Homeworks

STAT6245 Statistical Consulting (Spring, 2019)

- 1. Read the Chapter 4 (A consulting Project from A to Z) of the text book.
- 2. Use the case study 6.3 (page 216-220) as an example to go through the whole process. Try to answer all six questions on page 220 in your project. Prepare the following documents based on this case study:
 - (i). Outline (1) the objectives of this project, (2) your possible contributions and (3) time frame (Due Feb 7);
 - (ii). The contract (Due Feb 7);
 - (iii). Project Summary (Due Feb 21);
 - (iv). Invoice (Due Feb 21);
 - (v). The Final Report (within 5 pages, Due Feb 21).

The requirements of the Final Report:

Final report:

- Your report should be a professional report of at most 5 pages (not including Appendix). Reports exceeding the page limit will be penalized.
- The **most relevant** output (graphical and numerical) may (and should) be incorporated in the main part of the report, but other outputs together with your R or SAS code should be relegated to the appendix.
- Simply include the outputs from software is not sufficient. You need explain the results, and provide recommendations and conclusions.
- Your final report should consist of the following sections:
 - The title page with abstract. In the abstract, including the following small sections. Objective, Methods, Results and Conclusion (see Example 2.3.3 of the lecture note).
 - Introduction: Overview of the project.
 - Background and data set: explain the data source or the data collection procedure; explain the meanings of different variables; number of observations; main research interests, etc.

- Data analysis and results: state the formulated problems; state the model assumptions; describe what procedures are used to analyze data; carry out model diagnosis if appropriate; present and explain the results.
- Conclusion: state your conclusions, recommendations, suggestions or any other discussions you view important.
- Reference: cite appropriate references.
- Appendix: where you can put additional results or your computer code. Your appendix should be at most 10 pages.

You may use following information as the client: Feifang Hu, George Washington University.