# PUBH 7462 Homework 5

### Due 3/29/2022 @ Midnight

# **General Expectations**

Throughout the assignment, please:

- Use meaningful file names ("\_" or "-" seperated)
- Use meaningful variable names
- 'Good' R style (white space, etc.)
- Consistent style (choose a style and stick to it)
- Appropriate titles, axes labels, and legend titles/group names
- Get into the habit of commenting your code chunks
- Use relative paths, ex. "./data"

#### With respect to the knitted .RMD:

- Omit extra output (anything from R with ## for example)
- Make sure your code chunks are visible with echo = TRUE
- Make sure your inline R works properly and round() digits

#### With respect to Github:

- Make sure your repository is public so the TA and myself can view it
- Keep the repository 'tidy' and well organized
- Use meaningful filenames such that a stranger who happened upon the repository could surmise what's going on

With respect to data visualizations in general:

- Never output a tibble() or data.frame() as a table
  - Please use df %>% gt() %>% tab\_header("")
- Github Documents always save with gtsave in ./figures/ folder, and call inline with ![](filepath\_to\_fig)
- Remember, a good data visualization should be self-explanatory
- This means that I shouldn't need to read your code to know what's going on in the plot
- I find it useful to imagine your audience knows little to nothing about what you're doing prior to seeing the plot (as is often the case)

## Problem 1. Github repository (10pts)

- Please set up a repository named your-user-name.github.io
- Connect to it Rstudio with an .Rproj
- Create a /data folder, add to the .gitignore
- Download the website template folder on Canvas here
- 'Build the website' from the template
- Commit your changes, push, and pull

# Problem 2. Personal Website (55pts)

Please do the following -

- 1. Edit the \_site.yaml such that the email and github links (in the top right) link to your github and email (5pts)
- 2. Edit the \_site.yaml to add a logo and link to your LinkedIn account (5pts)
- 3. Edit the index.RMD home page to include your name, a 'professional' photograph of yourself, and a brief professional bio (20pts)
- 4. Add a button with a drop down menu entitled "Professional Documents" which includes your resume/CV like so: (25pts)
  - Within the menu:,
    - Create a resume.RMD
    - Embed your resume/CV in it
    - Knit to resume.html
    - Add a link called "Resume" which links to resume.html
- 5. 'Build your website' (make sure all the files are knitting together) and add, commit, pull, and push your changes.

# Problem 3. Embed an 'Interactive' Flexdashboard (35pts)

Working off of the flex dashboard template from last lecture, located here, as well as the lecture regarding  ${\tt plotly}$  here; please do the following –

- 1. Edit the flexdashboard.RMD template to include 3 interactive plotly's by taking any 3 ggplot's from previous lectures, hw, or the midterm, and transforming them into pplotly objects (30pts)
  - Cannot be any plots from the NYC Airbnb data/activity last lecture
  - At least 1 of your plotly's must be written in plotly syntax (not %>% ggplotly())
- 2. Add a button with drop down menu called "Recent Work" and within the menu, add a link called "Flexdashboard" which links to fleshdashboard.html (5pts)
- 3. 'Build the website' and then add, commit, pull, and push your changes.

### Notes

- You'll need to add whatever data your plots are coming from to the data folder in the repository
- Don't forget to 'build' the entire website (otherwise links between pages won't work)
- You may sometimes need to clear all cookies/browsing history to see your changes actually appear on the web