

# AgencyFlow CRM

Software Requirement Specification (SRS) - Version 2.0

## 1. Project Overview

- AgencyFlow CRM is an internal Software Development Agency Management System.
- Roles: Admin, Manager, Developer, Client.
- Features include Project Management, Milestones, Invoicing, WhatsApp Notifications via Exotel, Internal Chat, Activity Logs, and JWT Authentication.

## 2. Role & Permission Structure

- Admin: Full system control, create projects, assign managers/developers, manage payments and analytics.
- Manager: Manage assigned projects, create milestones, communicate with client and developers.
- Developer: Manage assigned tasks, upload files, chat with client and manager.
- Client: View project progress, milestones, invoices, and chat.

## 3. Project Module

- Status Flow: Draft → Active → On Hold → Completed.
- Project Fields: Name, Description, Client, Manager, Developers, Budget, Deadline, Priority, Status.

## 4. Milestone & Payment System

- Milestone Flow: Pending → In Progress → Submitted → Client Approved → Payment Pending → Paid.
- Payment Integration: Razorpay + Manual marking.
- No partial payments.
- Auto reminders via Email and WhatsApp.

## 5. Invoice System

- Integrated with Zoho Invoice (Free Version).
- GST Supported.
- PDF Generation.
- Invoice sent via Email and WhatsApp.
- Full invoice copy stored in CRM database.

## 6. Chat System

- Project-based group chat.
- Features: Real-time messaging, typing indicator, read receipts, file sharing, edit/delete message.
- Stored permanently in MongoDB with activity logging.

## 7. WhatsApp Integration

- Integrated via Exotel API.
- Used for payment reminders, milestone updates, invoice notifications.
- Messages stored in database.

## 8. Security Architecture

- JWT Authentication.
- Role-based Middleware.
- Rate Limiting enabled.
- Activity Logging enabled.
- IP Logging enabled.
- Password Policy: Minimum 8 characters with special character.

## 9. File Management

- Cloudinary for file storage.
- Max file size: 10MB.
- Role-based access control.
- File versioning enabled.

## 10. Reports & Analytics

- Revenue reports.
- Client payment history.
- Project performance reports.
- Export formats: PDF, Excel, CSV.

## 11. Database Architecture

- Multi-tenant ready design (companyId field in collections).
- Collections: Users, Projects, Tasks, Milestones, Invoices, Conversations, Messages, ActivityLogs, WhatsAppLogs, Notifications.

## **12. Deployment Strategy**

- Frontend: Vercel.
- Backend: VPS/AWS EC2 with NGINX.
- Database: MongoDB Atlas.
- Process Manager: PM2 Cluster Mode.
- SSL via Let's Encrypt.

## **13. Scaling Plan**

- Target Users: 200–1000.
- WhatsApp Messages: 2000+ per day.
- Future SaaS-ready architecture.
- Redis can be integrated for chat scaling.