DSA Lab 11: Sorting and Searching

Data Structures and Algorithms Lab 11. Sorting and Searching

Subject Code: 17ECSP201 Lab No: 11 Semester: III

Date: Oct, 2017 **Batch:** C1&C2

Question: 3C - Search Engine

Objective: Usage of searching, sorting and appropriate data structures in

implementing a mini-search engine



[Image Referenced From: brightworkweb.com]

When it comes to search engine, we all know who leads the competition. Though surrounded by many competitors, there is a clear winner in the race.

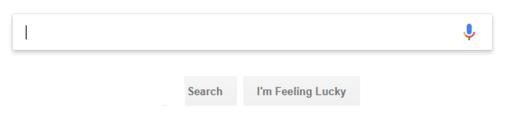
No, we don't want to be a competitor yet!

But let us start understanding how possibly they work in our own little universe being aware of concepts studied from data structures and algorithms. What I say is let's get the feel of it. If not on large scale, then on the first steps of the ladder which can give an awareness of what possibly a search engine is.

Let's Implement a 3C Search Engine.

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3C Search



offered in: हिन्दी वाश्ना తెలుగు मराठी தഥിழ் गुજરાતी ಕನ್ನಡ മലയാളം र्यनाघी

Following is the process you will follow:

Step 01: You have already been given with a file named – **SearchIndex.txt** which has few data sets. Each data set has News Feeds and a Priority number. Populate the file with 50 more data sets where priority can range from 0 to 10.

Step 02: Load all the data from file into an appropriate data structure (You are here working from a secondary storage to a primary storage)

Step 03: Collect a search string from the user. The search string will be of only one word. If more than one word is entered, display an appropriate message and re-prompt to enter a new word.

Step 04: Make a search based on user entered query string, get all the matching news feed and load them to an appropriate data structure.

Step 05: Sort the results based on the Priority

Step o6: Print the results to the user one by one, until there are no more results or the user terminates.

A starter code is already given to you!

** Happy Coding **

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