

Blood Donation Application

assignment12_category_0000

1. Introduction

1.1 Purpose

The purpose of the Blood Donation Application is to create a user-friendly platform that facilitates blood donation activities. The application will connect donors with those in need of blood, promoting a seamless and efficient donation process.

1.2 Scope

The application will include features for user(donor) registration, blood donation requests, donor management, content management, and role-based access control. It will be built using the MERN stack (MongoDB, Express.js, React, Node.js).

2. User Roles and Permissions

2.1 Role Management

- **Admin** 🌐: Has access to all features, including user management, donation requests, and content management.
- **Donor** 🩸: Can register, view donation requests, and respond to them, maintain his own profile.
- **Volunteer** 🧡: Can create and manage donation request.

💡 Make a user admin by editing from database

3. User Authentication(public)

3.1 Registration

- Application will have a registration page from where users can register an account for himself. When a new user will register an account by default the role of the user will be **donor**. Registration form will have the following input fields
 - email
 - name
 - avatar(use imageBB to upload the user avatar)
 - blood group(a selector with option A+, A-, B+, B-, AB+, AB-, O+, O-)

- district(select option)
- upazila(select option)
- password
- confirm_password

💡 **status:** Every user will have a default status “**active**”. Admin can blocked a user. Then the status for the user will be “**blocked**”. We will talked more about this feature in admin section

💡 You will find data for district and upazila in the resources section

3.2 Login



- Application will a login page from where registered users can log in using their email and password.

4. Dashboard(private 🔒)

- All of the dashboard layout will have sidebar not navbar on the top. Try to make the dashboard layout fully responsive.
- **Profile Page**
 - **Route:** /dashboard/profile
 - Every user(admin, donner, or volunteer) will have a profile page. And from where the user is able to see his name, email, avatar, address(district, upazila), blood group and able to update profile information.(only the email will not be changeable)

4.1 Donor Dashboard

- **Dashboard Home page 🏠**
 - **Route:** /dashboard
 - This page will display a welcome message with the user’s name(who has logged in as donor)
 - Below of the welcome section donor will see his maximum 3 recent donation request those was requested by the donor who is currently logged in. For example, if you are a donor then if you come to this page you will see your 3 recent donation request (show as tabular format). If the user has not any donation request yet this section will be hidden.

- Every donation request will have the data mentioned below
 - recipient name
 - recipient location(where donor will need to go to donating the blood for the blood recipient. In this row only show the district and upazila which was provided while the request was created. look at the create donation request form. you will find to input: **recipient district, recipient upazila**)
 - donation date
 - donation time
 - donation status(pending, inprogress, done, canceled) - **donor will found done and canceled button only while the donation status is inprogress.** Then the status can be changed from inprogress to done, or inprogress to canceled. while the status will be done, or canceled both(done and canceled) button will be hidden again.
 - donor information - while the donation status will be **inprogress** the donation will have donor information(name, email)
 - edit button to edit the donation request(when click the button donor will be redirect to a page from where the donation request can be edit and update by clicking on update donation request button)
 - delete button to delete the donation request(will show a confirmation modal before deleting and by confirming the donation request will be deleted)
 - view button to go into the donation request details page(you will find details about this page below)
- Below the 3 recent donation request the donor will see a “view my all request” button. When user will click on the button user(donor) will be redirect to the “**My Donation Requests**” page. (Note: **you will find details about this page below**)
- **My Donation Requests Page** 
 - **Route:** /dashboard/my-donation-requests
 - In this page user(donor) will see all of his donation requests those was requested by himself in a tabular format (same like recent donation section table in the “Dashboard Home Page”)
 - The table will have the same content as “recent donation request” section in the “Dashboard Home Page”
 - The table will have pagination feature.
 - Table will have filtering option(“**pending**”, “**inprogress**”, “**done**”, “**canceled**”) based on the donation request(you will find more details about how this donation status works in the whole requirement. So read it very carefully)
- **Create Donation Request Page** 
 - **Route:** /dashboard/create-donation-request
 - This page will have a form with the following input fields
 - requester name(read only - name of the logged in user)
 - requester email(read only - email of the logged in user)

- recipient name
- recipient district(select option)
- recipient upazila(select option)
- hospital name(where the donor will go to donate blood - like: Dhaka Medical College Hospital)
- full address line(like: **Zahir Raihan Rd, Dhaka**)
- donation date
- donation time
- request message(requester will write, why he need blood in this input field in details)
- donation status(this will not be in the donation request form. you will add the status as pending as default value. Don't add any input field for status)
- request button (form will have a request button and clicking on the button a donation request will be created.)

💡 **Blocked user is not able to create any donation request.** Only the active user is able to create donation request.

4.2 Admin Dashboard

- **Dashboard Home Page** 🏠
 - **Route:** /dashboard
 - Will have the same welcome section like the “**Donor Dashboard Home Page**” welcome section
 - Below the welcome section will have 3 featured cards to show the statistics. Every card will have an relevant icon, count number, and title. have look this image link to get idea: https://prnt.sc/h4qw_H22dX8x Don't copy the design. Design if from your own.
 - total user
 - total funding(user is able to donate few money to help this organizations. We will talk about how to donate money in bonus section)
 - total blood donation request
- **All Users Page** 👤
 - **Route:** /dashboard/all-users
 - All users data will be shown in tabular format in this page. table will have pagination feature
 - Table will have filtering option(“**active**”, “**blocked**”) based on the user status.
 - In every table row will have
 - user avatar
 - user email

- user name
- user status
- a block button to blocked the user while the user status is **“active”**(**clicking on the button admin is able to blocked the user. Then the user status will be **“blocked”**)
- a unblock button to unblocked the user while the user status is **“blocked”**(clicking on the button admin is able to unblock the user. Then the user status will be **“active”** again)
- a make volunteer button to make a user from donor to volunteer. By clicking the button admin is able to give volunteer role to a user/donor
- a make admin button to make a user from donor, or volunteer to admin. By clicking the button admin is able to give admin role to a user.

💡 You can use a three dot menu button with dropdown to manage all of the action button. It will be more nicer to look.

- **All Blood Donation Request Page** 🩸

- **Route:** /dashboard/all-blood-donation-request
- This page will have the same features and content like **“My Donation Requests Page”** from donor dashboard. That means admin will have the same privilege like a donor and able to to anything that a donor can from his dashboard → **“My Donation Requests Page”**.

💡 The only difference is a donor from his dashboard is able to manage only his own donation requests. But the admin is able manage all users donation requests.

- **Content Management Page** 📝

- **Route:** /dashboard/content-management
- This page will have a “Add Blog” button top right corner. while the button will be clicked, it will redirect to **Add Blog Page**.

- **Add Blog Page**

- **Route:** /dashboard/content-management/add-blog
 - This page will have a form with the following input fields
 - title(title of the blog)
 - thumbnail image(use imageBB to upload the thumbnail email)
 - content(blog content) - this will be a rich text editor. you can use [**jodit-react**](#) npm package for the rich text editor


- form will have a create button to create blog after filling the form.

💡 Every newly created blog status will be **draft** by default. only admin is able to change the status of publish a blog

- Then below will have all of the blogs. Design this section with your likings. You are open to design this section either card or tabular format. Pagination is optional on this page. But it will be great if you are able to implement.
- Will have filtering option(dropdown with option **draft** and **published**)
- Every blog will have a publish button if the blog status is on **draft** and only the admin is able to publish a blog.
- When the blog is in published status then will have a unpublish button. And admin can unpublished the blog by clicking on the button.
- Will have a delete button to delete the blog. Only admin is able to delete a blog.
- Implementing of editing blog is optional but highly recommended to do this as well

4.3 Volunteer Dashboard

- **Dashboard Home Page** 🏠
 - **Route:** /dashboard
 - Will be the same page like **Admin Dashboard** → **Home Page**
- **All Blood Donation Request Page** 🩸
 - **Route:** /dashboard/all-blood-donation-request
 - Will be the same page like **Admin Dashboard** → **All Blood Donation Request Page**. But volunteer will not have all of the permission or privilege like admin. Let's see what permission has to a volunteer below
 - Is able to see all blood donation requests with pagination and filtering functionality
 - Is able to update the donation status
 - **Only this two functionality is allowed for volunteer. Volunteer is restricted to do all other action in All Blood Donation Request management.**

- **Content Management Page** 
 - **Route:** /dashboard/content-management
 - Will be the same page link **Admin Dashboard** → **Content Management Page**. **The only difference is admin is able to delete, publish blogs. But volunteer is not able to do that.** Only this two action is restricted for volunteer. Volunteer will have all other permission in content management as like admin.

5. Home Page(public)

- **Route:** /
- **Navbar** → will have logo, donation requests, blog, login, registration link before logged in. and will have dashboard, and fundings links addition to those links.
- **Banner** → will have a heading with a “Join as a donor” and “Search Donors” button
 - Clicking on the “Join as a donor” button will redirect the user to registration page
 - Clicking on the “Search Donors” button will redirect the user to search page
- **Featured section** → make it from your own thinking. It should be relevant with the website.
- **Contact Us section** → will have a contact form and contact number
- **Footer** → make the footer relevant with the website theme and add useful links in the footer as well

6. Search page(public)

- will have a search form with following input fields
 - blood group(a selector with option A+, A-, B+, B-, AB+, AB-, O+, O-)
 - district(select option)
 - upazila(select option)
 - email
 - search button
- By clicking on the search button donor list will be show below. The view of this section depends on your website theming.

7. Blood Donation requests(public)

- This page will only show all of the **pending** donation requests(card or tabular view)
- Every donation request will have the following things
 - Requester name
 - location
 - date
 - time
 - view button
- By clicking the view button user is able to go the details page of the donation request. This page is private. If the user is not logged in then redirect the user to the login page

8. Blood Donation Details Page(private 🔒)

- This page will have all of the information that was provided during creation of a donation request. (you will find on the → **Create Donation Request Page**)
- Below that information will have a donate button. And by clicking on the button will open a modal with a form and confirm button
- The form will have following input fields
 - donor name(read only - logged in user name)
 - donor email(read only - logged in user email)
- By confirming donation the status for the donation will be changed **pending** to **inprogress**

8. Blog Page(public)

- Will show all of the published blogs. You are free to design this page with your likings.
 - You can implement search functionality into this page but it's optional for you
-

Bonus Section

9. Funding Page(private 🔒)

- From this page user is able to give funding for the organization(integrate stripe payment method for this)
- Show all of the funding history made by users below of the page in a tabular format

10. Responsive

- Make the whole website responsive
- making the dashboard responsive

11. JWT

- Implement JWT on login and store the token and protect private APIs with JWT
-

Resources

- Use this github repository to find all of the districts and upazilas data:
<https://github.com/nuhil/bangladesh-geocode>
-

Remember to maintain a consistent design and user experience throughout your website. Tailor these additional features and recommendations to suit the unique characteristics and goals of your Polling and Survey application. 🚀 ✨

Guidelines 📌

- Spend 15-20 minutes deciding on the core features of the survey application.
- Start with a basic idea and progressively add more features.
- Prioritize user experience, data security, and seamless payment integration.
- Use ChatGPT for generating sample data initially and adapt as needed.
- Regularly commit and update the readme as you progress through the development stages.

What to Submit

1. **Assignment Category: assignment12_category_0000**
2. **Admin email:**
3. **Admin password:**
4. **Front-end Live Site Link:**
5. **Client Side GitHub Repository Link:**
6. **Server Side GitHub Repository Link:**