessible. Based on the Government of Canada principles discussed in class we confirm that this visualization makes information clear, concise, and easy to use. The author made some effort to only include colors that are not overly bright and painful to look at. Regarding labels and legends, the visualization does a decent job highlighting the important data points, although not every visual element has labels it can still be understood without much difficulty.

Next, regarding reproducibility, this visualization is not reproducible. This is because this visual was created using visualization software not a language. This means that you cannot easily reproduce, fix, or enhance it. There are two potential ways to make this visualization somewhat accessible, one is by downloading the visualization and seeing some of its structure, and another way is to contact the maker for a copy of the data sources, but it can be quite time-consuming.

Lastly, this visualization is not equitable as there is a whole continent being excluded from the analysis. The maker should have conducted more due diligence to try to be able to get data from Africa, even at a high level. Furthermore, the maker did not make an extra effort to research more into the people behind the data, only citing "Statista" does not give much insight into the people behind the data.

This data visualization could be improved by applying the following two suggestions. One suggestion is to include alternate text (alt-text) in the visualization. This will greatly improve the readability of vision-impaired users. The second suggestion is to confirm that the colors used in the visualization are color-blind-friendly. This means that the creator will need to use a color blindness simulator tool, such as the one described in class.

Data visualization – MLS Salaries

Link:
https://www.businessinsider.com/the-27-worst-charts-of-all-time-2013-6#i-never-thought-it-was-possible-but-i-actually-understand-soccer-less-after-looking-at-this-chart-3

This data visualization is not accessible at all. Once again, following the Government of Canada's principles for accessible design, we can argue that this visualization is not clear as it is not intuitive. Also, it is not easy to use as you cannot filter or see individual data points. This visualization also presents barriers to visually impaired users as it does not have any alt-text features. The maker also made little effort to use colors that are not bright or high contrast.

Next, this visualization is not reproducible and this is the biggest red flag as we cannot reproduce the visualization and we know that the data may be inaccurate, as stated by the maker. The issue only increases when discussing transparency as not being able to reproduce the visualization makes its information and message not trustworthy.

Lastly, this visualization is not equitable. One clear reason, as discussed in class, is that the maker does not include any person involved in the data collection. Furthermore, this visualization does not contain data for women and does not provide any breakdown for race, age, and ethnicity. This leads us to assume that this data represents only white male players.

This visualization could have been improved by following the following two suggestions. The first one is changing all the colors in the visualization. As discussed in class, we can take the example of people on the autism spectrum (https://a11y.canada.ca/en/) and make sure to use colors that are not overwhelming for the user. The second reason, as discussed in class, is regarding making this visualization equitable. The maker must make an extra effort to confirm the data sources as well as properly give credit to all people who contributed to this visualization.

References:

Coblis-Color Blindness Simulator. https://www.color-blindness.com/coblis-color-blindness-simulator/

Government of Canada Digital Accessibility Toolkit. https://a11y.canada.ca/en/