Chair for Algorithms and Data Structures Prof. Dr. Hannah Bast Björn Buchhold

Information Retrieval WS 2015/2016

http://ad-wiki.informatik.uni-freiburg.de/teaching



Exercise Sheet 2

Submit until Tuesday, November 3 at 2:00pm

Exercise 1 (5 points)

Copy your code from *sheet-01* to a new subfolder *sheet-02*. Then extend your code to incorporate BM25 scores, as explained in the lecture. See the TIP file on the Wiki.

Try to keep your code as simple and as short as possible. Otherwise, adhere to the standards described on the back of Exercise Sheet 1. All this goes without saying from now on.

Exercise 2 (5 points)

Find a good setting for the BM25 parameters by inspecting the results for a variety of queries of your choice. Also feel free to improve your ranking in any way you see fit; we discussed various possibilities in the lecture (slide 18). This development phase should be completed **before** you proceed with Exercise 3. Briefly describe your insight from this phase in your *experiences.txt*.

Exercise 3 (10 points)

Evaluate your system on the benchmark provided on the Wiki. The benchmark provides 10 queries, and for each query the ids (line numbers in *movies2.txt*) of the relevant documents. Evaluate the measures P@3, P@R, and MAP. Report your results in the table on the Wiki, following the examples already given there. In the last column, provide your BM25 parameter settings + a very brief (not complete) description of any addition feature you might have added.

Once you start testing your system on this benchmark you should not go back anymore to Exercise 2 and change your ranking method or tune your parameters. That would be overfitting. In a real competition, your system would be evaluated by the organizers after the submission deadline, on an undisclosed benchmark.

Commit your *sheet-02* to our SVN. As usual, in your *experiences.txt*, provide a brief account of your experience with this sheet and the corresponding lecture. As a minimum, say how much time you invested and if you had major problems, and if yes, where.