

# CMT 209: WEB DEVELOPMENT

## TASK2: PROJECT DESIGN

Group Number		5
Group Members		
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### 1. Project Title

**VitalDrops Motive Group System:** A Blood Donation and Community Support Platform

### 2. Project Description

#### **Problem project addresses**

VitalDrops addresses the critical problem of connecting blood donors with patients in need during emergencies. It eliminates the delays and inefficiencies in manually finding donors and ensures timely support for patients. Additionally, it promotes community-based social support activities to uplift underprivileged members of society.

#### **What will be Developed**

**Donor Registration:** A user-friendly system for individuals to register as blood donors.

**Recipient Matching:** A search functionality to match blood donors with recipients based on blood group and location.

**Donation Requests:** A module for hospitals, patients, or NGOs to request blood.

**Social Activity Tracker:** Features to document and showcase community initiatives, such as food and clothing drives, blood donation campaigns, and cultural programs.

**Reports and Analytics:** A system to generate reports on donor activity, social impact metrics, and blood donation trends.

**Database Integration:** A robust database to securely store and manage donor, recipient, and activity data.

## **Where or in which organizations and region can the project be used**

The VitalDrops Motive Group System is designed for use by:

- Hospitals and clinics in Kenya, especially those in urban and rural areas.
- NGOs and community groups hosting blood donation campaigns.
- Organizations engaged in community upliftment activities.

## **Technologies to be Used In development**

**Front-End:** HTML, CSS, JavaScript for the user interface and responsive design.

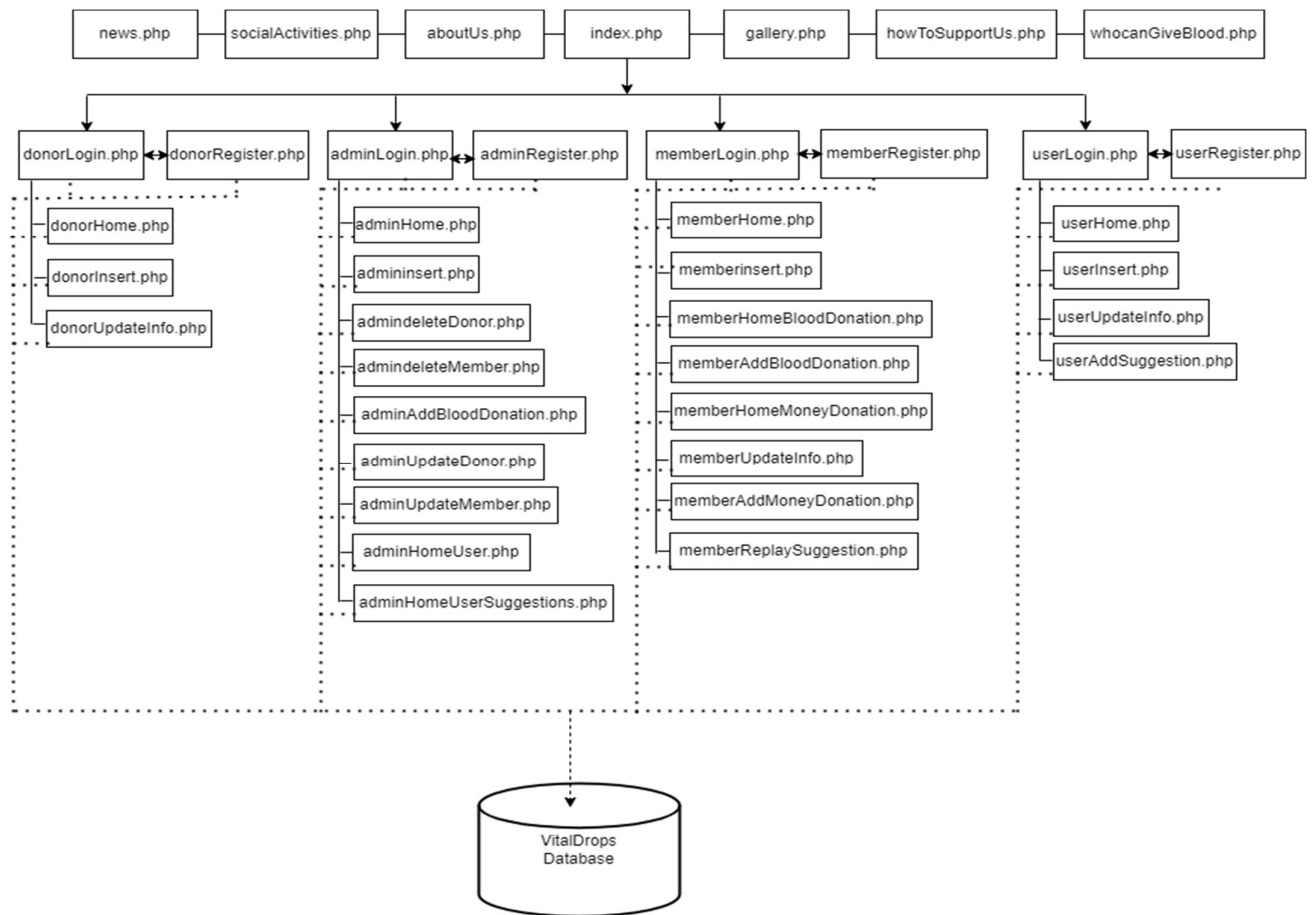
**Back-End:** PHP for server-side processing and MySQL as the relational database for data management.

### **Development Tools:**

- **Browser Automation:** Gecko Driver for testing front-end compatibility.
- **Version Control:** GitHub for code management and collaboration.

**Server Setup:** XAMPP for local testing and hosting.

### 3. Project Sitemap



#### Pages and Description

##### i. Home:

- index.php – Overview of the platform, mission, and features.
- news.php – Latest news about blood donation and community activities.
- socialActivities.php – Community-driven social activities.
- aboutUs.php – Information about the platform and its mission.
- gallery.php – Gallery of images and videos related to the platform’s activities.
- howToSupportUs.php – Information on how users can support the platform.
- whoCanGiveBlood.php – Information on eligibility for blood donation.

##### ii. Donor Section

- donorRegistration.php – Donor registration page.
- donorHome.php – Donor dashboard for managing their data.
- donorInsert.php – Back-end processing for donor registration.
- donorUpdateInfo.php – Functionality to update donor information.
- bloodDonorLogin.php – Donor login page.

### **iii. Member Section**

- memberHome.php – Member dashboard for accessing donations and activities.
- memberInsert.php – Backend for inserting member data.
- memberRegistration.php – Member registration page.
- memberHomeBloodDonation.php – Blood donation management for members.
- memberAddBloodDonation.php – Backend for adding blood donations.
- memberHomeMoneyDonation.php – Manage monetary donations for members.
- memberAddMoneyDonation.php – Add monetary donation details.
- memberUpdateInfo.php – Update member information.
- memberReplaySuggestion.php – Admin feedback on member suggestions.

### **iv. Admin Section**

- adminHome.php – Admin dashboard for overall system management.
- adminLogin.php – Admin login page.
- adminInsert.php – Admin inserts new data into the system.
- adminDeleteDonor.php – Admin functionality to delete donor records.
- adminDeleteMember.php – Admin deletes member records.
- adminAddBloodDonation.php – Admin adds blood donation info.
- adminUpdateDonor.php – Admin updates donor records.
- adminUpdateMember.php – Admin updates member information.
- adminHomeUser.php – Admin view of user data.
- adminHomeUserSuggestion.php – Admin view of user suggestions.

### **v. User Section**

- userHome.php – Home page for users who are not donors or members.
- userInsert.php – Logic for inserting new user data into the system.
- userLogin.php – Login page for users.
- userRegistration.php – User registration page.
- userUpdateInfo.php – Update user information.
- userAddSuggestion.php – Functionality for users to submit feedback or suggestions.

## **4. Project Technology**

### **donorRegister.php**

#### **Frontend:**

- HTML: Structure of the registration form (e.g., name, email, blood type).
- CSS: Styles the page for a responsive, user-friendly design.
- JavaScript: Client-side validation for fields like email format and password strength.

#### **Backend:**

- PHP: Processes form data and communicates with the database.
- MySQL: Stores user data in the database.
- Password Hashing: Ensures secure storage of passwords (hashing and salting).

### **bloodDonorLogin.php**

#### **Frontend:**

- HTML: Structure of the login form (email/username and password).
- CSS: Responsive styling for the login page.
- JavaScript: Validates input before submitting the form.

#### **Backend:**

- PHP: Verifies user credentials, starts sessions for logged-in users.
- MySQL: Retrieves stored user data for login authentication.
- Session Management: Keeps users logged in across pages.
- Security: Uses prepared statements to prevent SQL injection and hashed passwords for security.