

Client Requirement Document

RO Purifier Service Management System (Web & Mobile Application)

1. Client Overview

Client Type: RO Purifier Sales & Service Company
Business Domain: Water Purifier Installation, Service & Maintenance
Application Type: Web Application + Mobile Application

The client requires a centralized digital system to manage RO purifier customers, service schedules, technicians (service men), and automated service reminders.

2. Business Problem Statement

Currently, the client manages RO service schedules manually using phone calls, notebooks, or spreadsheets. This leads to: - Missed or delayed service reminders - Poor tracking of customer service history - No automated follow-up after 3 months - Difficulty managing multiple service technicians

The client wants a **reliable, automated, and easy-to-use system** to handle these challenges efficiently.

3. Project Objective

The main objective of this project is to: - Digitize RO purifier service management - Allow service men to manually update service dates - Automatically notify customers and admin after every **3 months** - Provide role-based access through web and mobile applications

4. Stakeholders

Stakeholder	Role
Company Owner	Project Sponsor
Admin Team	System Administrators
Service Man	Field Technicians
Customers	End Users

5. User Roles & Access

5.1 Admin

Admin has full control over the system.

Admin Requirements: - Login with secure credentials - Add, edit, and manage customers - Add and manage service men - Assign customers to service men - View all service records - Receive service due notifications - Configure reminder duration (default: 3 months)

5.2 Service Man

Service Man uses mainly the **mobile application**.

Service Man Requirements: - Secure login - View assigned customers - Manually update service dates after service - Add service remarks - Mark service as completed

5.3 Customer

Customer uses both **mobile app and website**.

Customer Requirements: - View next service due date - View service history - Receive service reminders - Update basic profile details

6. Functional Requirements

6.1 Authentication & Security

- Role-based login (Admin / Service Man / Customer)
 - Secure password storage
 - OTP-based login for customers (optional)
-

6.2 Customer Management

- Store customer details:
 - Name
 - Mobile Number
 - Address
 - RO Model
 - Installation Date

- Last Service Date
 - Edit and deactivate customers
-

6.3 Service Management

Core Requirement: - Service Man manually updates service date after each service - System auto-calculates next service date = Service Date + 3 Months

Service data includes: - Service date - Next service due date - Service notes - Service man details

7. Notification & Reminder Requirements

7.1 Reminder Logic

- Automatic reminder every **90 days (3 months)**
- Reminder alerts:
 - Before due date
 - On due date
 - After due date (if not serviced)

7.2 Notification Recipients

- Customer
- Admin Team

7.3 Notification Channels

- Mobile push notification
 - SMS
 - Email (optional)
-

8. Web Application Requirements

Target Users: Admin & Customers

Features: - Admin dashboard - Customer dashboard - Service reports - Responsive design for desktop and mobile browsers

9. Mobile Application Requirements

Target Users: Service Man & Customers

Features: - Easy service update screen - Push notifications - Offline support (optional) - Camera access for service proof (optional)

10. Non-Functional Requirements

10.1 Performance

- System should support 10,000+ customers
- Fast notification delivery

10.2 Security

- Secure APIs
- Role-based access control

10.3 Reliability

- Daily database backups
 - Error logging and monitoring
-

11. Assumptions & Constraints

Assumptions: - Customers have valid mobile numbers - Internet connectivity available for service updates

Constraints: - Initial version excludes online payment - Multi-language support optional

12. Future Enhancements

- AMC plan management
 - Online payment integration
 - WhatsApp reminder integration
 - Automatic technician assignment
-

13. Acceptance Criteria

The project will be considered successful when: - Service men can update service dates - Customers and admins receive reminders after 3 months - Admin can monitor all services - System works on both web and mobile platforms

14. Conclusion

This Client Requirement Document clearly defines the expectations, scope, and functionality of the RO Purifier Service Management System. The solution will help the client improve operational efficiency, customer satisfaction, and service reliability.