

MERN Stack Task – Mini CRM Application

Develop a Mini CRM (Customer Relationship Management) system using the MERN stack. The project should allow management of users, leads, clients, and projects with defined roles and restricted access. Each user type should interact only with the features relevant to their role.

User Management

Create a system that supports multiple user roles such as Admin, Staff, and Client. Admins should be able to add, update, or remove users. Each role should have defined access permissions and distinct visibility for different sections of the application.

Lead Management

Leads should be manageable through create, update, and delete operations. Each lead should store basic information such as name, email, and contact number. Leads progress through stages and can eventually be converted into clients.

Client Management

Clients represent confirmed leads and should be manageable with details such as contact information, related projects, and assigned staff. Admin and Staff should have the ability to view and manage client information efficiently.

Project Management

Projects should be linked to specific clients and staff members. Each project must contain essential details like title, description, deadlines, and progress status. Staff can update project progress, and clients can view their projects.

Role-Based Access

Restrict access based on user roles to ensure data security and controlled operations. Admins can manage all entities, Staff handle assigned clients and projects, and Clients can view information relevant only to them.

Authentication and Authorization

Implement a secure authentication system allowing users to log in with their credentials. Authorize actions using role-based logic so that only permitted users can access or modify data.

Lead Conversion Flow

Include functionality to convert a lead into a client while retaining necessary information. The conversion should move the data from leads to the client section seamlessly.

Project Lifecycle

Define project stages and allow updates as the project progresses. All related users should be able to see the current status of projects relevant to them.

Reporting and Overview

Provide a section that offers summarized insights such as total leads, clients, and active projects. Display basic statistics for easy overview and management.

Bonus Features (Optional)

Include additional capabilities such as notifications for activity updates, dashboard visualizations, or a simple commenting system for collaboration within projects. Creativity and polish in execution will be appreciated.

Timeline: 3 Days

Objective: Deliver a functional, secure, and role-based Mini CRM demonstrating solid understanding of the MERN stack, user roles, and data relationships.