Project Proposal

Project Details

Project Name: School Management System
Date Submitted: 15/08/2023

Project Description

A School Management System developed in C language implementing Data Structures and Algorithms as in,

1. Dynamic Array or Linked List- to store multiple students' information.
2. Multidimensional Array- to store a student's obtained marks in courses.
3. Structure- to store a student's information such as Name, ID, Department, Courses, Session, CGPA.
4. Queue- to take in Academic Queries on Town Hall Meeting
5. Stack- to keep track of taken courses and which is the newest
6. Graph- to map in courses and different career paths
7. Tree- to hierarchically store Department and Courses' information
8. Sorting Algorithm (Merge Sort)- to sort the Students according to their CGPA.
9. Dyamic Programming- to see which and how many courses can a student take to maximize number of courses taken with limited course credit capacity
10. Greedy Method- to avoid taking time-overlapping courses.

Project Justification

This project is optimized for students in choosing their courses effectively, storing school data efficiently, sorting out information in an organized manner, thus making it a convenient School Management System.