

Exercise Sheet 6

Submit until Tuesday, December 3 at 4:00pm

Exercise 1 (5 points)

Extend the server code provided on the Wiki (in both Java and C++) to serve HTTP requests for HTML pages and JavaScript code with the correct response headers. When a requested file is not found, return an appropriate 404 header. Note that this was done live in the lecture, however, it is not part of the provided code (you only learn something about this by doing it yourself).

Exercise 2 (5 points)

Extend the server code to answer error-tolerant prefix queries using your code from the last exercise sheet. Requests should be of the form `http://<host name>:<port>/?q=<query>`. Concerning usage, exactly follow the specification in the already provided code.

Exercise 3 (5 points)

Write a simple web application, where the user can type something into a search field. After each keystroke, the top-10 error-tolerant prefix matches are computed by communicating with the server from Exercise 2, and interactively displayed on the page. Use an HTML file, a CSS file, and a file containing the JavaScript code, as explained and shown in the lecture by example.

Exercise 4 (5 points)

Make your web application nicer. As a minimum, you should extend it by at least one non-trivial feature. Examples of such a feature are: show the top-10 matches in a nice drop-down box, add a feature to show more than 10 matches if there are more, with mouse over a displayed match show the picture from the corresponding Freebase page (if available).

Add your code to a new sub-directory *exercise-sheet-06* of your folder in the course SVN, and commit it. Make sure that *compile*, *test*, and *checkstyle* run through without errors on Jenkins. As usual, also commit a text file *experiences.txt* where you briefly describe your experiences with this exercise sheet and the corresponding lecture. As a minimum, say how much time you invested and if you had major problems, and if yes, where.