GRADING RUBRIC FOR FINAL PROJECT

Critera Points

Your name and class (IST 719) clear on poster (can include a photo of you) 1

Poster is minimum 2’ x 3’ max 3’ x 4’ (1' x 4' ok) 1

**Poster Story: Two sentences that provide overall context for the poster.**

Missing medical appointment has become a prevalent problem for the healthcare systems in many countries including the US, as missed appointments cost the U.S. healthcare system more than $150 billion a year. Since the politicians and the people of this country are always complaining about too much money spent on the healthcare, I want to explore what factors that might contribute to the no-show problem.

**Motivation: 2 or 3 sentences that answer these questions: 1) who might be interested in this (audience); 2) why might they be interested. Ideally, this text leads to your questions (next item).**

The healthcare providers and the insurance companies might be interested in this data analysis, as they might find something useful to decrease the number of missing appointments. The factors I am going to look at include the demographic of the patients, the pre-existing conditions of the patients, and the day of the week of the appointment. By analyzing these factors, my target audiences might find some insights regarding how to accommodate the possible patients with higher no-show rate better to decrease the number of no-shows.

**Questions: between 2 and 3 questions (with question mark) that can only be answered by relating two or more fields of data.**

**Does**

**Data description text: 2 or 3 sentences that includes number of rows and columns, what the data is about and note subsetting, cleaning, and aggregations. 2**

The dataset I am working on has 300,000 medical appointments data as rows and their 15 characteristics as columns. Those characteristics include the patient’s gender, age, day of the week of the appointment, do they have any pre-existing conditions like diabetes or handicaps, whether the healthcare provides send them SMS reminder, etc., and most importantly, whether they show up to the appointment or not. I cleaned up the data by erasing all the entries with the age below 0 and over 100. I have also grouped the ages into 20 groups, and calculated the probability of no-show by aggregating the number of no-shows of each criteria and divide it by the number of all of the appointments.

**Sources: data source, R packages, R scripts, any templates, vector or raster images (small clip art, icons and small bits of code are excluded). 2**

R Package: core package and fmsb.

Image source: “Friends”

Data source: JoniHoppen from kaggle.com

**Data descriptive plots: 2 to 4 single dimension plots that show the data distributions. Uses appropriate data encoding. Used R to make plot. These plots don't answer your questions. They provide insight into your data set and help provide depth to your overall data story. 3**

Key visualization: the main plot. Must be 2 or more dimensions showing a relationship that answers one of your questions. Uses appropriate data encoding. Use R to make plot. Should be in its own sub-heading area on poster with a relevant title. 3

Supporting Visualization(s): one or two additional multi dimension visualizations that answer your other questions.  Uses appropriate data encoding. Used R to make plot. Should be in its own sub-heading area on poster with a relevant title. 3

Color: consistent, appropriate, appealing 2

Layout and use of space: good alignment, space for eye to rest, good navigation clues, not crowded 2

Image Quality: vector graphics or high resolution supporting images 2

Good overall design. Has WOW factor. 2

Files uploaded: Your original Adobe Illustrator file, a pdf of the poster, and all R script(s) that load data, do some data prep work, and make your plots. 1

Total 30

Specific ways I think about the poster as I grade it:

Could I reproduce your work? Could I find the data, select the same subset or do the same kinds of aggregations? What packages would I need? Did you have to do a lot of work to clean the data? If you used graphics or templates from the web, can I find and use them as well?

How is the overall effect? Does the poster support the "3 distances" (across the room appeal, middle distance topic overview, up close detail).

Does the layout and other visual elements support a visual hierarchy that enables quick navigation? Do you have clear sections for different areas (data description, areas for the two important plots, maybe an area for questions and motivation).

Is the text readable in terms of appropriate spacing, size, grammar and spelling?

Is the code commented and organized reasonably well? Does the AI file use layers to organize the poster?

END!