# Peer-graded Assignment: Regression Models Course Project

Even though your assignment is due on May 17, 11:59 AM PKT, try to submit it 1 or 2 days early if you can. Submitting early gives you a better chance of getting the peer reviews you need in time.

## **Instructions**

You work for *Motor Trend*, a magazine about the automobile industry. Looking at a data set of a collection of cars, they are interested in exploring the relationship between a set of variables and miles per gallon (MPG) (outcome). They are particularly interested in the following two questions:

- "Is an automatic or manual transmission better for MPG"
- "Quantify the MPG difference between automatic and manual transmissions"

#### Review criteria

### **Peer Grading**

- The criteria that your classmates will use to evaluate and grade your work are shown below.
- Each criteria is binary: (1 point = criteria met acceptably; 0 points = criteria not met acceptably)

#### Criteria

- 1. Did the student interpret the coefficients correctly?
- 2. Did the student do some exploratory data analyses?
- 3. Did the student fit multiple models and detail their strategy for model selection?
- 4. Did the student answer the questions of interest or detail why the question(s) is (are) not answerable?
- 5. Did the student do a residual plot and some diagnostics?
- 6. Did the student quantify the uncertainty in their conclusions and/or perform an inference correctly?
- 7. Was the report brief (about 2 pages long) for the main body of the report and no longer than 5 with supporting appendix of figures?
- 8. Did the report include an executive summary?
- 9. Was the report done in Rmd (knitr)?