STA 404/504 Homework 8 - Plotly

Submission through Canvas - Due Monday 5/6/19 by 5:00 PM

- This is a homework: complete individually, not in groups

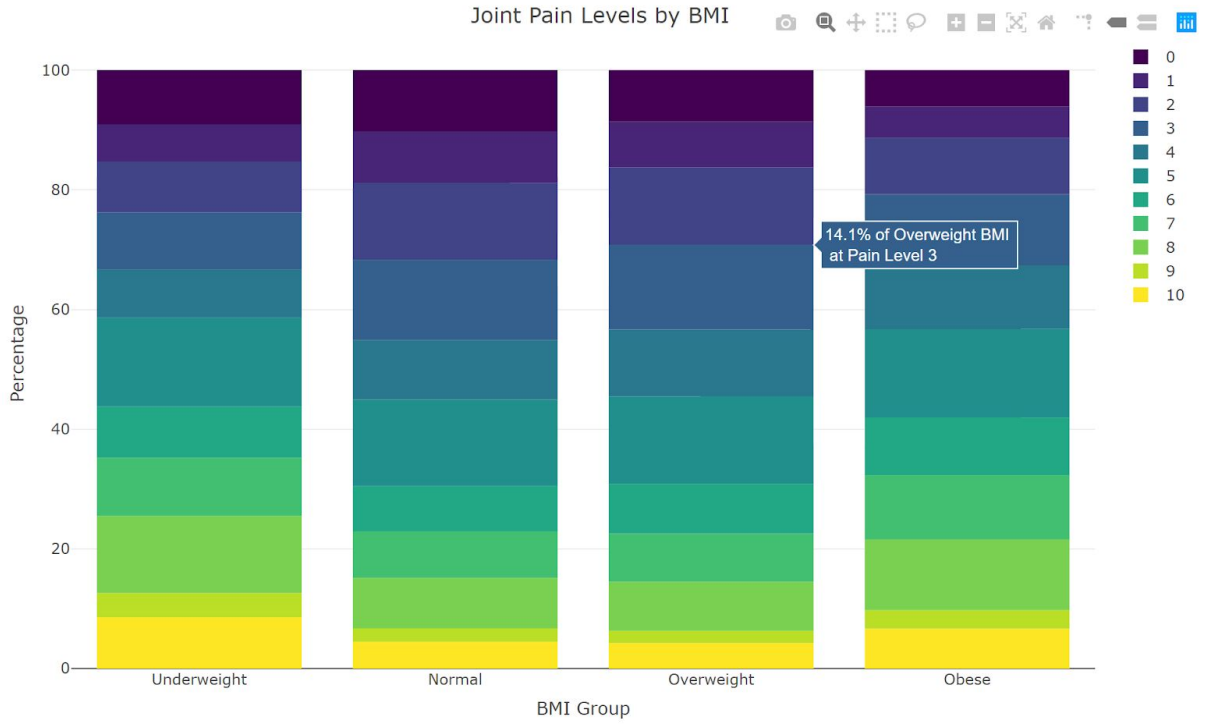
Learning Objectives:

- Adapting existing plot building skill sets to new software tools

Assignment:

For this assignment you will be continuing to use the BRFSS data that was used in Homework 5 to build a categorical variable display with plotly. You will again be using the data directly from the source (CDC website) to download the data from the full 2017 survey. Please download from the link labeled "2017 BRFSS Data (SAS Transport Format)" [ZIP size 101 MB], extract the files then move the file named "LLCP2017.XPT" to your homework 5 folder. Note this file is BIG (1.4 GB) so it will take time to load into R. Use the attached code titled "Homework5_Startup.R" to get started.

Once you have the data loaded you need to create the proportionally-stacked barplot of joint pain (JOINPAI1) within BMI categories (X_BMI5CAT) with plotly as seen in the screenshot below. For this **you must use the plot_ly() function** from the plotly package in R. Note that there are axis labels and a title that I would like you to include. Additionally, I would like to see that the mouseover text for the plot is formatted as you see in the screenshot.



For general help with plot_ly, I would suggest looking into help documentation on https://plot.ly/r/

Submission Format: **R code file** showing your work

What will we look for in grading?
[2 pts] Code - well commented/structured/organized/documented
[3 pts] Plot construction/design and correct use of aesthetics