Project Documentation: Customer Lead Management System (CLMS)

1. Introduction

The **Customer Lead Management System (CLMS)** is a centralized web-based platform designed for internal use in an IT company. The system enables staff to log their daily activities (social media updates, customer queries, student conversions, client visits, outreach initiatives, etc.), while providing the **CEO/Super Admin** with real-time monitoring and analytics.

This project will be built using the **MERN stack (MongoDB, Express.js, React.js, Node.js)**.

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2. Objectives

- Centralize all office activities (client visits, inquiries, social media updates, outreach initiatives, etc.) into one system.
- Enable **role-based access** for staff, project managers, and super admin.
- Provide **real-time insights** with dashboards, analytics, and reports.
- Ensure **efficient lead follow-up** through automated reminders (e.g., if a student doesn't respond in 1–2 weeks, their record resurfaces).
- Improve **transparency and accountability** across departments.

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3. User Roles & Permissions

1. Super Admin (CEO)

- Manage staff accounts (create, update, deactivate).
- View and filter **all activities** (by staff, date, type).
- Access analytics dashboards & reports.
- Monitor **International projects, local projects, Digital Koshi outreach**.
- Secure login with email/password.

2. Project Manager

- Schedule meetings with clients.
- Manage project details (client name, project type: international/local).
- Track client visits and support activities.
- Assign tasks to staff.

3. Social Media Handler

- Log daily updates (posts, campaigns, ads).
- Record customer queries and student conversions.
- Track student enrollments.
- Handle auto-reminder system for unresponsive students.

4. Outreach Team (Digital Koshi)

- Record school/college visits.
- Submit digital training proposals.
- Track institution responses (accepted/rejected/pending).

5. Staff (General Role)

- Can only view and manage their own entries.
- Update profile details.
- Submit activity data as per assigned role.

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4. Core Features

✅ Authentication & Security

- Role-based access control.
- Email/password login.
- JWT authentication.
- Forgot password (with OTP via email).

✅ Dashboard

- Real-time activity tracking.
- Line chart (activities over time).
- Bar chart (activities by type).
- Recent activity tables.

✅ Lead Management

- Add/edit/delete leads (students, clients, institutions).
- Auto-reminder for unresponsive students (after 7 or 14 days).
- Lead status tracking (Pending, Active, Enrolled, Dropped).

✅ Project Management

- Track international/local client projects.
- Meeting scheduling.
- Client visit records.

✅ Outreach Management (Digital Koshi)

- Track school/college visits.
- Manage proposal status.

✅ **Admin Tools**

- Filter data by staff, type, or date.
- Export reports (CSV/PDF).
- Analytics dashboard for monitoring.

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5. Tech Stack

- **Frontend**: React.js + Tailwind CSS (UI)
- **Backend**: Node.js + Express.js
- **Database**: MongoDB (Mongoose ORM)
- **Authentication**: JWT + bcrypt
- **Email Notifications**: Nodemailer (SMTP)
- **Charts & Visualization**: Chart.js / Recharts

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6. Database Design (MongoDB)

Collections:

1. **Users**
   - `name`, `email`, `password`, `role`, `department`
   - `createdAt`, `updatedAt`
2. **Leads**
   - `studentName`, `contact`, `status` (Pending, Active, Enrolled, Dropped)
   - `lastContactDate`, `nextFollowUpDate`, `assignedTo`
3. **Projects**
   - `projectName`, `clientName`, `type` (International/Local)
   - `meetingSchedule`, `status`, `assignedManager`
4. **Activities**
   - `staffId`, `activityType` (social update, client visit, outreach, etc.)
   - `details`, `date`
5. **Institutions (for Digital Koshi)**
   - `name`, `contact`, `proposalStatus` (Accepted/Rejected/Pending)
   - `visitDate`, `staffId`

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7. Automation Rules

- **Student Follow-Up Reminder**:
- If a student lead is not updated within **7 or 14 days**, it automatically resurfaces in the "Pending Follow-Up" list.
- **Notification System**:
- Email or in-app notification for upcoming client meetings.
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