

# 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
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# 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

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# 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

[App Logo]

Service Center Pro

Mobile/Email

Password

☒ Remember Me

LOGIN

[Fingerprint] Use Bio

Forgot Password?

OR

[Login with OTP]

**Fields:**

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



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

2. DASHBOARD (Service Advisor)

☰ Dashboard [Sync]

Hi, [Name] [Avatar]

Today's Summary

1284

TotalActivePending

Quick Actions

[+][📋]

New JobJob List

[🚗][👥]

Check-InCustomers

Recent Jobs

KA01AB1234 - Brake

In Progress • 2 hrs

KA02CD5678 - Service

Waiting Parts • 4 hrs

[View All]

[Home][Jobs][+][Cust][🔍]

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 →] |



← 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

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	







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 Icon] Menu
Jobs List	Job Details		
[+New Job]	#JC2024001234		
	KA01AB1234 - Swift		
Filter: [▼]			
	Customer: Mr. Singh		
#JC20241234	[Phone Icon]	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



In Progress [45%]

Pending Parts [25%]

Quality Check [20%]

Ready [10%]

Top Technicians This Week

1. Raju - 45 jobs

2. Kumar - 38 jobs

3. Suresh - 32 jobs

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

• 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)



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# 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 (CGST + 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
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## 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.