M.Sc. in Advanced Computer Science
Advanced Algorithms and Data Structures Module

GROUP PROJECT DESCRIPTION

In SIGMOD 2013 Conference a programming contest took place a few months before the venue. In this contest, universities compete in the implementation of a streaming document filtering system. The general idea was to filter a stream of documents using a dynamic set of exact and approximate continuous keyword match.

As a group you should do the following:

- Go to the website (http://sigmod.kaust.edu.sa/index.html)
- Read the Task Overview and Task Details sections.
- Download the necessary test files in a home directory and build your environment based on the instructions found in the website.
- Build or use an existing shortest path-searching algorithm to filter documents using AVL, Red-Black Trees, or Fibonacci Heaps. Choose your searching algorithm and implementation method based on the current contest problem (you might need to compare two implementations of shortest path searching algorithms).
- Compare the asymptotic behavior of your program with the first five wining implementations (source files are included in the website).
- Split your work efficiently.

GROUP PROJECT PLANNING / OUTCOME

- Record the individual tasks you need to carry out using Gantt chart. You can use the following web site that explains how to build a Gantt chart in excel. (http://office.microsoft.com/en-us/excel-help/create-a-gantt-chart-in-excel-HA001034605.aspx)
- The end result should be a roughly ***10-page two-column paper*** describing the results. Presentation quality will be a factor in your grade.