Final Project

Due dates:

Score posting: 8:59am on June 14 (Tuesday), 2016
Code & result: 3:30pm on June 14 (Tuesday), 2016
Report: 3:30pm on June 21 (Tuesday), 2016

Introduction:

- This year, you are going to participate in one of the Kaggle (https://www.kaggle.com/) competitions! Kaggle is a platform for predictive modelling and analytics competitions on which companies and researchers post their data and statisticians and data miners from all over the world compete to produce the best models.

- The competition you will work on is Kobe Bryant Shot Selection (https://www.kaggle.com/c/kobe-bryant-shot-selection). Using 20 years of data on Kobe's swishes and misses, can you predict which shots will find the bottom of the net?

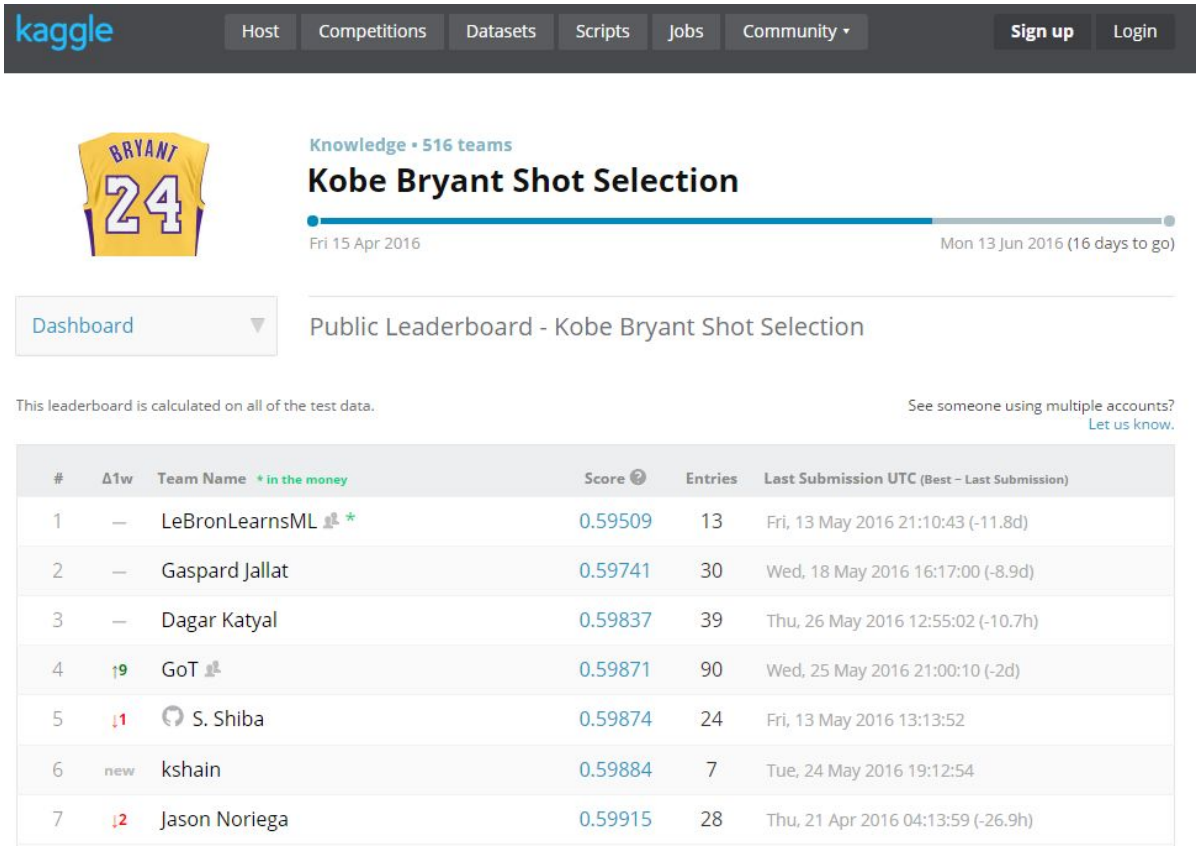
Notes:

- No late submission is accepted.
- This assignment should be done as a team of TWO students.
- There are four types of deliverables, and make sure to submit them all on time.

Document version: 1.1

Instructions

1. Make a team of two students, name your team, and email TA's about your team information (including team members and team name), if you have not done yet.
2. Go to the competition website (https://www.kaggle.com/c/kobe-bryant-shot-selection) and make yourself familiar with the details of the competition.
3. Download the data from https://www.kaggle.com/c/kobe-bryant-shot-selection/data. You will need to register for the Kaggle website before accessing to the data.
4. Design your algorithm and implement it using **either Python or Matlab** (no other option is acceptable). You will want to consider different algorithms for classification, feature engineering, and time series analysis.
5. Make trial submissions to the competition website. **Warning: You can submit your work only 5 times per day.** For the final evaluation of your work, the website allows you to select two of your submissions. As of May 28, the public leader board looks like this:



#	Δ1w	Team Name * in the money	Score	Entries	Last Submission UTC (Best – Last Submission)
1	–	LeBronLearnsML *	0.59509	13	Fri, 13 May 2016 21:10:43 (-11.8d)
2	–	Gaspard Jallat	0.59741	30	Wed, 18 May 2016 16:17:00 (-8.9d)
3	–	Dagar Katyal	0.59837	39	Thu, 26 May 2016 12:55:02 (-10.7h)
4	↑9	GoT	0.59871	90	Wed, 25 May 2016 21:00:10 (-2d)
5	↓1	S. Shiba	0.59874	24	Fri, 13 May 2016 13:13:52
6	new	kshain	0.59884	7	Tue, 24 May 2016 19:12:54
7	↓2	Jason Noriega	0.59915	28	Thu, 21 Apr 2016 04:13:59 (-26.9h)

6. By the due date (8:59am on June 14 Tuesday, 2016, KST), make sure to submit the best of your work to the Kaggle website. Note: the due date specified on the competition website is in the UTC time zone, which is 9 hours behind KST.
7. Submit (a) **your code** and (b) the **final result** you submitted to the competition website through eTL so that TA's can verify your work. The due date for this is 3:30pm on June 14 Tuesday, 2016, KST.

Note: make sure to name your final result file submit.csv; otherwise our automated grading script will not be able to recognize it, and your work will not be graded properly.

8. Prepare a project report that describes your design and implementation along with important design choices you made. Basically, you can include anything you think that is helpful for you to get credits. You may use either Korean or English in your report. Upload a softcopy of your report to eTL by 3:30pm on June 21 Tuesday, 2016, KST. You should use the LaTex/Word template file available on eTL to write your report.

Deliverables

	Due (KST)	***Where***	***Format***	***Note***
Score posting	8:59 am June 14	Kaggle		Read carefully all the instructions on the competition website.
Code	3:30 pm June 14	eTL	Softcopy	Either Python or Matlab
Result file (submit.csv)	3:30 pm June 14	eTL	Softcopy (csv)	The name of this file must be submit.csv.
Report	3:30 pm June 21	eTL	Softcopy (pdf)	Use the LaTex/Word template available on eTL.