## Homework 2: UI and Visuals that talk to each other

Due Date: 9/14/2018

Nearly every Shiny application requires you to translate user inputs to allow them to manipulate the data you visualize for them. For this assignment you must use data from an open data website (you may download and clean the data and write it as a CSV). You must also use a different UI layout than what you used in Homework 2.

Data Resources:

* WPRDC: <https://data.wprdc.org/>
* Data World: <https://data.world/datasets/data>
* US Open Data: <https://www.data.gov/>
* EU Open Data: <http://data.europa.eu/euodp/en/data/>
* Just about any major US City

Directions: Use plotly (with or without the aid of ggplot2) to create three (3) different kinds of figures and one (1) data table. Include at least three (3) types of inputs, one (1) functioning downloadButton() and one (1) observer in the server. On the server side your plots and tables must utilize the reactive function for any and all datasets.

Reminder Input Types are:

* Numeric
* Text
* Other/miscellaneous

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Standard | Weight | 100-90 | 80-89 | 70-79 | 60-69 | 50-0 |
| Code Standards | 20 | All code meets Style Guide standards | Most code meets Style Guide standards | Some code meets style Guide standards | Little code meets Style Guide standards | No code meets Style Guide standards |
| Git Commits | 30 | All git commits are clear | Most git commits are clear | Some git commits are clear | Few git commits are clear | No git commits are clear |
| App functionality | 60 | All assigned and extra elements and portions of the app work as expected | All assigned and a few extra elements and portions of the app work as expected | All assigned elements and portions of the app work as expected | Some assigned elements and portions of the app work as expected | None of the assigned elements or portions of the app work as expected |
| User Interface | 40 | All UI elements are clearly labeled and function properly | All UI elements are labeled and function properly | All UI elements function properly | Some UI elements function properly | No UI elements are labeled nor function properly |