

# Merchant Complaint Management Application

---

## 1. Overview

### Purpose

To provide merchants a simple and reliable application to log, track and resolve complaints or service requests related to devices, payments, advertisements, or any other issues.

### Scope

- Mobile App (Android & iOS) for merchants
  - Web-based Admin Panel for support team
  - RESTful API backend
- 

## 2. Stakeholders

Role	Responsibilities
Merchant	Register/login, raise complaints, upload evidence, track status
Support Agent	View, assign, update complaints, resolve issues
Admin	Manage categories, SLAs, users, and reports

---

## 3. Functional Requirements

### 3.1 Merchant App

#### Authentication & Profile

- Login via mobile number + OTP.
- **First-time login:** Merchant must provide mandatory details:
  - Merchant Name
  - Merchant ID (if available)
  - Contact Number
  - Business Name / Address (optional)
- After submission, details saved on backend and used to pre-fill forms for future logins.

- Profile view & edit feature to update these details later.

### **Complaint Submission**

- Form fields:
  - Merchant Name (pre-filled from profile)
  - Merchant ID (pre-filled from profile)
  - Contact Number (pre-filled from profile)
  - Select Device/Order ID (dropdown or QR scan)
  - Complaint Category (dropdown: Device Issue, Payment Issue, Ad Management Issue, Billing, Other)
  - Short Description (text area)
  - Attach Photos/Videos (multiple files)
  - Priority Level (Normal/Urgent)
- Submit button generates Ticket ID and confirmation message.

### **Complaint Tracking**

- “My Complaints” screen listing:
  - Ticket ID
  - Date Raised
  - Category
  - Status (Open/In-Progress/Resolved/Closed)
  - SLA countdown indicator
- Detail view with history, updates, and chat with support.

### **Notifications**

- SMS and Push Notifications for:
  - Ticket creation
  - Status change
  - Resolution
- In-app notification center.

### **Feedback**

- Prompt for rating (1–5) and comments after resolution.
- 

## **3.2 Admin / Support Panel**

### **Login**

- Role-based authentication.

### **Ticket Management**

- Dashboard:
  - Open Tickets
  - In-progress Tickets
  - SLA Breaches
  - Filter by category, status, priority
- Ticket Detail View:
  - Merchant details
  - Issue details
  - Attachments
  - Status update (Open/In-progress/Resolved/Closed)
  - Add internal notes
  - Assign to agent

### **Configuration Management**

- Manage Complaint Categories
- Manage Priority Levels
- Manage SLAs (response/resolution time per category)
- Manage Merchant Profiles

### **Reports & Analytics**

- Ticket Volume by category
- SLA compliance reports
- Agent performance
- Feedback scores

---

### 3.3 Backend / API

- REST/GraphQL API for mobile app and admin panel.
- JWT-based authentication.
- Data model:
  - Merchants (created on first login)
  - Devices/Orders
  - Complaints
  - Status Updates
  - Attachments
- Integration with SMS/Email gateway for notifications.

---

### 4. Non-Functional Requirements

Area	Requirement
Security	Data encryption in transit (HTTPS); Role-based access
Performance	<2s response time for main API calls
Scalability	Handle 10,000+ merchants simultaneously
Availability	99.5% uptime
Data Storage	Cloud-based database with daily backup
Audit Logs	All ticket updates logged

---

### 5. User Interface Guidelines

- Clean, minimalistic UI.
- Mobile-first design.
- Dropdowns for categories to avoid typing errors.
- Large “Submit Complaint” button.
- Use icons for attachment upload and status.

---

## 6. Assumptions

- No existing master database of merchants; details collected at first login and stored on backend.
  - Merchant profile info validated via OTP to ensure authenticity.
  - SMS/Email service provider available for notifications.
  - Support team already has defined SLAs.
- 

## 7. Future Enhancements

- WhatsApp integration for ticket updates.
- AI-based issue categorization.
- Multi-language support.
- Offline complaint submission with later sync.

This shows:

- Merchant uses the **mobile app** to log in and raise complaints.
- App talks to the **Backend/API Server** for authentication, profile saving, ticket creation.
- Backend notifies **Support Team/Admin Panel** with the new ticket.
- Support updates status → backend → app → merchant sees real-time updates.

