---

due in 1wk 7d

Submission Phase

1. Do assignment ☐ (/predmachlearn-033/human_grading/view/courses/975203/assessments/4/submissions)

Evaluation Phase

2. Evaluate peers 🔒 (/predmachlearn-033/human_grading/view/courses/975203/assessments/4/peerGradingSets)

Results Phase

3. See results 🔒 (/predmachlearn-033/human_grading/view/courses/975203/assessments/4/results/mine)

☐ In accordance with the Honor Code, I certify that my answers here are my own work, and that I have appropriately acknowledged all external sources (if any) that were used in this work.

Save draft   Submit for grading

Background

Using devices such as *Jawbone Up*, *Nike FuelBand*, and *Fitbit* it is now possible to collect a large amount of data about personal activity relatively inexpensively. These type of devices are part of the quantified self movement – a group of enthusiasts who take measurements about themselves regularly to improve their health, to find patterns in their behavior, or because they are tech geeks. One thing that people regularly do is quantify how *much* of a particular activity they do, but they rarely quantify *how well they do it*. In this project, your goal will be to use data from accelerometers on the belt, forearm, arm, and dumbell of 6 participants. They were asked to perform barbell lifts correctly and incorrectly in 5 different ways. More information is available from the website here: http://groupware.les.inf.puc-rio.br/har (http://groupware.les.inf.puc-rio.br/har) (see the section on the Weight Lifting Exercise Dataset).

Data

The training data for this project are available here:

https://d396qusza40orc.cloudfront.net/predmachlearn/pml-training.csv (https://d396qusza40orc.cloudfront.net/predmachlearn/pml-training.csv)

The test data are available here:

The data for this project come from this source: http://groupware.les.inf.puc-rio.br/har (http://groupware.les.inf.puc-rio.br/har). If you use the document you create for this class for any purpose please cite them as they have been very generous in allowing their data to be used for this kind of assignment.
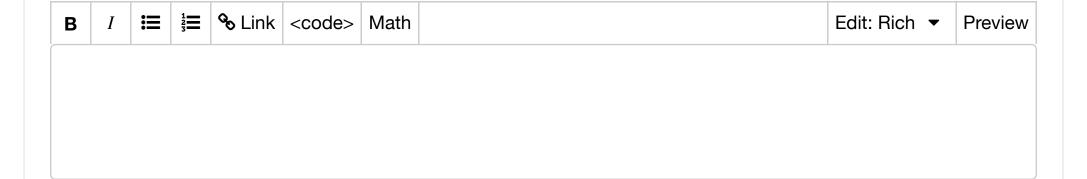
What you should submit

The goal of your project is to predict the manner in which they did the exercise. This is the "classe" variable in the training set. You may use any of the other variables to predict with. You should create a report describing how you built your model, how you used cross validation, what you think the expected out of sample error is, and why you made the choices you did. You will also use your prediction model to predict 20 different test cases.

1. Your submission should consist of a link to a Github repo with your R markdown and compiled HTML file describing your analysis. Please constrain the text of the writeup to < 2000 words and the number of figures to be less than 5. It will make it easier for the graders if you submit a repo with a gh-pages branch so the HTML page can be viewed online (and you always want to make it easy on graders :-).
2. You should also apply your machine learning algorithm to the 20 test cases available in the test data above. Please submit your predictions in appropriate format to the programming assignment for automated grading. See the programming assignment for additional details.

Reproducibility

Due to security concerns with the exchange of R code, your code will not be run during the evaluation by your classmates. Please be sure that if they download the repo, they will be able to view the compiled HTML version of your analysis.

Please upload a link to the github repository containing your .Rmd or .md file and your compiled HTML file performing your analysis.

B	*I*	☰	☷	% Link	<code>	Math		Edit: Rich ▼	Preview

Evaluation/feedback on the above work

Note: this section can only be filled out during the evaluation phase.

Has the student submitted a github repo?

[▲▼]

Does the submission build a machine learning algorithm to predict activity quality from activity monitors?

To evaluate the HTML file you may have to download the repo and open the compiled HTML document.

Alternatively if they have submitted a repo with a gh-pages branch, you may be able to view the HTML page on the web. If the repo is:

https://github.com/DataScienceSpecialization/courses/tree/master/08_PracticalMachineLearning/001predictionMotivation (https://github.com/DataScienceSpecialization/courses/tree/master/08_PracticalMachineLearning/001predictionMotivation)

then you can view the HTML page here:

http://datasciencespecialization.github.io/courses/08_PracticalMachineLearning/001predictionMotivation/ (http://datasciencespecialization.github.io/courses/08_PracticalMachineLearning/001predictionMotivation/)

Do the authors describe what they expect the out of sample error to be and estimate the error appropriately with cross-validation?

Please use the space below to provide constructive feedback to the student who submitted the work. Point out the submission's strengths and identify some areas for improvement. You may also use this space to explain your grading decisions.

You've written 0 words

Overall evaluation/feedback

Note: this section can only be filled out during the evaluation phase.

As far as you can determine, does it appear that the work submitted for this project is the work of the student who submitted it?

Save draft

Submit for grading