RepairHub (Placeholder name) Product Requirements Document (PRD)

Introduction

RepairHub is an all-in-one repair shop management platform designed to simplify workflows, enhance customer service, and improve operational efficiency. Our system provides seamless repair tracking, inventory management, invoicing, and customer interactions, all within an intuitive interface. Built for mobile repair shops, computer repair businesses, and other service-oriented repair companies, RepairHub ensures smooth daily operations without unnecessary complexities.

User Stories

Understanding user interactions is key to designing a system that meets their needs. Below are the primary actions that admins and customers will perform within RepairHub.

Admin User Stories

1. **Creating a repair ticket** – Admins must be able to record repair requests (tickets), ensuring all customer and device details are logged correctly.
2. **Assigning repair jobs** – If a technician module is introduced, admins should be able to delegate repairs to specific team members.
3. **Updating repair status** – The system should allow admins to update repair statuses to keep customers informed of progress.
4. **Automating customer notifications** – SMS and email alerts should be sent to customers at key repair stages to improve communication.
5. **Generating invoices** – Once a repair is completed, an invoice should be generated for payment processing.
6. **Issuing receipts** – The system should automatically generate receipts upon payment confirmation for record-keeping.

Customer User Stories

1. **Submitting a repair request in-store** – Customers should be able to visit the store, provide device details, and have a repair ticket created.
2. **Submitting a repair request online** – Customers should be able to request repairs online using a simple form.
3. **Tracking a repair using a tracking ID** – The system should provide a unique tracking number that customers can use to check repair progress.
4. **Receiving notifications** – Customers should be updated via SMS or email when their device status changes.

5. **Paying invoices online** – Customers should be able to complete payments digitally for convenience.
6. **Getting a final notification upon repair completion** – A message should be sent when the device is ready for collection.

Core Features

Repair Management

- Create and assign repair tickets effortlessly.
- Generate tracking ID on creation of new repair order
- Track repair progress and history in real-time.
- Electronically sign repair tickets for a paperless process.
- Customize terms and conditions for repair work.
- Convert completed repair tickets into invoices with one click.

Required Fields:

- Customer Name
- Contact Information (Phone, Email) (with proper error messaging)
- Device Details (Brand, Model, IMEI/Serial Number, Condition)
- Issue Type (dropdown - eg screen, keyboard, hdd failure, etc options set by admin)
- Issue Description
- Estimated Cost & Time (logic generated)
- Assigned Technician (allow for future development. Set default to storename eg. firstangle)
- Repair Status (default - Pending, In Progress, Completed, Cancelled)
- Customer Signature (if applicable)

Customer-Facing Portal

- Customers can track their repair status online.
- Receive automated SMS and email notifications for updates.
- View invoices and make secure online payments.
- Book new repair requests with ease - order request form.

Required Fields:

- Order Tracking ID - FA 244353646 NG -(Suffix and Prefix 4 character alphabets)
- Device & Repair Status
- Estimated Completion Date
- Payment Status & Invoice Details

- Contact Support Option

Admin Panel

- Manage business settings, inventory, and repair workflows.
- Configure system-wide notifications and alerts.
- Track repair ticket status and technician performance.
- Generate sales and repair history reports for business insights (repairs per week, income per week, cancellations per week).

Required Fields:

- Technician Assignments
- Inventory Usage & Stock Alerts
- Repair Reports & Analytics
- Sales & Revenue Data
- System Logs & Activity History

User Roles & Workflow

Admin Workflow

- Accept repair requests from walk-in customers.
- Record repair details and update progress at each stage.
- Notify customers as repairs progress.
- Close tickets upon completion and generate invoices or receipts.
- Maintain records for future reference and reporting.

Required Fields:

- Customer & Device Information
- Repair Ticket Details & Updates
- Payment & Invoice Records
- Notifications Sent to Customer

Customer Workflow

- Drop off their device for repair.
- Or book online
- Receive a tracking ID for real-time status updates.
- Get automated notifications via SMS/email.
- View invoices and make payments online.
- Pick up repaired devices once notified.

Required Fields:

- Customer ID / Order Number
- Device & Repair Status
- Invoice & Payment Confirmation
- Notifications Received

System Overview

Technology Stack:

- **Frontend:** React.js / Vue.js
- **Backend:** Django
- **Database:** PostgreSQL / MySQL
- **Hosting:** VPS/AWS
- **Mobile Support:** Progressive Web App (PWA) with future native app expansion.

MVP Scope

The initial launch will focus on:

- User authentication & role management (Super Admin (Delete), Admin (cannot delete) & Customer only).
- Repair ticket creation and lifecycle tracking.
- Customer portal for repair tracking and notifications.
- Basic reporting for admins.
- Secure invoice generation and payment processing.

MVP Scope & Breakdown

Phase 1: Planning & Setup

- Define system requirements and database schema.
- Set up the backend, frontend, and database environments.

Phase 2: User Authentication & Core Features

- Implement user authentication and role-based access control.
- Develop the repair ticket management module.
- Implement repair status tracking.

Phase 3: Customer Portal & Notifications

- Build the customer portal for repair tracking.
- Set up automated SMS/email notifications.
- Enable customers to submit repair requests online.

Phase 4: Inventory, Invoices & Deployment

- Implement inventory tracking and low-stock alerts.
- Develop invoice and receipt generation.
- Enable secure online payment processing.
- Conduct internal testing and deploy the MVP.

Suggested Database Schema (Developer can develop further based on need of the project)

Tables & Relationships:

1. **Users** (Admin, Customer)
    - `id` (Primary Key)
    - `name`
    - `email`
    - `phone_number`
    - `role` (superadmin, admin/customer)
    - `Password_hash`

2. **Repair Tickets**
    - `id` (Primary Key)
    - `customer_id` (Foreign Key -> Users)
    - `device_brand`
    - `device_model`
    - `device_imei_number`
    - `device_serial_number`
    - `issue_description`
    - `status` (Pending, In Progress, Completed, Cancelled)
    - `created_at`
    - `updated_at`
3. **Inventory**
    - `id` (Primary Key)
    - `part_name`

    - `quantity_available`
    - `low_stock_threshold`
    - `supplier_info`
4. **Invoices**
    - `id` (Primary Key)
    - `repair_ticket_id` (Foreign Key -> Repair Tickets)
    - `amount_due`
    - `payment_status` (Pending, Paid)
    - `created_at`
5. **Notifications**
    - `id` (Primary Key)
    - `user_id` (Foreign Key -> Users)
    - `message`
    - `sent_at`

Workflow in Words

Customer Portal - Create New Repair Request (creation to payment) - Track Repair Request (using tracking ID) - Customer Support Form

Admin Portal - CRUD Repair Requests - Manage Payment - Manage Invoicing - User management, Inventory Management - Customer Support Management

System Setting Field

Future Enhancements

- AI-based repair cost estimation.
- Augmented reality (AR) troubleshooting assistant.
- Technician tracking & auto-scheduling optimization.
- iOS & Android mobile apps.
- Custom branding & white-label solutions.

Conclusion

RepairHub is designed to provide a seamless, easy-to-use solution for repair businesses. By integrating repair tracking, inventory management, sales, and reporting into a single platform, we empower businesses to enhance efficiency and customer satisfaction with minimal learning curves.

Super Admin – 0

Admin – 1

Techn - 2

Customer - 3