Process Report

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Group 126

1 Project schedule

Our mainly schedule on this task can divided into three part:

- The first week we want to explore the whole dataset, finish data visualization and try to fill the missing values.
- The second week we try to find method to combine or extract the features.And we want to find the perfect model for this task.
- For the final week, we want to do final adjustment on features and model. And we will mainly focus on writing reports.

2 Process

Table 1. Process

Date	Task	Who
01/05	Reading the task and data	All
02/05-05/05	Exploring dataset and visualization	Wenlin,Xiaoqing
05/05	First try on filling missing value, basically just fill 0.	Qinghe
06/05	First try on model- Random Forest, and result - 0.17128	Qinghe,Xiaoqing
08/05	Try a new model-LambdaMART and result-0.17156	Qinghe,Wenlin
09/05	Final desicion on model-LightGBM and result-0.17249	Qinghe
11/05	Try feature normalization and result-LambdaMART:0.17549	Qinghe
12/05	Try feature normalization and result-Lightgbm:0.17497	Qinghe
13/05-16/05	Reading top algorithms and try feature combination.	All
17/05	Try feature combination and result-Lightgbm:0.36120.	All
18/05	Process categorical feature result-Lightgbm:0.40000.	All
19/05	Process position attribute result-Lightgbm:0.40119.	Qinghe
20/05	Several tries, no improvement.	All
20/05-22/05	Writing reports	All

3 Contribution

The contribution works like:

Qinghe Gao: Filled the missing value, combine and normalized the new features, fitted the model and predicted the result.

Wenlin Chen: Business understanding of data and winning models, Explore data analysis and visualization, writing the report.

Xiaoqing Han: Did data understanding and some experiments during building models.

4   Reflection of team cooperation

All team members were willing to help and response quickly. During our work, everyone contributed a lot, especially their areas of expertise. Here, thanks to Gao, he is good at fitting model and is willing to help others.