

# ExpoLeads - Complete Developer Requirement Document

## 1. Product Overview

ExpoLeads is a Multi-Tenant SaaS CRM and Lead Automation Platform designed for exhibitions, networking events, conferences, business teams, and sales organizations.

The platform combines:

- Business card scanning
- OCR & AI extraction
- CRM management
- WhatsApp/SMS/Email automation
- QR/NFC digital identity
- Appointment scheduling
- SaaS subscription management
- External CRM integrations
- Public APIs

System Hierarchy:

Super Admin → Admin/Tenant → Users → Leads/Contacts

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## 2. User Roles & Hierarchy

### SUPER ADMIN

- Platform owner/developer
- Controls SaaS platform
- Manages tenants
- Billing & subscription management
- API & system configuration

### ADMIN / TENANT

- Customer organization/company
- Creates users
- Manages leads
- CRM operations
- Campaigns & automation

### USERS

- Employees/team members
- Scan leads
- Follow-ups
- Tasks & activities

### LEADS / CONTACTS

- Customer/prospect database
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## 3. Multi-Tenant SaaS Architecture

Critical Requirements:

- Every database table must contain tenant\_id
- Complete tenant isolation
- RBAC (Role Based Access Control)
- API authentication
- Activity logs

Security:

- JWT authentication
  - Encrypted passwords
  - Session management
  - Rate limiting
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## 4. Super Admin Module

Dashboard:

- Total tenants
- Revenue analytics
- Active subscriptions
- API usage
- Platform growth analytics

Tenant Management:

Fields:

- Company Name
- Admin Name
- Email
- Mobile
- Package
- Status
- Subscription dates

Functions:

- Create/Edit/Delete tenant
- Suspend tenant
- Login as admin
- Reset password

Package Management:

- Free/Starter/Business/Enterprise
- User limits
- Lead limits
- Scan limits
- API access control
- WhatsApp/SMS limits

Billing:

- Invoices
- GST support
- Renewals
- Payment tracking

System Configurations:

- SMTP
- WhatsApp API
- SMS Gateway
- Payment gateways
- OCR API

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## 5. Admin/Tenant Module

Dashboard:

- Leads analytics
- Team performance
- Campaign statistics
- Upcoming follow-ups

User Management:

Fields:

- User Name
- Role
- Department
- Email
- Mobile

Functions:

- Create users
- Assign roles
- Activity logs

Lead Management:

Fields:

- Name
- Company
- Designation
- Mobile
- Email
- LinkedIn
- Address
- Notes
- Tags
- Lead source
- Assigned user

Functions:

- Add/Edit/Delete lead
- Import/export
- Search/filter/sort
- Duplicate merge
- Grouping

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## 6. Business Card Scanning Module

Features:

- Single card scan
- Bulk scanning
- OCR extraction
- AI field mapping
- Gallery upload
- Camera capture

Extracted Fields:

- Name
- Company
- Phone
- Email
- Website
- Address
- LinkedIn

Functions:

- Auto-save lead
  - Duplicate detection
  - Save to phone contact
  - Manual correction
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## 7. CRM & Sales Pipeline

Pipeline Stages:

- New Lead
- Contacted
- Interested
- Proposal Sent
- Negotiation
- Won/Lost

Features:

- Kanban board
  - Tasks
  - Notes
  - Follow-up tracking
  - Attachments
  - Revenue forecasting
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## 8. Communication & Automation

WhatsApp:

- Single/bulk campaigns
- Templates
- Media support

Email:

- SMTP
- Bulk campaigns
- HTML templates

SMS:

- Promotional & transactional

Automation:

Triggers:

- Lead created
- Status updated
- Meeting scheduled

Actions:

- Send WhatsApp
- Send Email
- Send SMS
- Create task
- Schedule reminder

Festival campaigns:

- Diwali
  - New Year
  - Holi
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## 9. QR & NFC Module

QR Features:

- Generate QR
- Scan QR
- Share profile

NFC Features:

- Write NFC
- Read NFC
- Share digital profile

Functions:

- Auto create lead
  - Trigger automation
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## 10. Appointment & Calendar Module

Features:

- Meeting scheduling
- Google Calendar sync
- Notifications
- Reminder alerts

Fields:

- Meeting title
  - Date
  - Time
  - Attendees
  - Notes
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## 11. Digital Business Card Module

Features:

- Digital profile
- QR sharing
- NFC sharing

- Branding templates
- Social links

Fields:

- Name
  - Company
  - Logo
  - Email
  - Mobile
  - Website
  - Social links
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## 12. Dashboard & Analytics

Analytics:

- Lead sources
- Conversion ratio
- User performance
- Campaign reports
- Revenue reports
- Event analytics

Charts:

- Daily leads
  - Monthly conversions
  - Team performance
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## 13. External CRM API Integrations

Supported Integrations:

- Zoho CRM
- HubSpot CRM
- Pipedrive
- Salesforce
- Freshsales
- Custom CRM APIs

Features:

- Push leads
  - Pull contacts
  - Sync notes
  - Sync activities
  - Webhooks
  - Real-time sync
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## 14. Public API Access

Tenant/Admin APIs:

- REST APIs

- API keys/tokens
- Webhooks
- API logs
- Usage tracking

Package-wise Access:

- Free → No API
- Starter → Limited API
- Business → CRM integrations
- Enterprise → Full API + Webhooks

Super Admin Controls:

- Enable/disable API
  - Request limits
  - Token revoke
  - API monitoring
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## 15. Recommended Tech Stack

Mobile:

- Flutter

Backend:

- Laravel OR Node.js

Frontend:

- React.js/Vue.js

Database:

- MySQL/PostgreSQL

Cloud:

- AWS
  - Google Cloud
  - DigitalOcean
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## 16. Security & Scalability

Security:

- HTTPS
- Encrypted passwords
- Role permissions
- Audit logs

Scalability:

- Queue jobs
  - Cloud storage
  - Multi-tenant architecture
  - Backup & disaster recovery
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## 17. Final Vision

ExpoLeads is a Lead Acquisition Operating System.

Workflow:

Capture Lead → Store in CRM → Automate Communication → Track Activity → Convert Opportunity → Analyze Performance

Core focus:

- Offline networking
  - Digital automation
  - Revenue conversion
  - Mobile-first CRM experience
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