**Project Specification: Sales & Marketing CRM for IT Industry**

**Project Title : SmartLead** – A Web-Based CRM for IT Businesses

**Overview**

SmartLead is a web application designed for IT companies to **track leads, manage clients, automate follow-ups, and store interaction history securely**. It includes a **.NET Core Web API backend**, an **Angular frontend**, and a **Microsoft SQL Server database**.

**Objectives**

* Centralized storage of leads and clients
* Full sales funnel tracking (from lead to deal close)
* Secure data storage and access control
* Scalable architecture ready for enterprise growth
* Dashboard with actionable sales and marketing insights

**Technology Stack**

| **Layer** | **Technology** |
| --- | --- |
| Frontend | Angular 16+ |
| Backend | .NET Core Web API (7.0) |
| Database | Microsoft SQL Server |
| Hosting | Replit or External (for DB) |
| Auth | JWT-based authentication |

**User Roles**

* **Admin** – Full access, user management
* **Sales Rep** – Lead/client tracking, follow-ups
* **Manager** – Dashboard, performance tracking

**Core Modules & Features**

**1. Leads Management**

* Add/Edit/Delete leads
* Status tracking (New, Contacted, Proposal Sent, Won, Lost)
* Lead source tagging (Web, Referral, LinkedIn, etc.)
* Assignment to sales reps

**2. Clients Management**

* Company profiles with contacts
* Store meeting notes, documents, contracts
* View interaction history (calls, emails, meetings)
* Link with lead history

**3. Activities & Follow-Ups**

* Task and reminder system
* Log meetings, calls, follow-up notes
* Set auto reminders for reps

**4. Dashboard**

* KPIs: total leads, conversion rate, deal stage, top performers
* Charts: Monthly new leads, conversion funnel, win/loss ratio

**5. Data Security**

* Role-based access
* Encrypted storage for sensitive data (emails, notes, files)
* Audit log for changes

**6. Integrations (Phase 2)**

* Email sync (Outlook/Gmail)
* LinkedIn data enrichment
* Calendar scheduling

**Database Schema (SQL Server)**

**users**

user\_id INT PRIMARY KEY IDENTITY,

username NVARCHAR(100) UNIQUE,

email NVARCHAR(150),

password\_hash NVARCHAR(MAX),

role NVARCHAR(50)

**leads**

lead\_id INT PRIMARY KEY IDENTITY,

name NVARCHAR(100),

email NVARCHAR(150),

phone NVARCHAR(20),

source NVARCHAR(50),

status NVARCHAR(50),

assigned\_to INT FOREIGN KEY REFERENCES users(user\_id),

created\_at DATETIME DEFAULT GETDATE()

**clients**

client\_id INT PRIMARY KEY IDENTITY,

company\_name NVARCHAR(150),

industry NVARCHAR(100),

location NVARCHAR(100),

contact\_email NVARCHAR(150),

notes TEXT

**activities**

activity\_id INT PRIMARY KEY IDENTITY,

type NVARCHAR(50), -- Call, Meeting, Email

notes TEXT,

scheduled\_at DATETIME,

related\_to NVARCHAR(50), -- Lead/Client

related\_id INT,

created\_by INT FOREIGN KEY REFERENCES users(user\_id)

**files**

file\_id INT PRIMARY KEY IDENTITY,

client\_id INT FOREIGN KEY REFERENCES clients(client\_id),

file\_name NVARCHAR(255),

file\_url NVARCHAR(500),

uploaded\_at DATETIME DEFAULT GETDATE()

**Frontend (Angular) Pages**

* Login/Register
* Dashboard (admin/manager)
* Leads List + Detail View + Create/Edit
* Clients List + Detail View + Create/Edit
* Activities View + Add Follow-Up
* File Upload
* User Profile

**Security & Auth**

* JWT token-based login
* Passwords hashed with bcrypt or ASP.NET Identity
* Role middleware for access control

**Deployment Setup**

* Host Angular app on Replit (static hosting)
* Host .NET Core Web API on Replit or external VPS (with ngrok or cloud backend)
* Connect to **Microsoft SQL Server (external)** — Azure SQL or hosted DB

**Folder Structure Example**

/backend

- Controllers

- Models

- Services

- appsettings.json

/frontend

- src/app

- components

- services

- models

- angular.json

/database

- init-schema.sql

**MVP Scope (Phase 1)**

* Lead & Client Management
* Activities
* Basic Dashboard
* Authentication
* SQL schema + seed data

**Optional Enhancements**

* Email/calendar sync
* AI-powered lead scoring
* Custom pipeline stages
* In-app notifications
* Dark mode/theme options