
Python For Fine Programmers

Deadline: July 2, 2009

From the previous problem set, we have implemented a program to generate a graph of URLs from starting from an initial URL. In this exercise sheet, we are going to develop it further.

Problem 1 (3 Points)

Implement an HTMLParser, so that for every node (URL node) in the graph, the parser could filter out the text-contents of the URL-page.

Problem 2 (3 Points)

Once the HTMLParse is in place, use the details given in the lecture, to generate the tf values of the words in the document.

For further use, the tf values are to be stored in a `shelve` object.

Problem 3 (4 Points)

Once the tf values of all words and documents are in place, then using the information from the lecture, generate the $tf-idf$ values for the word-document pair.

Note/Bonus: Design the whole exercise as a class object called `Crawler` or `Spider`. The `Crawler` class should be able to update itself in case of events like a change in the contents of a file or addition/deletion of a file.