Project 1 Outline (Fall 2017)

Goal: Better understand the initial stages of a data focused project by conducting background research and completing Exploratory Data Analysis (EDA).

    A. Development of a research driven question (SMART) focused on a dataset either inside of R or one of your choosing

    B. Provide the follow information in a Rmarkdown document including explanations of the steps being taken and rationale for each
        a. Conduct Exploratory Data Analysis that will begin to answer your question, this can include for example:
            i. Summary of the dataset
            ii. Descriptive Statistics
            iii. Graphical representations of the data
            iv. Measures of Variance
            v. Initial correlation/Chi Square/ANOVA analysis

    C. Write a roughly 7-page summary of the research and EDA process related to your dataset. Potential areas to address include:
        a. What do we know about this dataset?
        b. What are the limitations of the dataset?
        c. How was the information gathered?
        d. What analysis has already been completed that is related to the content in your dataset?
        e. How did the research you gathered contribute to the development of your question?
        f. What additional information would be beneficial?
        g. How did your question change, if at all, after Exploratory Data Analysis?
        h. Based on EDA can you begin to sketch out an answer to your question?

    D. Develop a 15 minute presentation that effectively communicates the results of these initial stages of a data science project to be presented during class.

Grading:

    A. 25%
    B. 25%
    C. 25%
    D. 25%