Information Retrieval Programming Assignment 5: Learning-to-Rank

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Source Code

Please refer to our GitHub repository for the source code.

To run the project, you need to have the folder outputs/pa5 downloaded in your system.

Produce Features for Learning to Rank

- 1. You can find the produced feature file in RankLib format in here
- 2. Using the following command, we can train a model in Coordinate Ascent method for MAP.

\$ java -jar bin/RankLib.jar -train mytest/task1 -ranker 4 -metric2t MAP -tolerance .001 -save mytest/outputtask1 In this command, we used coordinate ascent with tolerance of .001 to train the model. The parameters of our model are:

```
1:0.25 2:0.25 3:0.25 4:0.25
```

3. Lines corresponding to D1 and D2 are:

```
0 qid:Q 1:1.0 2:1.0 3:1.0 4:0.0 # D1
0 qid:Q 1:0.5 2:0.5 3:0.5 4:1.0 # D2
```

Combining Different Ranking Functions