Rubric EDH7916

Benjamin Skinner

There are five major areas to the final project:

- 1. Data Analysis
- 2. Graphical/Tabular Presentation
- 3. Written Description
- 4. Organization, Clarity, and Formatting
- 5. Coding

Data Analysis

- 1. A strong final project will have a data analysis that cleanly wrangles raw data into an analysis-ready data set; correctly performs all descriptive and statistical analyses necessary to answer the research question; and well presents the results. The analyses do not necessarily have to be complex, but they should represent the best reasonable approach.
- 2. An acceptable final project will have a data analysis that includes some some mistakes or inaccuracies in how the data are cleaned, analyses are run, and/or results are presented. The analyses may not be quite appropriate for the analytic task.
- 3. A weak final project data analysis will not correctly wrangle raw data into a clean data set, will not well describe relationships between predictors and the outcome, will not use appropriate analytic tools, and will not present results well or at all. In general, the analysis will be messy and unable to provide insights into the research questions/problems motivated in the report.

Graphical/Tabular Presentation

- 1. A strong final project will include nicely labeled, easy to understand graphics that describe exactly what is happening with the patterns in the data. The graphics may be simple or complex, but they clearly connect to the analysis (e.g. not just a figure for the sake of a figure). The response could include (but doesn't have to include) interactive graphics. A table or two may be included, but only sparingly and in a clear format.
- 2. **An acceptable final project** will include graphics, but these figures may not be easy to read, may not be sufficiently detailed, or may not represent the most appropriate way to show the relationships in the data. A table or two may be included, but not appropriately formatted or without a clear rationale for its inclusion (*i.e.* why a table and not a figure).
- 3. A weak final project will include graphics and/or tables that are poorly labeled and don't make much sense.

Written Description

- 1. **A strong final project** will include clear and concise written sections that are easily understandable by an interested layperson. Assume that your audience is your boss or a colleague—not me.
- 2. An acceptable final project will be written generally well, but technical details may be poorly described or not described at all, and sentences will be hard to follow.
- 3. A weak final project will be poorly written, with many mistakes regarding both the analysis and good writing practices.

Organization, Clarity, Formatting

- 1. A strong final project will have an .Rmd file that generates a very nicely formatted document, suitable for professional presentation. What kind of report would you want to give to a supervisor or have given to you? That's what I want back from you. The organization should be very clear and easy to understand.
- 2. An acceptable final project will have some formatting problems and may not look very nice.
- 3. A weak final project will include code chunks in the output, poor formatting, and in general will just be messy.

Coding

- 1. A strong final project will have code that can generate results from the raw data in an easy to understand way. The code will be commented and will run on my computer without my having to tweak it in any way. (NOTE: An easy test on your end is transfer your files to a new location with the appropriate directory structure and attempt to knit the document)
- 2. **An acceptable final project** will have code that is relatively clear, but that may not be commented in ways that make sense and that has some problems that require debugging on my end.
- 3. A weak final project will have code that is messy, hard to understand and not commented. It will not run on my computer, and cannot be easily debugged.