ALGORITHM ANALYSIS AND DESIGN

PROJECT PROPOSAL

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Aim: -

The aim of the project is to accomplish a good grasp in various algorithms as well as help others getting knowledge of algorithms starting from the beginner level till the level where they are not hesitant to talk about it while making them fall in love with the algorithms and their analysis.

Things to do: -

I wish to create a handbook for the course having a name "Not just a handbook" where in I will be discussing the various algorithm in form a pdf having images and reader-friendly language for better understanding. The plan is to cover the course in a breadth wise manner discussing the algorithm and their applications to get a better idea of the industrial applications of the respective algorithms.

Timeline*: -

1. 25% completion: - October 20
2. 50% completion: - October 30
3. 75% completion: - November 15
4. 100% completion: - Around November end

Tentative and will change as per the project's deadline.

Overview of one of the segments: -

Design Techniques: -

1. Divide and conquer
2. Prune and search
3. Dynamic programming
4. Greedy algorithms

What I am trying to achieve: -

There are multiple achievements interconnected with each other. For beginners, it will make the concepts of the reader fundamentally strong.

Secondly, it may also make the reader to get an idea of how to get started and project he/she should opt for since everything is an algorithm in the world.

Thirdly, the analysis of various algorithms will help them understand unfamiliar problems and their solutions including the analysis of the algorithm made by them using their own creativity and capability.