Homework 1: SDGB 7851

Instructor: Prof. Nagaraja

Due: 9/26

This assignment is worth 60 points. Submit both your R Markdown file and the knitted Word file through Blackboard. Feel free to format your of Word document. **The maximum length for question 1 is 1 page; the maximum length for question 2 is 2 pages; the maximum length for question 3 is 1 page. Any content beyond that will not be graded.** Remember to comment your code and to submit a professional-looking assignment. Your assignment will be graded using the rubric given in the syllabus.

1. You discussed with your classmates the quality of the responses from the survey questions developed in class. Discuss whether or not people interpreted the questions you wrote with your group as intended and how you would use the results to improve the wording of the questions. (Note: there are 36 students registered for this course, but only 31 responses; think about nonresponse (i.e., missing data).) (max. 1 page)

2. Tell a story about our class using our survey data (you can use any of the results, not just those from the questions your group wrote). Use summary statistics and graphs in your report; make sure you discuss the source of your data and data quality as well. (max. 2 pages)

3. Find a metric used in whichever field (marketing, finance, medicine, etc.) interests you (but don't choose one of the examples discussed in *The Tyranny of Metrics* or in class).

   Discuss the following and write your response as a report, not as bullet points (max. 1 page). Cite any resources you use and do not copy someone else's words without attribution; Wikipedia is NOT an appropriate resource.

   - Describe the metric and what it is used for.
   - Evaluate it using the list in Chapter 2 ("Recurring Flaws") from *The Tyranny of Metrics*.
   - Explain why you think this metric is used by companies/organizations.
   - Propose and discuss at least one way to improve your chosen metric.