Jay Bharat Vora

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SKILLS

PROGRAMMING TECHNOLOGIES

C, C++, Python

WEB TECHNOLOGIES

HTML, CSS, Bootstrap, PHP, Ruby on Rails

DATABASES

MySQL

INTERESTS

- Data Structures and Algorithm
- Entrepreneurship
- Web Development

LANGUAGES

English Hindi Marathi

Gujrati Kutchi

HOBBIES

- Travelling
- Movie watching
- Spiritual learnings
- Carrom

EDUCATION

National Institue of Technology Calicut (August 16, 2022 - Present)
MTech (Computer Engineering)

Mumbai University (August 14, 2017 - May 19, 2021)
B.E. (Computer Engineering) 8.94 CGPA / 78.16%

Mithibai College (June 09, 2015 - February 09, 2017)
H.S.C 83.08%

Rosary High School 87%
S.S.C

INTERNSHIPS

Cloudpoint Technologies
Project Internship Trainee

A1 Farms
Full Stack Developer

Whitepocket
Back-end Developer

Namita's Fitness Hub
Full Stack Developer

Bluepen
Back-end Developer

Indian Development Foundation
Back-end Developer

PROJECTS

Web Series Success Prediction
Prediction was based on previous data such as actors, directors, etc. and real-time sentimental analysis based on likes and comments on YouTube.

Python

Ecommerce Website
Developed a complete Ecommerce Website which gives smooth shopping experience

Ruby On Rails

VOLUNTEER EXPERIENCE

Shri Mazgaon Bazaar K.V.O Jain Sangh
Committee Member and App Co-Ordinator

Shri Mazgaon Bazaar K.V.O Jain Sangh
Volunteer in Blood donation camps and Vaccination Drives

PIXEL Tech Conclave'19
Public Relations Officer (PRO)

PIXEL Tech Conclave'20
Sponsorship Head

ECELL SAKEC
Documentation Head

Research Cell SAKEC
Public Relations Officer (PRO)

CS 6103D Software Systems Laboratory

PROBLEM 1B

The objective is to learn the following:

- implementation of list using pointers (as a singly linked list)
- implementation of queue using pointers (as a doubly linked list)
- maintaining multiple header and source files
- use of make utility.

Submission date: on or before 03-09-2022 Saturday 11.59 PM
Submission: as a single *.tar* file named as per the format
$P1B\_<FIRSTNAME>\_<ROLLNO>.tar$ (*eg* : *P1B_ARUN_M180xxxCS.tar*)

Modify the program developed for problem 1A as follows:

1. For each course, provide the option for registering students in the course. For this, it is required to maintain a list of names of students who have registered for each course with provisions for adding and deleting names. Implement this list as a *singly linked list* and keep a pointer to the head of the list as an additional field, named *regList* in the *course struct*. Define functions *insert()* to insert a name to the front of the list and *delete()* to delete a given name from the list.

2. Maintain the *regList* in sorted order. For this modify the *insert()* function such that it inserts every new name in its correct sorted position in the list. Keep the function definitions for list operations in a separte file named *list.c*, with the related type definitions and prototypes in a header file named *list.h*.

3. For each course, the course faculty decides how many students can register for the course. For this, add a field *maxLimit* to *struct course* indicating the maximum number of students that can register for a course. Once the number of students registered reaches *maxLimit*, any further request for registration is kept in a waiting list. Add another field *waitList* to *struct course* which points to the head of the waiting list. Whenever a student drops a course, the name of that student is removed from *regList*, a student from *waitList* is removed in FIFO (First In First Out) order and added to the *regList*. This requires implementing the *waitList* as a queue of names with operations *enQueue()*, *deQueue()*, and *isEmptyQueue()*. Use *doubly linked list* for queue implementation. Name the header file *queue.h* and the implementation file *queue.c*.

4. Now your project consists of five separate files. Create a *makefile* for building the executable.