PROJECT #2: FIRST DATA VISUALIZATIONS

Visualize the data you secured in project #1:

- use D3 as shown in class with either one plot at a time or sequentially on a scroll-down webpage

Your visual interface should be able to (each 20 pts):

1. create a drop-down menu that allows users to select a variable
2. produce a bar chart (categorical variable) or histogram (numerical variable) of the selected variable (make sure you make that distinction)
3. produce a pie chart of the selected variable (make sure you have no more than 5-6 slices, sum the smaller ones into a single 'others' slice)
4. produce a scatterplot of two selected variables (use a radio button to determine which of the two variable axes is to be loaded)

Deductions for:

- missing labels (axes, ranges, sectors, legends)
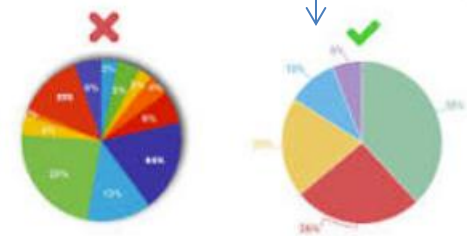
Deliverables

You need to upload the following by the due date
- please use Brightspace for your submission
- voice narrated video file that shows your software in action
- all source code via zip file or other archive format

Grading
- TAs will pick students at random for thorough code review sessions
- you better know your code !!!
- so, please do not just copy code
- or even worse, videotape someone else's program

Submission via Brightspace
Due Thursday, October 5, 2023

Video Recording

Video recording

- you can use Zoom and enable Recording
- captures screen and voice at the same time
- a good program is [Apowersoft Screen Recorder](#)
- it's free for a version with sufficient capabilities

Seeking Outside Help

Aka, cheating

Discussion with your class mates is OK
- stackoverflow.com is a good source of information
- to get some advice on implementation details when you get stuck
- not meant to be a shortcut to avoid own implementation work

Cut and paste from any source is <u>not</u> OK
- any suspected activity of this kind will result in zero points
- also for the person providing the original
- two-strikes and out rule is in effect (including an academic misconduct report)
- this includes any feeble attempt to cover the tracks somehow
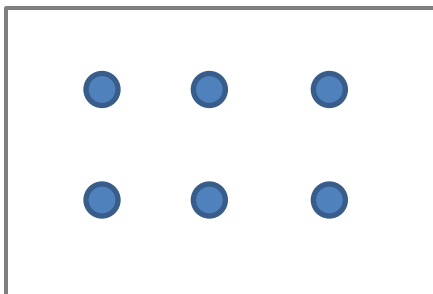
Stay honest and resist the temptation!

Notes on Scatterplots

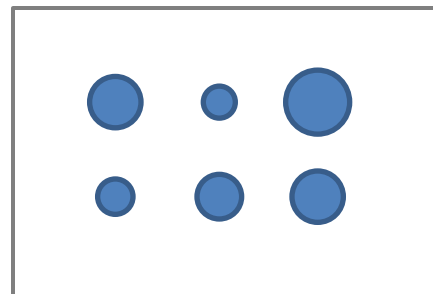You can plot both numerical and categorical variables

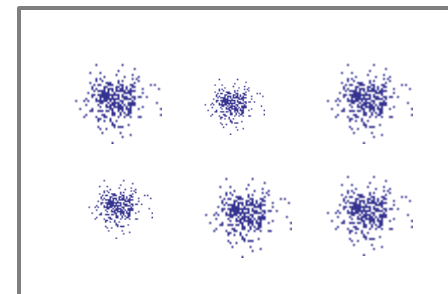- when one or both variables are numerical this is straightforward
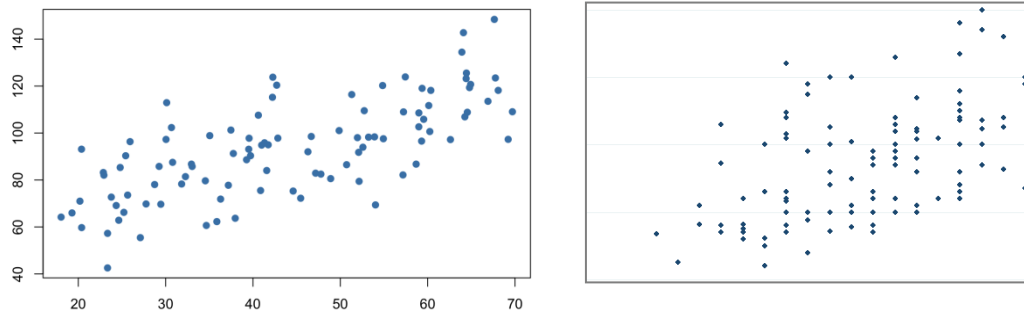
- when both variables are categorical you have three options

just overplot the points so they look like one point

scale disks in proportion to the number of points (more informative)

jitter each plotted point so a cluster with more points appears denser (more real)