Final Project Guidelines
Modern Data Mining

Instead of doing a final exam, we ask you to do a project. An important aspect of learning is through hands on experience, especially when working with data and analysis – nothing can prepare you better for the real world than analyzing a real data set which you're interested in.

We hope that you find the project rewarding and worthwhile. This final project is a good addition to your resume or CV. They are very attractive, valuable sets of skills/experiences!

You should demonstrate the following skills:
- Domain knowledge
- Data mining skills: data preparation, EDA, analyses
- Software proficiency
- Written and verbal communication skills

Prompt: Carry out a study applying the methods that you are learning this semester or beyond

Requirements:

1) An interesting topic, preferably with application value, and originality (preferred)
2) Data set: submit both the *original data*, and a *cleaned/processed version*.
3) Techniques: materials covered this semester, or explain further if they are beyond this course
4) A complete report: The final report should be prepared with a R-Markdown format so that it can be reproduced. As a culmination of your work this semester, it is very important that you control the R output to keep the report readable. The following is a suggested outline:
   a) Executive summary (one page)
      a. Goal of the study
      b. Data
      c. Findings
   b) Detailed analysis
   c) **Maximum of 15 pages** for the main body of the report and keep all other materials in appendices. The shorter the better.

Other notes:

   a) This is a group project. One submission each group
   b) Please label your main document with your last name and some key words about the topic, e.g. "Zhao_ElectionPrediction"
   c) **Submit the following documents to canvas:**
      - Final report
         o **your .rmd file, and a compiled pdf or html.**
      - All the **original data** and the **clean data** used
      - So that we can run you code
   d) Github users: Please send us the link in COMMENTS under Final Project assignment.