**1. MovieLens Project Instructions**

The submission for the MovieLens project will be three files: a report in the form of an Rmd file, a report in the form of a PDF document knit from your Rmd file, and an R script that generates your predicted movie ratings and calculates RMSE. The R script should contain all of the code and comments for your project. Your grade for the project will be based on two factors:

* 1. Your report and script (75%)
  2. The RMSE returned by testing your algorithm on the **validation** set (the final hold-out test set) (25%)

Note that to receive full marks on this project, you **may not simply copy code from other courses in the course series and be done with your analysis**. Your work on this project needs to build on code that is already provided.

Please note that **once you submit** your project, you will **not be able to make changes** to your submission.

**Report and Script (75%)**

Your report and script will be graded by your peers, based on a rubric defined by the course staff. Each submission will be graded by three peers and the median grade will be awarded. To receive your grade, you must review and grade the submissions of five of your fellow learners after submitting your own. This will give you the chance to learn from your peers.

**Please pay attention to the due dates listed!** The project submission is due before the end of the course to allow time for peer grading. Also note that you must grade the reports of your peers by the course close date in order to receive your grade.

**RMSE (25%)**

Your movie rating predictions will be compared to the true ratings in the validation set (the final hold-out test set) using RMSE. Be sure that your report includes the RMSE and that your R script outputs the RMSE.

Note that to receive full marks on this project, you **may not simply copy code from other courses in the course series and be done with your analysis**. Your work on this project needs to build on code that is already provided.

***IMPORTANT:****Make sure you do NOT use the***validation***set (the final hold-out test set) to train your algorithm. The the final hold-out test set should ONLY be used to test your final algorithm. The final hold-out test set should only be used at the end of your project with your final model. It may not be used to test the RMSE of multiple models during model development. You should split the data into a training and test set or use cross-validation.*

submission for this project is three files:

1. Your report in Rmd format
2. Your report in PDF format (knit from your Rmd file)
3. A script in R format that generates your predicted movie ratings and RMSE score (should contain all code and comments for your project)

**2. Choose your own Project Instructions**

The submission for the choose-your-own project will be three files: a report in the form of both a PDF document and Rmd file and the R script that performs your machine learning task. You must also provide access to your dataset, either through automatic download in your script or inclusion in a GitHub repository. (Remember, you are **strongly discouraged**from using well-known datasets, particularly ones that have been used as examples in previous courses or are similar to them. Also remember that you **may not submit the same project** for both the MovieLens and Choose Your Own project submissions.) We recommend submitting a link to a GitHub repository with these three files and your dataset. Your grade for the project will be based on your report and your script.

### Report and Script

Your report and script will be graded by your peers, based on a rubric defined by the course staff, as well as by the course staff. **The staff grade will be your final grade for the project.** Note that due to the volume of submissions and the number of graders, it can take up to four weeks to receive your staff grade, although we strive for a faster turnaround time! To receive your grade, you must review and grade the reports of five of your fellow learners after submitting your own. This will give you the chance to learn from your peers. You are encouraged to give your peers thoughful and specific feedback on their projects.

The submission for the choose-your-own project will be three files: a report in the form of both a PDF document and Rmd file and the R script that performs your machine learning task. You must also provide access to your dataset, either through automatic download in your script or inclusion in a GitHub repository. (Remember, you are **strongly discouraged**from using well-known datasets, particularly ones that have been used as examples in previous courses or are similar to them. Also remember that you **may not submit the same project** for both the MovieLens and Choose Your Own project submissions.) We recommend submitting a link to a GitHub repository with these three files and your dataset. Your grade for the project will be based on your report and your script.

### Report and Script

Your report and script will be graded by your peers, based on a rubric defined by the course staff, as well as by the course staff. **The staff grade will be your final grade for the project.** Note that due to the volume of submissions and the number of graders, it can take up to four weeks to receive your staff grade, although we strive for a faster turnaround time! To receive your grade, you must review and grade the reports of five of your fellow learners after submitting your own. This will give you the chance to learn from your peers. You are encouraged to give your peers thoughful and specific feedback on their projects.

submission for this project is three files:

1. Your report in PDF format
2. Your report in Rmd format
3. A script in R format that performs a supervised machine learning task