Algorithm Analysis and Design (CS1.301)

Questionnaire
Functional Implementation of Algorithms

Abhinav S Menon

Project Plan

For my project, I have chosen to implement all class algorithms in Haskell (a functional programming language). I also analyse the programs for w.r.t their running time.

Question 1

I am driven by my fondness for programming in functional languages, which I have been practising for a year. Haskell is the language I enjoy coding in the most. In addition, I believe that the difference between the functional and imperative paradigms means that a considerably different thought process will come into play when implementing algorithms in functional languages, and this will deepen my understanding of the algorithms.

Question 2

The project can be evaluated on the following parameters:

- quality of code (does it cover all cases? does it give correct output?)
- organisation and clarity of code (is it readable?)
- quality of analysis (is the consideration complete? is it accurate?)

Question 3

Sir suggested that I could compare the running time of the Haskell code with code in imperative languages, if possible. I will try to do this if there is time.