

Homework 3: SDGB 7851

Instructor: Prof. Nagaraja

Due: Sunday 12/8

This assignment is worth 120 points. Remember to comment your code, cite and provide your references, and submit a professional-looking assignment.

The goal of this assignment is to create a dashboard in R and write an accompanying technical document. Below are the basic specifications for each:

- The purpose of your dashboard must be clear, easy to use, and able to be interpreted by a non-statistician (that also means someone who hasn't read your technical document). This dashboard must incorporate (be creative!):
 - at least one data set (don't use a data set we've used in class; no simulated data)
 - user interactivity
 - at least 3 visualizations, one of which must be a time series
- Imagine your dashboard will be maintained by another statistician. Write a document containing what you think this person would need to know to understand and adapt your code for the future (max. **2 pages**). (Some things to think about: data sources, data cleaning requirements, data dictionary, limitations, justification of why you decided to use certain metrics, visualizations, design choices, etc.)

*** Files to submit (submit as a zipped file) ***

1. .Rmd file of the dashboard and any other code files you created.
2. Screenshot of dashboard.
3. Word/pdf technical document (max. **2 pages**).
4. ALL data files. If you downloaded a data set which was accompanied by documentation files (like you saw with the Pew Research data and American Community Survey data), submit the documentation files as well.
5. Word/pdf document containing a table with the name of each file and a one sentence description of that file.