

Job Work Management System - Wireframe Documentation

For Indian Car Service Centers

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System Overview

Primary Users

1. **Admin** - Full system access, reporting, configuration
2. **Job Creator/Service Advisor** - Creates job cards, manages workflow
3. **Customer** - Views service status, history, approvals

Platform Priority

- **Primary:** Tablet & Mobile (for Service Advisors and Technicians)
- **Secondary:** Web Dashboard (for Admin and Reporting)
- **Customer:** Mobile App (for tracking and approvals)

Key Features

- Offline-first architecture with automatic sync
 - Digital job card management
 - Real-time status tracking
 - GST-compliant invoicing
 - Media capture (photos/videos)
 - Digital approvals and signatures
-

User Roles & Access

Admin Access

- Full system configuration
- User management
- Reporting & analytics
- Financial overview
- Multi-branch management
- Inventory overview

Job Creator/Service Advisor Access

- Create/Edit job cards
- Customer management
- Vehicle check-in/out
- Assign technicians
- Generate estimates
- Process payments

Customer Access

- View job status
- Service history
- Digital approvals
- Payment processing
- Appointment booking
- Feedback submission

Technology Architecture

Database Architecture

Primary Database: PostgreSQL/MySQL (Cloud)

Local Database: SQLite (Device)

Sync Strategy:

- Bidirectional sync with conflict resolution
- Last-write-wins for most fields

- Version tracking for critical data
- Queue-based sync for offline changes

Security Implementation

- AES-256 encryption for data at rest
- TLS 1.3 for data in transit
- JWT tokens with refresh mechanism
- Biometric authentication support
- Role-based access control (RBAC)
- Session timeout after 30 minutes of inactivity

Mobile App Pages & Wireframes

1. LOGIN SCREEN

The wireframe illustrates the layout of the login screen:

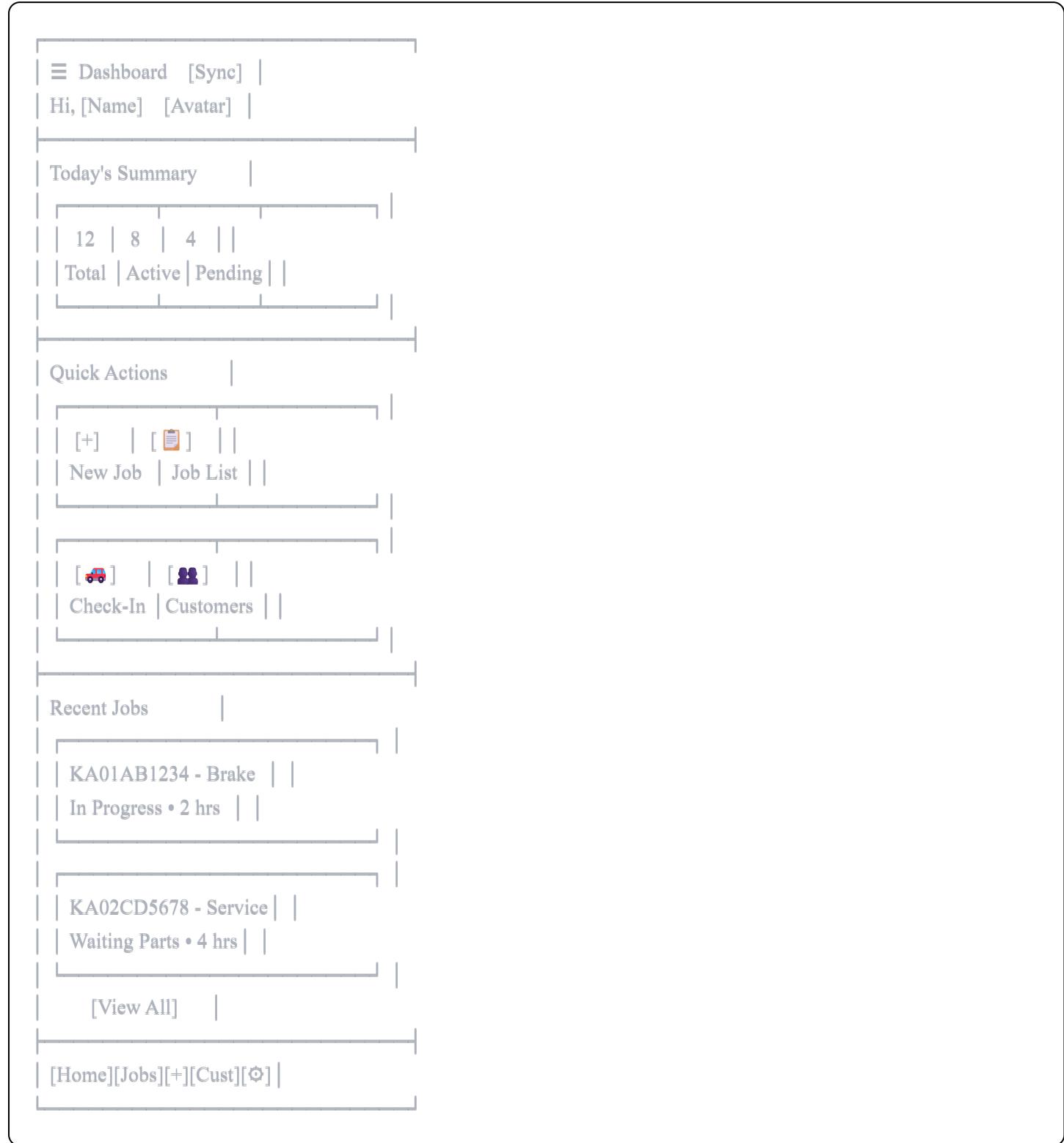
- [App Logo] positioned at the top left.
- Service Center Pro text below the logo.
- Mobile/Email input field with placeholder text and a required validation message.
- Password input field with placeholder text and a required validation message.
- [✓] Remember Me checkbox.
- LOGIN button at the bottom of the form area.
- [Fingerprint] Use Bio link below the login button.
- Forgot Password? link below the bio link.
- OR separator line.
- [Login with OTP] link at the bottom right.

Fields:

- Mobile/Email (Required, Validation: 10 digits/email format)

- Password (Required, Min 8 chars)
- Biometric option (if available)

2. DASHBOARD (Service Advisor)



Features:

- Offline indicator/Sync status
- Real-time job statistics
- Quick action buttons

- Recent job cards with status

3. NEW JOB CARD CREATION

← New Job Card [✓]	
Customer Info [🔍]	
Phone: 98765****	
Name: Auto-fill	
Email: Optional	
Vehicle Details	
Reg No: KA01AB1234	
Make: ▼	Model: ▼
Year: ▼	Color: ▼
VIN/Engine:	
ODO: km	Fuel: ▼
[Continue →]	

← Job Card (2/4) [✓]

Customer Complaints

Describe issues...

(Voice input 

Vehicle Inspection

[] Front View

[] Left Side

[] Right Side

[] Rear View

[+ Add More Photos]

Existing Damage Notes

Mark on diagram or
describe...

[← Back] [Continue →]

Page 3: Service Selection

[← Job Card \(3/4\) \[✓\]](#)

Service Type

General Service

Brake Service

Engine Repair

AC Service

Wheel Alignment

Custom Work

AI Recommendations [\[?\]](#)

Based on 45000 km:

- Oil Change - Due
- Air Filter - Due
- Brake Pads - 70% worn

[\[Accept All\]](#)

Estimated Cost

Labor: ₹ _____

Parts: ₹ _____

Est. Time: [2] hours

Assign To:

[\[▼ Select Technician\]](#)

[\[← Back\]](#) [\[Continue →\]](#)

← Job Card (4/4) [✓]

Job Summary

Job ID: #JC2024001234

Customer: Mr. Singh

Vehicle: KA01AB1234

Maruti Swift 2019

Services:

- General Service
- Oil Change
- Air Filter Replace

Estimate: ₹4,500

Time: 2-3 hours

Technician: Raju

Customer Signature

[Draw here]

[Clear]

Terms & Conditions

[✓] Customer accepts T&C

[← Back] [Create Job ✓]

4. JOB LIST VIEW

← Active Jobs (12) [🔍]

[All][Active][Pending]

[Completed][Delivered]

Sort: [Recent ▼]

#JC2024001234



KA01AB1234

Mr. Singh
Swift - Service
Tech: Raju • 2 hrs
[View] [Update]

#JC2024001233 
KA05XY9876
Ms. Sharma
i20 - Brake Issue
Parts Pending
[View] [Update]

#JC2024001232 
KA03PQ4567
Mr. Kumar
City - Engine
Awaiting Approval
[View] [Update]

Status Indicators:

-  Active/In Progress
-  Waiting/Pending
-  Urgent/Approval Needed
- ✓ Completed

5. JOB DETAIL VIEW

← Job #JC2024001234 [:]

Status: In Progress

[—————o———] 70%

Customer [Call]

Mr. Singh

 9876543210

 singh@email.com

Vehicle

KA01AB1234

Maruti Swift 2019

ODO: 45,000 km

Timeline

- Check-in: 10:00 AM
- Started: 10:30 AM
- Est. Ready: 1:00 PM

Work Progress

- [✓] Oil Change
- [✓] Filter Replace
- [○] Brake Check
- [] Wash & Polish

[Add Note] [Add Part]

[Update Status]

[Generate Invoice]

6. CUSTOMER CHECK-OUT

← Check-Out [Print]

Job #JC2024001234

Final Invoice

Services Performed:

- Oil Change - ₹1,200
- Air Filter - ₹400
- Labor - ₹900

Subtotal: ₹2,500

GST (18%): ₹450

Total: ₹2,950

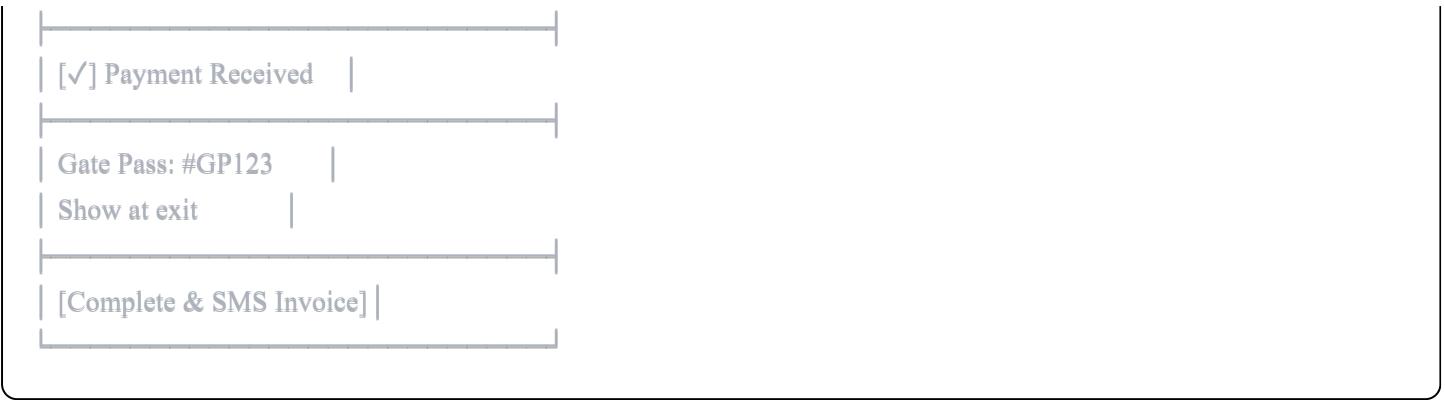
Payment Method:

[Cash][Card][UPI][Later]

UPI Payment:

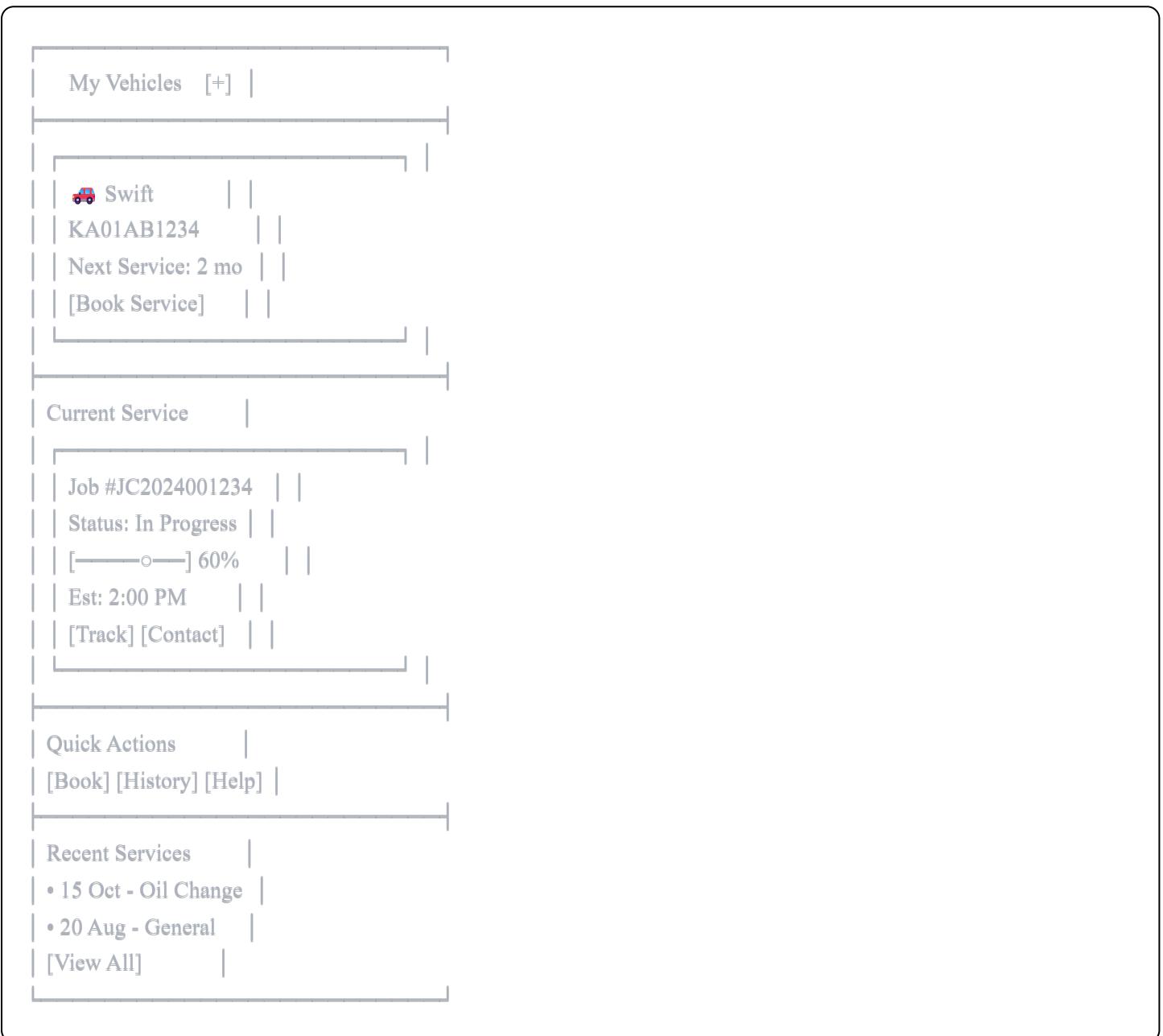
[QR Code]

Scan to Pay ₹2,950



Customer Mobile App Pages

7. CUSTOMER DASHBOARD



8. SERVICE TRACKING



Job #JC2024001234
Swift KA01AB1234

Live Status

✓ Vehicle Received

10:00 AM

✓ Inspection Done

10:30 AM

[View Report]

○ Service In Progress

Started 11:00 AM

60% Complete

○ Quality Check

Pending

○ Ready for Delivery

Est: 2:00 PM

Need Help?

[Call] [Chat] [Visit]

9. DIGITAL APPROVAL

← Approval Required

Additional Work Needed

During inspection:

- Brake pads worn (70%)

Recommend replace

Cost: ₹2,500

[Photo Evidence]

- Battery weak

May fail soon

Cost: ₹3,500

[Test Report]

Your Decision:

[✓] Brake Pads

[] Battery	
New Total: ₹7,450	
(Original: ₹4,950)	
[Decline All]	
[Approve Selected ✓]	

Tablet Interface Wireframes

10. TABLET SPLIT VIEW (Landscape)

Service Center Pro		[Sync] [User Menu]
Jobs List	Job Details	
[+New Job]	#JC2024001234	
KA01AB1234 - Swift		
Filter: [▼]		
Customer: Mr. Singh		
#JC20241234	9876543210	
KA01AB1234		
In Progress	Status Timeline:	
[✓]—[✓]—[○]—[]—[]		
#JC20241233	Work Items:	
KA05XY9876		
Pending	✓ Oil Change	
✓ Filter Replace		
○ Brake Inspection		
#JC20241232	○ Wheel Alignment	
KA03PQ4567		
Completed		
[Update] [Invoice] [Close]		

11. TABLET CHECK-IN KIOSK MODE

Welcome to XYZ Service Center
[Vehicle Check-In]

Enter Registration Number:

K	A	0	1	A	B	1	2	3	4

Mobile Number:

98765				

[Proceed to Check-In →]

— OR —

[Scan QR from Appointment]

Web Dashboard Wireframes

12. ADMIN DASHBOARD (Web)

[Logo] Service Center Pro [] [Settings] [Admin ▼] |

MENU | Dashboard Overview |

Dashboard |

Jobs	Today	Week	Month	Year
Customers	24	156	623	7.2K
Vehicles	Jobs	Jobs	Jobs	Jobs
Staff				

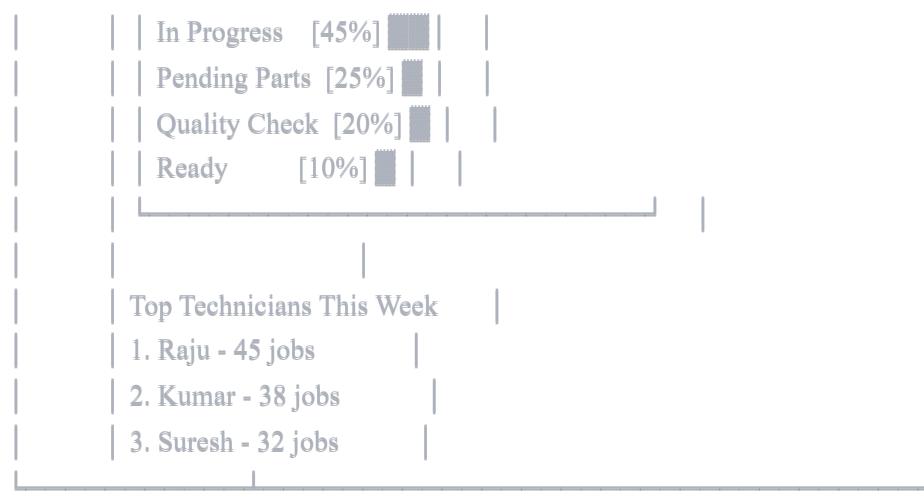
Inventory |

Finance | Revenue Chart |

Reports |

Settings | Graph Here | |

Active Jobs by Status |



13. DETAILED REPORTS PAGE (Web)

Reports	[Export]	[Print]		
Date Range: [01/01/24 ▼] to [31/01/24 ▼]				
Type: [All Services ▼] Status: [All ▼]				
Summary Statistics				
Total Jobs: 156	Revenue: ₹4,52,000			
Avg TAT: 3.2 hrs	Customer Sat: 4.5/5			
Detailed Report				
Job	Vehicle	Customer	Service	Amount
234	KA01AB1234	Mr Singh	General	₹2,950
233	KA05XY9876	Ms Sharma	Brake	₹4,500
232	KA03PQ4567	Mr Kumar	Engine	₹8,750
[← Previous] Page 1 of 10 [Next →]				
Analytics				
<ul style="list-style-type: none"> Most Common Service: General (45%) Peak Hours: 10 AM - 12 PM Average Bill: ₹2,900 Repeat Customers: 67% 				

Form Specifications

Customer Registration Form

Fields:

- Full Name* (Text, Min 3 chars)
- Mobile* (Number, 10 digits, Unique)
- Alternate Mobile (Number, 10 digits)
- Email (Email validation)
- Address Line 1 (Text)
- Address Line 2 (Text)
- City* (Dropdown/Text)
- State* (Dropdown - Indian states)
- Pincode* (Number, 6 digits)
- GST Number (Optional, Validation)
- Customer Type (Individual/Corporate)
- Preferred Communication (SMS/Email/WhatsApp)

Vehicle Registration Form

Fields:

- Registration Number* (Pattern: KA01AB1234)
- Make* (Dropdown - Maruti, Hyundai, Honda, etc.)
- Model* (Dependent dropdown based on Make)
- Year* (Year picker, 1990-current)
- Variant (Petrol/Diesel/CNG/Electric)
- Color (Dropdown)
- VIN/Chassis Number* (Alphanumeric, 17 chars)
- Engine Number (Alphanumeric)
- Insurance Expiry (Date picker)
- PUC Expiry (Date picker)
- Last Service Date (Date)
- Last Service KM (Number)

Job Card Form

Sections:

1. Customer & Vehicle (Auto-populated)

2. Current Readings:

- Odometer* (Number)
- Fuel Level* (Slider 0-100%)
- Check-in Time (Auto timestamp)

3. Customer Complaints:

- Description* (Textarea, Voice input)
- Urgency (Low/Medium/High/Critical)

4. Inspection Checklist:

- Exterior (Good/Average/Poor + Notes)
- Interior (Good/Average/Poor + Notes)
- Engine (Good/Average/Poor + Notes)
- Battery (Voltage reading)

- Tyres (Tread depth for each)
- Brakes (Percentage worn)
- Fluids (Levels for each type)

5. Recommended Services:

- Service Type (Multiple select)
- Parts Required (Dynamic list)
- Labour Hours (Number)
- Cost Estimate (Auto-calculated)

6. Assignment:

- Primary Technician* (Dropdown)
- Secondary Technician (Optional)
- Bay Number (Dropdown)
- Priority (Normal/High/Urgent)
- Estimated Completion* (DateTime)

Invoice Form

Fields:

- Invoice Number (Auto-generated)
- Invoice Date (Auto)
- Job Card Reference*
- Customer Details (Auto-populated)
- Vehicle Details (Auto-populated)

Line Items:

- Description
- Quantity
- Rate
- Discount %
- GST %
- Amount

Totals:

- Subtotal
- Total Discount
- Taxable Amount
- CGST (9%)
- SGST (9%)
- Grand Total

Payment:

- Payment Method (Cash/Card/UPI/Cheque/Credit)
- Transaction Reference
- Payment Status (Paid/Partial/Pending)

Security & Offline Architecture

Data Sync Strategy

1. Initial Sync:

- Download master data (customers, vehicles, parts)
- Cache last 30 days of job cards
- Store user preferences

2. Offline Mode:

- Queue all CREATE operations
- Queue all UPDATE operations
- Block DELETE operations
- Generate temporary IDs

3. Sync Process:

- Check connection every 30 seconds
- On reconnection:
 - a. Upload queued changes
 - b. Resolve conflicts (last-write-wins)
 - c. Download updates from server
 - d. Update local IDs with server IDs

4. Conflict Resolution:

- Timestamp-based for most fields
- Version numbers for critical data
- Manual resolution for payment data

Security Implementation

1. Authentication:

- JWT tokens (15 min expiry)
- Refresh tokens (7 days)
- Biometric for quick login
- OTP for password reset

2. Data Protection:

- AES-256 for local storage
- Certificate pinning for API
- No sensitive data in logs
- Automatic logout on idle

3. Access Control:

- Role-based permissions
- Feature-level access
- Data-level filtering

- Audit trail for all actions

4. Compliance:

- PII data encryption
- Right to deletion
- Data portability
- Regular security audits

Performance Optimization

1. Database:

- SQLite with indexes
- Pagination (20 items)
- Lazy loading for images
- Background sync

2. UI Performance:

- Virtual scrolling for lists
- Image compression
- Cached calculations
- Debounced search

3. Network:

- Delta sync only
- Compressed payloads
- Batch operations
- Retry with exponential backoff

API Endpoints Structure

Core Endpoints

Authentication:

```
POST /api/auth/login  
POST /api/auth/refresh  
POST /api/auth/logout  
POST /api/auth/otp
```

Job Cards:

```
GET /api/jobs  
POST /api/jobs  
GET /api/jobs/:id  
PUT /api/jobs/:id  
PATCH /api/jobs/:id/status  
POST /api/jobs/:id/photos
```

Customers:

```
GET /api/customers  
POST /api/customers  
GET /api/customers/:id  
PUT /api/customers/:id  
GET /api/customers/:id/vehicles  
GET /api/customers/:id/history
```

Vehicles:

```
GET /api/vehicles  
POST /api/vehicles  
GET /api/vehicles/:id  
PUT /api/vehicles/:id  
GET /api/vehicles/:id/history
```

Sync:

```
POST /api-sync/push  
GET /api-sync/pull  
GET /api-sync/status  
POST /api-sync/resolve
```

Testing Checklist

Offline Scenarios

- Create job card offline
- Edit job card offline
- Queue multiple operations
- Handle sync conflicts
- Verify data integrity after sync

Security Testing

- SQL injection attempts
- XSS prevention
- Session management
- Role-based access
- Data encryption verification

Performance Testing

- Load 1000+ job cards
- Simultaneous user access
- Large image uploads
- Slow network conditions
- Battery consumption monitoring

User Acceptance

- Job card creation flow
 - Customer check-in process
 - Digital approval workflow
 - Invoice generation
 - Payment processing
 - Report generation
-

Implementation Phases

Phase 1 (MVP - 2 months)

- Basic authentication
- Job card CRUD
- Customer management
- Simple invoicing
- Offline support for job cards

Phase 2 (1 month)

- Digital inspections
- Photo/video capture
- Customer portal
- SMS/Email notifications
- Advanced search

Phase 3 (1 month)

- AI recommendations
- Analytics dashboard
- Inventory tracking
- Multi-branch support
- Advanced reporting

Phase 4 (1 month)

- Integration APIs
- Advanced security features
- Performance optimization
- Backup & restore

- Training & documentation
-

Appendix

GST Compliance for Indian Market

- HSN codes for services
- Proper tax calculation ($\text{CGST} + \text{SGST} = 18\%$)
- E-invoice generation capability
- GSTIN validation
- Tax reports for filing

Indian Payment Methods

- UPI integration (PhonePe, GPay, Paytm)
- Card payment gateway (Razorpay/Paytm)
- Cash handling with denomination entry
- EMI options for high-value services
- Digital receipt via WhatsApp

Localization Requirements

- Hindi language support
- Regional language options (Tamil, Telugu, etc.)
- Indian vehicle makes/models database
- Indian phone number validation (+91)
- Festival greeting automations

Hardware Considerations

- Tablet: Minimum 10" screen, 4GB RAM
 - Mobile: Android 6.0+, iOS 12+
 - Printer: Thermal printer for receipts
 - Scanner: QR/Barcode scanner support
 - Network: 4G/WiFi with fallback to 2G
-

Conclusion

This comprehensive wireframe documentation provides a complete blueprint for developing a Job Work Management System tailored for Indian car service centers. The system emphasizes offline-first architecture,

ensuring continuous operation even in areas with poor connectivity, while maintaining robust security and data integrity.

Key success factors:

1. Simple, intuitive UI for non-technical users
2. Comprehensive offline support with smart sync
3. Indian market-specific features (GST, UPI, etc.)
4. Mobile-first design approach
5. Strong security and data protection

The phased implementation approach allows for quick MVP delivery while building towards a feature-rich platform that can transform how Indian car service centers operate.