Homework 7

Introduction to Data Visualization

Due on Aug 13, 11.59PM

- No GitHub needed for this homework, but Tableau links should be provided along with the images for your submissions. Please consider creating a file which has all the links to the corresponding questions below.
- Please follow the submission instructions in each question.
- No late submissions will be accepted **unless you have an excuse**.

1. Use the causes_of_death.csv in Tableau to create the following charts:
   (a) A horizontal bar plot which has Race on y axis and death counts on x axis where each bar is split and colored based on gender. Please change default coloring for Male and Female to blue and pick.
   (b) Create a horizontal bar which has Age groups on y axis and death counts on x where each bar is split and colored based on gender.
   (c) Use the state information to visualize a map where each state is colored based on the death count. Then add the gender information to your x axis to have one map for each gender. Please change the color palette to another one which has red on the right end of the spectrum.
   (d) Please create Dashboard and drag all three charts you created above to this dashboard. Arrange your charts as you want. Then use the Dashboard menu on the top to add a Filter action. Your filter should use the map and cause changes on the remaining two figures as you hover your mouse. Please check here to see a finished example. (Please submit links to all four items you created on Tableau in your submission document.)
2. Use the flights.csv to create a line plot for each month with a different color which summarizes number of passengers over years for a given month. Please check here here for a finished example.
3. Use the olympic_medals.csv to create a treemap for gender and medal types, which shows the number of medals for each gender and medal combination, i.e., Female-Gold. Please use the Orange-Gold palette and use the count information to show the count for each combination. You can check a finished example here
4. Use the World_Bank_CO2.xlsx to create dot plot on world map. Please color your dots based on the country name and change their sizes based on the CO2 Per Capita (metric tons) in CO2 Per Capita (Pivoted) sheet. Notice that one country appears for different years, but we're not interested in yearly break-down. If you don't drag and drop year, you'll get cumulative values which we want to see. Please check here for a finished example.