

PRODUCT REQUIREMENTS DOCUMENT (PRD)

Product Name: Universal Modular CRM Platform (U-CRM)

Version: 1.0

Platform Type: SaaS | Mobile-First | Modular CRM

Prepared For: Enterprise-Scale Deployment

Document Classification: Developer-Ready & Investor-Ready

1. Product Vision

Vision Statement

To develop a universal, scalable, mobile-first CRM platform capable of supporting diverse business workflows through configurable modules, dynamic forms, role-based access control, and plugin architecture – without requiring code changes.

Problem Statement

Existing CRM platforms are rigid, industry-specific, and require heavy customization or redevelopment to adapt to different operational models.

Modern businesses require a unified system capable of dynamically supporting:

- Lead management
- Sales tracking
- Training operations
- Service management
- Payment tracking
- Communication workflows

All configurable without engineering dependency.

Proposed Solution

The Universal Modular CRM Platform will provide:

- Dynamic lead lifecycle management
- Plugin-based extensible modules
- Mobile-first user interface
- Dynamic roles and permissions
- Workflow automation engine
- Multi-company SaaS architecture

2. Target Users

Role	Description
Admin	Configures platform settings and modules
Manager	Oversees teams and performance
Business Development Executive	Manages leads and conversions.
Trainer	Handles training operations
Accounts	Manages payments and invoicing
Company Owner	Monitors analytics and revenue

3. Product Goals

Goal	Target
Multi-industry support	100% configurable
Mobile usability	100% feature parity
No-code configuration	Fully enabled
System scalability	10M+ records
Response time	< 3 seconds

4. Core Product Principles

The platform must be:

- Mobile-first
- Dynamic
- Modular
- Scalable
- Secure
- Plugin-extensible

5. Core Modules Overview

Module	Purpose
Authentication	Secure login & access
Lead Management	Lead lifecycle tracking
Dynamic Form Builder	Custom field creation
Category Engine	Business vertical structuring
Workflow Engine	Status lifecycle automation
Plugin Engine	Module extensibility
Communication Engine	WhatsApp / Email / SMS
Sales Module	Quotations & invoices
Training Module	Attendance & batches
Payment Module	Financial tracking
Role Management	RBAC controls
Reporting Module	Analytics & exports
Theme Engine	Light/Dark UI
User Management	User provisioning

6. Mobile-First Design Requirements

Objective

Full operational capability via mobile devices.

Functional Mobility

Users must be able to:

- Login
- Create & update leads
- Communicate via WhatsApp/Email
- Generate quotations
- Track payments
- Mark attendance

UI Requirements

Requirement	Description
Responsive design	Mandatory
Touch optimized	Mandatory
Load time	< 2 seconds
Bottom navigation	Required

7. Theme Engine (Light / Dark Mode)

Features:

- Light Mode
- Dark Mode
- System Mode

Theme preferences stored per user and applied globally.

8. Dynamic Role Management

Capabilities:

- Create roles dynamically
- Assign granular permissions
- Edit / delete roles
- No hardcoded access rules

Permission scopes include:

- Lead operations
- Communication
- Finance
- Training

9. Lead Management Module

Lead Capture Sources

- Manual entry
- Dynamic forms
- Excel import
- API integrations

Lead Actions

- Assignment
- Status updates
- Notes logging
- Follow-ups
- Communication triggers

10. Category & Subcategory Engine

Unlimited hierarchical categories.

Example:

Training → Technical

Sales → B2B

Service → Support

11. Dynamic Form Builder

Admin-configurable forms.

Supported fields:

- Text
- Number
- Dropdown
- Date
- File upload

No developer dependency.

12. Workflow Engine

Admin-defined lifecycle stages.

Example pipeline:

New → Contacted → Qualified → Converted

Supports automation triggers.

13. Plugin Module Engine

Enables dynamic module activation.

Example plugins:

- Training
- Sales
- Service

Plugins activate contextually by category.

14. Communication Engine

Channels supported:

- WhatsApp
- Email
- SMS

Features:

- Template messaging
- Automated triggers
- Communication logs

15. Template Engine

Template types:

- WhatsApp
- Email
- SMS
- Quotations
- Invoices

Dynamic variables supported.

16. Sales Module

- Quotation generation
- Invoice generation
- Order management

17. Payment Module

Tracks:

- Advance payments
- Partial payments
- Full settlements

Maintains audit logs.

18. Training Plugin Module

- Batch creation
- Enrollment
- Attendance
- Fee tracking

19. Follow-Up Module

- Schedule reminders
- Notification alerts

20. Reporting & Analytics

Reports include:

- Lead conversion
- Revenue analytics
- User performance

Export formats supported.

21. User Management

- User creation
- Role assignment
- Access governance

22. SaaS Multi-Company Architecture

- Multi-tenant environment
- Company-level data isolation
- Configurable branding

23. Notification Module

- WhatsApp alerts
- Email notifications
- System notifications

24. Security Requirements

- Role-based access control
- Secure authentication
- Data encryption
- Tenant isolation

5. Performance Requirements

Metric	Target
Page load	< 3 sec
API response	< 500 ms
Uptime	99.9%

26. Database Core Entities

companies
users
roles
permissions
leads
categories
forms
form_fields
form_data
workflows
workflow_stages
plugins
quotations
invoices
payments
attendance

templates
communications

27. System Integrations

Integration	Purpose
WhatsApp API	Messaging
Email SMTP	Email delivery
SMS Gateway	Notifications
Payment Gateway	Transactions

28. User Flow

Lead Created

↓

Assigned to BDE

↓

Quotation Sent

↓

Lead Converted

↓

Invoice Generated

↓

Payment Tracked

29. Technical Stack Recommendation (Infrastructure-Aligned)

Backend Environment

- Node.js v16.20 (LTS)
- PHP up to v8.3 supported
- Python 3.6.8 (upgradable to 3.9)
- Apache / Nginx web server
- Composer (latest stable)

Backend Framework Options

- Node.js (Express / NestJS) – Primary
- Laravel (PHP 8.1–8.3) – Alternate

Frontend Stack

- React v18
- Next.js v12 / v13
- TypeScript v5
- Tailwind / Material UI

Mobile-first responsive architecture mandatory.

Database Layer

- MongoDB v4.x
- MySQL v5.7.37

Hybrid usage supported:

Use Case	Database
Dynamic data / forms	MongoDB
Financial records	MySQL

Cache & Queues

- Redis
- Bull / Laravel Queues

Storage

- AWS S3 / Object storage
- Local fallback supported

30. Acceptance Criteria

Feature	Criteria
Mobile usability	Fully functional
Dynamic roles	Configurable
Theme engine	Functional
Plugin activation	Dynamic
Performance	Meets SLA

31. Future Enhancements

- Native mobile application
- AI lead scoring
- Automation workflows
- Advanced analytics

32. Final Outcome

The Universal Modular CRM Platform will operate as a scalable, configurable, enterprise SaaS system capable of supporting multiple industries through dynamic modules and plugin extensibility.