Semester Project Submission

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Name of the Project:

Online Blood Donation Management System (BloodLink)

Overview:

BloodLink is a web-based platform that connects blood donors with recipients in need. The system allows users to register as donors, search for available donors based on blood type and location, and request blood donations. The platform also includes an admin panel for managing donor data, user verification, and monitoring donation activities. With real-time notifications, location tracking, and a user-friendly interface, BloodLink enhances the efficiency of blood donation processes and ensures timely assistance to those in need.

Key Features:

1. **Dashboard with Navbar and Sidebar** – Intuitive navigation for users and admins   **Login/Sign Up System** – Secure authentication for donors, recipients, and admins
2. **Multi-Device Optimization** – Fully responsive design for all devices
3. **Google Maps Integration** – Location of Donors
4. **User Profiles** – Donors and recipients can manage their personal details
5. **Blood Donation Requests** – Users can request and approve blood donations
6. **Search Functionality** – Find donors based on blood type, location, and availability
7. **Notifications & Alerts** – SMS/Email alerts for requests, approvals, and reminders

8. **Social Media Integration** – Share donation requests on social media platforms
9. **Certificate Generation (PDF)** – Generate donor appreciation certificates (not confirmed but Hope so we can Manage this as well)
10. **Error Handling** – Proper validation and error messages for smooth user experience
11. **Admin Panel with Analytics Dashboard** – Track total donations, active donors, and statistics
12. **Security & Data Protection** – Secure encryption and verification of user data
13. **User-Friendly Design (UI/UX)** – Clean, simple, and intuitive interface
14. **Blogs & Awareness Section** – Informative articles on blood donation benefits
15. **Third-Party Service Integration** – Email Service, for SMS if get free API from twilio will use, otherwise whatsap icon or number
16. **Donation History –** Keep record of all donations
17. **Donor Eligibility Check (Form Based**) – check if donor can donate or not