✅ Client Management System for Interior Designers – Requirements, Specifications & User Stories

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🚀 1. Project Overview

Project Title: Client Management System for Interior Designers
Objective:
The goal of this system is to help interior designers efficiently manage their clients, including end users, architects, brokers, and suppliers. The system will track customer interactions, project statuses, payments, and automate payment reminders.

📋 2. Functional Requirements

✅ 2.1. User Roles & Access

- **Admin:**
  - Add, edit, and delete customers and suppliers.
  - Manage project statuses and payments.
  - Send payment reminders.
- **Interior Designer (User):**
  - View and manage their own clients.
  - Update statuses and payment details.
  - Generate quotations.
- **Supplier:**
  - View their linked projects.
  - Receive payment reminders (optional).

✅ 2.2. Key Modules & Features

2.2.1. Welcome Page

- **Options:**
  - Customer → Leads to customer categories.
  - Supplier → Leads to supplier management section.

2.2.2. Customer Categories

- **Options Under Customer:**
    - End User
    - Architect
    - Interior Designer
    - Broker

2.2.3. Customer Management

- Add new customers with the following fields:
    - Name
    - Address
    - Contact Number
    - Email
    - Customer Type (Dropdown: End User, Architect, Interior Designer, Broker)
    - Notes/Additional Info
- View customer details.
- Edit or delete customer records.

2.2.4. Status Management

For each customer, track project progress using status stages:

- **Enquiry:**
    - Store feedback and notes.
    - Option to mark as successful or unsuccessful.
- **Design & Quotation:**
    - Add project design details.
    - Upload quotation PDFs or images.
- **Order Done:**
    - Confirmation of project completion.
    - Automatically triggers the Payment Mode section.

2.2.5. Payment Management

- **Payment Modes:**

    - Cash
    - Cheque
    - UPI
    - Bank Transfer
- **Payment Reminder System:**
    - Select due date for payment.
    - Automatic reminder email/SMS on the due date.
    - Status update upon successful payment.

⚙️ 3. Technical Specifications

✅ 3.1. Technology Stack

- **Frontend:**
    - React.js with Tailwind CSS (for UI)
- **Backend:**
    - Node.js + Express.js
- **Database:**
    - MongoDB (for managing clients, suppliers, and payments)
- **Authentication:**
    - JWT-based authentication for secure access
- **Reminders:**
    - Email/SMS automation service using **Twilio** or **Nodemailer**
- **Deployment:**
    - Vercel (Frontend)
    - Render / Railway (Backend)

📚 4. User Stories

💡 4.1. Customer Management

- **As an interior designer**, I want to add new customers (end users, architects, designers, and brokers) with their contact details so that I can keep track of my leads.
- **As an admin**, I want to view and edit customer records so that I can update their information.
- **As an interior designer**, I want to filter customers by type (end user, architect, etc.) so that I can easily manage specific categories.

💡 4.2. Status Management

- **As an interior designer**, I want to mark the status of each customer interaction (enquiry, design & quotation, order done) so that I can track the progress of each project.
- **As an admin**, I want to add notes and feedback to each status so that I can log details about customer interactions.
- **As an interior designer**, I want the system to automatically update the status once a project moves to the next stage.

💡 4.3. Payment Management

- **As an admin**, I want to select the payment mode (cash, cheque, UPI, bank transfer) so that I can log payment details.
- **As an admin**, I want to set a payment due date so that the system automatically sends reminders.
- **As an interior designer**, I want to receive notifications when payments are overdue.

💡 4.4. Automatic Payment Reminders

- **As an admin**, I want to send automatic payment reminders via email or SMS so that I can reduce payment delays.
- **As an interior designer**, I want the system to send reminders based on the due date I select for each project.
- **As a supplier**, I want to receive payment notifications when clients have pending payments.

💻 5. Database Schema

Customers Collection

json

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```json
{
  "customer_id": "UUID",
  "name": "string",
  "customer_type": "string",  // [End User, Architect, Designer, Broker]
  "address": "string",
  "contact_number": "string",
  "email": "string",
  "notes": "string",
  "created_at": "timestamp"
}
```

Project Status Collection

json

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```json
{
  "project_id": "UUID",
  "customer_id": "UUID",
  "status": "string",  // [Enquiry, Design & Quotation, Order Done]
  "feedback": "string",
  "quotation_file": "string",
  "created_at": "timestamp"
}
```

Payments Collection

json

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```json
{
```

```
  "payment_id": "UUID",
  "customer_id": "UUID",
  "project_id": "UUID",
  "amount_due": "decimal",
  "payment_mode": "string",  // [Cash, Cheque, UPI, Bank Transfer]
  "due_date": "timestamp",
  "reminder_sent": "boolean",
  "payment_status": "string"  // [Pending, Paid, Overdue]
}
```

🔄 6. Workflow Flowchart

css

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```
[Welcome Page]
    ↓
[Select Customer] → [Supplier]
    ↓
[Customer Categories] → [End User] / [Architect] / [Designer] / [Broker]
    ↓
[Add New Customer] → Save in DB
    ↓
[Select Customer] → [Status: Enquiry → Design & Quotation → Order Done]
    ↓
[Payment Mode] → [Set Payment Due Date]
    ↓
[Send Payment Reminders] → [Payment Status: Pending/Paid]
```