Programming Fundamental

Fall 2022

Semester Project

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Project Title: Blood Donor Management System

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Instructions

- This is an individual project and you have to do it on your own.
- Any plagiarism in this project may cause you to **FAIL** this course.
- You may require some research for identifying the exact requirement, so don't hesitate.

FCIT Health, Wellness and Safety Society (also known as **FCIT Blood Donor Society**) is a non-profitable welfare society based on health and awareness. One purpose of this society is to grow a community of blood donors which shall provide people who require blood donations with a platform they can always rely upon.

The society annually organizes blood camps in which they gather data of all the students and faculty members who are willing to donate blood when the need arises. Previously this data was being stored in **Google Sheet**. When someone requests blood, society uses this data to connect the donor with the one who made the request and keeps track if the donation was successful (by updating donation count and the last donation date of that donor). If the blood is successfully donated, the donor's record is updated.

You have to automate the system of blood management by providing them with a **Blood Donor Management System**. Using this system they will be able to do the following jobs

- Add donor's record. (Mostly during blood camps)
- Search the donor's record based on name. (To respond a blood request)
- Search a list of donors based on blood group. (To respond a blood request)
- Update the donor's record after successful donation. (After successful donation)
- Remove donor's record (May be due to medical reasons).

You have to demonstrate what you have learned so far. The grading criteria will be based on following

1. Implementing all featured with menu a driven architecture   **(5)**
2. File Handling   **(2)**
3. Functions   **(2)**
4. Appropriate data structure   **(1)**

Note:

The records of the donors should be stored in a file named "bds_donor_data.txt".