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INFO-3300

Initial Ideas for Project 2.

1. Create an interactive visualization of United States map where you show the election results of United States. (SM)
    a. The idea is to show all these graphs dynamically: https://www.270towin.com/historical-presidential-elections/
    b. Need to find the data to do this visualization.
    c. Need to combine election data and map data for this visualization.
    d. This visualization should allow user to change the years by dragging a slider and change the graph dynamically.
2. Life Expectancy Visualization of countries graph. (SM)
    a. Create a graph of world map with the variable "life expectancy". Create a similar interactive graph like this one: https://ourworldindata.org/life-expectancy
        i. Data: http://data.un.org/Data.aspx?d=WHO&f=MEASURE_CODE%3aWHOSIS_000001
        ii. Need to acknowledge the original concept by ourworldindata website. Using similar idea is allowed in project 2 as long as we cite it.
    b. But also add in another graph side by side with the variable called "Per capita total expenditure on health" from this dataset.
        i. Data: http://data.un.org/Data.aspx?d=WHO&f=MEASURE_CODE%3aWHS7_105
    c. The visualization should only look at one year only. It should allow hover over both graphs that shows the country name with the value associated with that country.
3. US Gun Violence from 2013-2018
    a. Data: https://www.kaggle.com/jameslko/gun-violence-data
    b. Interactive US Map visualization that shows the year by year gun violence data per state - each different year can either be viewed using a slider or some type of clickable button per year
        i. Choropleth map with a sequential scale to indicate data values
    c. Another visualization that shows data for each specific state - can have user click on each state in US Map which would show the specific state

and actual locations of where each act of violence happened w/ details such as year, city, # killed, #injured, address, etc.

   d. Maybe another interactive line graph showing the number of total gun violence crimes per state as it increases through the years
      i. Have some type of selector so users can pick states to display on the map at a time
      ii. Have a "show all" option to see total gun violence by year

4. Foodborne Disease Outbreaks in the US from 1998-2015 (Kelly)
   a. Data: https://www.kaggle.com/cdc/foodborne-diseases
   b. Create a US map data visualization that is colored using a sequential scale. The darker the color, the more illnesses there were in each state
      i. Have buttons for each year, so the user can click what year they want to see
      ii. Use a slider to illustrate the different months and see if there is an effect on the time of year and the number of illnesses
      iii. When you click on each state, there's a pop up of how many distinct diseases there were and what diseases they were
5. United States Mass Shootings 1966-2017 (Kelly)
   a. Data:https://www.kaggle.com/zusmani/us-mass-shootings-last-50-years
   b. United States map that has circles for each location/city. The bigger the radius, the more fatalities.
      i. Maybe do the slider for each year to see the difference in mass shootings
      ii. When you hover over each circle, it will say how many fatalities there were
   c. Maybe make another visualization that shows the race of the shooter and the number of fatalities?

Tasks that need to be completed for March 22, Friday, Milestone 2.

1. Find a second dataset that is a good match for one of the existing ideas.
2. Open up dataset in excel and try to see that it has complete values.
3. Write down how the first and second dataset relate to each other and what story they might tell when put together.
4. Draw hand drawn designs for the graph idea.