

Data Structures : Blood Donation System

Objective : To develop a Blood donation system Data structure :

Disadvantages of the existing Manual Blood donation system:

1. Process is too time consuming, often leads to error prone results
2. Consumes additional manpower
3. lacks donor information (missing data)
4. Percentage of accuracy is less.

New system development : From Class of CS102 B Section- Project Team 1

- Hardware and System Software requirements : Not required

Facilities to be designed and developed :

1. Collect the blood sample details every day at each blood bank (identify various data types and data fields)
2. Store rare blood groups from any other Blood bank branches in the same city (identify the mechanism to store branch details)
3. Find out blood group specific details, branch wise and date wise details whenever required

Scope of the New System :

1. New Automated online blood donation management system should maintain information of all blood donors and also helps the recipients to track and search the right donor whenever required.
2. It has two modules namely Admin and User.
3. Admin can add hospitals having blood banks and blood donation camps. Admin can view the list of donors of a particular area with proper Blood group details. Admin can check for blood requests and in case of emergency they send notifications to blood donors as per the requirements.
4. Users can register and make a request. Users(donors) can check for Blood camps and hospitals for blood donation and will get notifications in case of emergency. They can either accept or ignore it.

This project/system aims at maintaining all information regarding blood donors, different blood groups available in blood banks as well as blood camps and help them manage in a better way

Problem Statement : Design an efficient Data structure for Admin group of this System. Create the data types, data fields and sample values for donors, recipients, hospital, branch names etc.

Functions : Retrieval of Donor specific data, rare blood group specific data, and Branch specific data.

Clearly specify all the assumptions made during the Data Structure identification and data retrieval process.

