

## BST 5930 Data Visualization: Fall 2018

### Project Description and Rubric

Your project should involve a data visualization for some real problem. The assignment will consist of three pieces:

1. (V) The visualization itself. Turn in the code or a link to the deployed app if you use Shiny. I will run your visualization several times with various options or data sets. I will look for bugs, and basically whether I can gain insight from your problem. Due by noon on Wednesday December 19, 2018.
2. (W) Written "User Manual". Write a "user's manual" for your visualization. Explain the purpose, the data, the inputs and choices, and what the output shows. Give an example or two. User should be able to make use of the visualization after reading this user manual. Be clear on what problem you are addressing. [About 2 to 6 pages, depending on the depth of the examples and how much input there is.] Due by noon on Wednesday December 19, 2018.
3. (P) Presentation in class: Explain what the visualization does and how to use it. Much the same as the written manual, except in an oral presentation. Run through at least two examples of the visualization. Length is 10 minutes and about 4 to 10 slides, depending on the depth of the examples and how much input there is. Monday, December 17, 2018.

Here is a rough rubric for grading.

Category	Item	Weak	Fair	Good	Excellent	Points
V	Difficulty: Challenging problem addressed.	Trivial problem	Easy problem	Reasonable problem	Challenging problem	/10
V	Visualization Itself: Yields insight into problem.	Not at all	Yields some insight	User gains insight into problem	User gains insight that might not be available in a static graph	/20
V	Correctness vs. "bugs" in the visualization	"Buggy"	A few obvious bugs	Mostly bug free	No bugs discovered	/10
V	Graphs in Visualization: Following rules for good graphs	Graphics are difficult to read or understand	Contains some shortcomings in reading graphs	Mostly good graphs.	Publication quality graphics.	/10
W	Written manual describes <i>why</i> and <i>what</i> of the visualization.	Significant lapses	Minor lapses	Mostly	Thoroughly	/10
W	Written manual describes <i>how</i> to use the visualization	Significant lapses	Minor lapses	Mostly	Thoroughly	/10
P	Oral presentation describes <i>why</i> and <i>what</i> .	Significant lapses	Minor lapses	Mostly	Thoroughly	/10
P	Oral presentation describes <i>how</i> .	Significant lapses	Minor lapses	Mostly	Thoroughly	/10
Overall	Details				On-time. Followed directions	/10
TOTAL						/100