

Blood Bank – Donate blood and Save life

Problem statement:

Many of us know the importance of blood availability at critical conditions in case of an accident or long run diseases. To keep track of blood donors, blood group wise, an NGO wants to go automate the donor identification process with a Web application which should support below functionalities

1. Application requirements:

- a. User/Donor can get registered with the web application with the Personnel details and as well as his/her donor details as mentioned below,

i. Personnel details:

Name, Contact Number, Address, Bloodgroup, DOB, age, IOE Name, IOE Contact Number, Relation with user

Field Description:

- IOE means person, could be father/mother/brother/any relative **In case of Emergency** to contact.
- BBDId means, unique number generated for every successful user/donor, i.e. Blood bank donor identification number.

ii. User specific Donor details:

The user can tag the people known / well wishers as donors to him/her as a first level of donors in case of Emergency by registering with the below details:

DonorName, location, contact, bloodGroup, RelationWithUser(Friend/ relative/father/ mother/Brother/Sister/Uncle/ Aunt/BrotherInlaw/SisterInLaw/Niece/Nephew)

Some times user may proceed without registering the **user specific donor details(as in #ii)**

Refer registration page(below in screen details section) for more details

After successful registration, unique Id(**BBDId**) will be generated for the user, registered and added to the registered user list. At later point of time the user, admin track the details with the BBDId or Blood group

- b. Application should fetch donors using **BBDId** or **blood group**:

i. Search donors based on BBDId:

- If the respective user/BBDId, being searched for then display the list of donor details to donate the blood in emergency for the user.

ii. Search donors based on blood group:

Display all the registered users whose blood group is same as the given blood group

2. Screen / Web page details to implement the above functionalities:

Page1: Login Page:

Can support Normal User, System admin /customer care

Options on this page:

For new user to register
Existing user to login

Note:

The user account data(BBDId ,Password ,User type (Admin/normal user))needs to be stored in a file after registration and with the preferred password. Next time onwards upon validation, the user will be allowed to enter into application.

After successful logon with UserName and Password, home page will be displayed

Page2: Home Page

Home page – Display a statement about application and importance of blood donation(Your own statement can be displayed)

Home page should provide the navigations to

- Registration Page
- Search page

Any user can view this page

Page3: Registration page: should contain the Input text fields to read the personnel and User specific donor details as below and a button(named as **Register**) to trigger/perform the registration operation with the input data entered

a. Personnel details of user:

Name
Contact number
Address
BloodGroup
DOB
Age
IOE Name
IOE Contact No
IOE Relation

b. User specific Donor details:

Name
Location
Contact No
Relation
BloodGroup

The user can add multiple donors for Him/her

- Page should allow user to input the required data mentioned above during the registration and the input data can be stored in any type of data storage objects as mentioned below after successful registration

Dictionary/list/excel files/any text file/Jason/XML

- Provide page navigations to Home page (Back), and **Search Page**
- Validate the Input data for Date,DOB,Numeric and string format and data.
- Any user can access this page

Page4: Search page : Should contain text fields for Blood group or BBDId and button(named as **Search**) to perform/trigger the search operation

i. If you enter **BBDId** as search parameter then display the list of donor details to donate the blood in emergency for the user.

ii. If you enter blood group as a search parameter ,then display all the registered users whose blood group is same as the given blood group

Note:

Admin will be allowed to perform both the operations mentioned above

Normal user can be allowed only for first option # i

Guest User, incase of emergency after entering BBDId, can directly be redirected to the page mentioned in point# i

Donors data **to be displayed in this page as below**

Name:

Location:

Contact:

Boodgroup:

Relation

Can be navigated to this screen from Home page or from registration page

User should be in a position to navigate to Home page , back screen

Take care of validation of the Input data for Numeric type or Blood group type should be incorporated.

The Search page needs to read the data of registered users from the place , where the data gets stored after successful registration ie it could be from Dictionary/list/excel files/any text file/Jason/XML

Apply CSS for screens / web pages beautification

Instructions to Upload the solution:

1. DataBase would not be required to store the registered user/donar details. Instead use XML/JSON/any type of file to store the registered users data and Read from the same at later stage of application as part of searching based on BloodGroup or BBDId
2. Feel free to add or use required and necessary files like python files,HTML ,css or any other required to the **project folder** using the Visual studio code as part implementation of project requirements.
3. Finally zip the Project folder (mentioned in above point) and Upload the zip file in to ION.
Zip file name is Your **CT Reference_YourName#**

Note:

While uploading, please go to the location, where you have downloaded the Question paper and scroll down, you will be able to see the Upload option.

Please upload the answers in the form of zipfile only.

Wish you all the best

