Final project guidelines

The final project for the class will consist of analyzing a data set in order to answer a question about baseball or another topic. The purpose of the project is to gain experience analyzing data while pursing a research question that you find interesting.

Your final project <u>should be focused on answering a question</u>. Some example questions are:

- Does the performance of a team in spring training indicate how well a team will do in the upcoming regular season?
- What is the influence of money on the number of wins that a team achieves in a season?
- Is David Ortiz really a clutch hitter?

The research question that you choose does not have to be about baseball - i.e., it could be about another sport, or in another field entirely. However you should choose a question that is relatively simple so that it will be possible to come to a reasonable answer within a month's worth of work. Also, be sure to choose a question where there is data you can use to answer it!

The final project report will consist of a 5-10 page paper that should include statistically analyses along with a written discussion giving background information about the question you choose, why you are doing the analyses you are doing, and the conclusions you have come to. Ideally this will be done in an RMarkdown document. You will also give a short presentation about your research question and the answers you came to during the last weeks of the class.

Apart from doing your own analyses on the data, you should also do background research into how others have tried to answer this question. If you are doing a baseball related question, there are a number of website on the Internet that are good sources for background material (see the slides from the first class). It is very important, however, that you fully cite any sources that you use, and that you clearly state which ideas are your own and which come from external sources. Not fully citing sources is a form of academic dishonesty and can have real consequences.

A proposal for your class project is due <u>before class on Wednesday March 23rd</u>. The proposal should be one or two paragraphs in length and state the research question you are going to pursue, and the data set that you will analyze in order to answer your question. Please let me know if you have any questions.