CEP Fall 2022

Data Structures & Algorithms EE-2031

U. B. Mansoor

Viva/Presentation on Monday, January 30th, 2023

Problem Statement:

A university is about to commence. It is developing a database that can store fields like registration numbers, First Name, Middle Name, Last Name, Department, Program, Plan-of-Study, etc. A university database requires quick searching in order to look up a student, his/her status, etc. Seldom a record is deleted from these databases. Insertions are seasonal.

Using the requirements mentioned above, select an appropriate data structure to implement your database. For a good understanding of the design strategy of a database and the selection of an efficient data structure, you can read here.

Outcome:

After completing the CEP, students should be able to:

- Explain in detail the philosophy of Data Structures
- Select efficient Data Structures given the constraints
- Write a report or develop a presentation substantiating their choice of the Data Structure

Instructions

- A group of not more than two students should be made.
- A single submission will be accepted for a group.
- A group viva/presentation will be held on the submission date.
- Students will be graded on their performance in the viva/presentation.