Grading Scheme of Math4432, Spring 2018

A. Distribution: the following guidance is adopted for the 3-project run in the course

Homework: 20%
Project 1: 20%
Project 2: 20%
Project 3 (Final): 40%
Peer review report: Bonus 10%

B. Details.

1) The grading scheme for Homework (20%):

- Graded by teaching assistant (TA).
- Each of 8 weekly homework is a graded according to the rule in the below. The total grades for homework is simply the total sum of eight grades.
- For each homework, there are three levels,
  - [Low-1] Finished before deadline but some questions unsolved.
  - [Middle-2] Finished before deadline with most problems solved.
  - [High-3] Beyond the basic requirements, some deep explorations or bonus questions have been done.
- The Homework scores range in [0, 20].

2) The grading scheme for Project 1 (20%):

- Totally graded by TA.
- The formula is:

  Score = 14 + 2 x TAScore
- TA score follows the following three-level scale,
  - [High-3] Include elements above and explore some aspect deeply, for example, methodology, analysis or visualization.
  - [Middle-2] Include basic element for a real-world application: data preprocessing, modeling, model selection, and model evaluation. Report the conclusion reasonably and clearly, which should be supported by your model results.
  - [Low-1] Lack basic element, or the conclusion is unclear (insufficient).
- This is a warm-up project with the aims to help students get familiar with basic elements of statistical machine learning, and hence does not distinguish students sharply. According to the scheme above, the score ranges in [16,20].

3) The grading scheme for Project 2 (20%):

- A weighted average of Doodle Peer Review Votes and Meta-reviewer with a scale ratio at 3:4
- Scoring depends on peer voting and rank scores of Kaggle Inclass contest. The formula is,

  Score = #Votes + 4 x RankScore
- Peer voting rules,
  - Each participant vote top-3 favorite project excluding his own.
  - Number of votes is counted, which ranges from 3 to 9 in project 2.
- Meta-reviewer decides the RankScore via Kaggle Inclass contests ranking,
  - Each project has a Kaggle in-class ranking (regression or classification) and the RankScore is based on the rank
  - 3-level RankScore: [High-3] Top 1-4, [Middle-2] Top 5-8, [Low-1] Others

4) The grading scheme for (Final) Project 3:

- A weighted average of Doodle peer review votes and independent Meta-reviews (TA and Instructor) with a scale ratio at 7:15.
- Scoring depends on peer voting, TA grading and instructor grading. Concretely,

  Score = 9 + #Vote + 3 x TAScore + 5 x InstructorScore
- Peer voting rules is same as project 2 with number of votes (#Vote) ranging from 1 to 7.

- Both TA and Instructor grading follows three levels [High-3], [Middle-2], [Low-1], which is similar to project 1. Moreover, self-proposed projects are encouraged. For each report, different contributions in team members are considered.

5) The grading scheme for Bonus peer review report,

- We collect each one's review and give a bonus credit in the following rule:
  - [0~1] Not submitted or apparently unfinished report.
  - [Low-2~3] A rough review without a concrete description.
  - [Middle-4~5] A detailed review, the strength and weakness sounds reasonable but sometimes vague.
  - [High-6+] A detailed review with carefully thinking, the strength and weakness are critical.

  *It turns out the bonus scores range in [0,6].