



**Smt. K.B. Parekh College  
of Computer Science - Mahuva**

PROJECT ANALYSIS REPORT

# **TAILOR MANAGEMENT SYSTEM**

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# Introduction



## Tailor Management System

Tailor shops commonly use manual and paper-based methods for managing customer measurements, work orders, delivery dates, and staff assignments. These old methods often lead to lost records, incorrect measurements, missed deadlines, and weak customer communication.

This project aims to create a modern web-based solution that simplifies and automates the overall tailoring workflow.

## Project Goal

The main goal of the Tailor Management System is to replace manual processes with a digital, easy-to-use, and efficient management platform.

The system will help tailors maintain accurate customer records, track orders, manage staff workloads, send automated WhatsApp updates, and improve service quality through timely reminders and analytics.

# PROBLEM ANALYSIS

Traditional tailor shops face the following major problems

## MANUAL RECORD KEEPING

- Customer measurements are written on paper slips.
- Information gets lost, damaged, or mixed up.
- Tailors struggle to find old records for repeat customers.

## ORDER MISMANAGEMENT

- Orders tracked via notebooks or memory.
- Delivery dates often forgotten.
- No clear order status (cutting, stitching, ready, delivered).

## POOR CUSTOMER COMMUNICATION

- Customers call repeatedly asking “mera order kab milega?”
- No automated updates for order received, order ready, or payment due.

## STAFF & WORKFLOW PROBLEMS

- No system for assigning work to cutting masters or sewing masters.
- Difficult to track which worker is responsible for delays.

## MISSING ANALYTICS

Tailors have no idea about:

- Monthly sales
- Most repeated customers
- Most demanded clothing items
- Number of delayed orders
- Pending payments

## LACK OF DIGITAL PROOF & BILLS

- Some customers ask for digital receipts.
- Manual bills are time-consuming.
- No easy way to send digital bills or payment confirmations.

# SOLUTION & FEATURES

It digitizes all major workflows, reduces manual errors, and improves customer communication through WhatsApp automation.

## CUSTOMER & MEASUREMENT MODULE

- Customer profile with name, contact, and address
- Store multiple measurement sets (shirt, pant, kurta, blouse, coat)
- Update measurements anytime
- View past measurement history
- Quick “repeat order” option using existing measurements

## ORDER MANAGEMENT MODULE

- Create new orders with item details
- Add delivery date and expected completion time
- Real-time order status:
  - Received
  - Cutting
  - Stitching
  - Finishing
  - Ready for Pickup
- Attach photos, notes, and cloth details
- Partial payment support (cash/online)
- Automatically generate printable invoice

## NOTIFICATION & REMINDER MODULE

- Whatsapp message for new order confirmation
- Whatsapp message when order is ready
- Reminder message for delivery date
- Pending payment reminder
- Automatic delay alert if the delivery date is exceeded
- WhatsApp bill sending (PDF/Message format)

## STAFF MANAGEMENT MODULE

- Add staff members (cutting master, sewing master, iron/finishing)
- Assign orders to staff
- Track progress by worker
- Worker performance and productivity report

## REPORTS & ANALYTICS

- Monthly sales report
- Order completion statistics
- Most sold items (shirt/pant/kurta/blouse)
- Delivery accuracy (on-time vs delayed)
- Pending payments summary
- Customer history report
- Staff productivity analytics

## AI WHATSAPP AUTO-REPLY BOT

- Using Baileys, a custom AI bot will reply automatically to customer queries.
- Examples:
  - Customer: “Shirt kab milegi?”
  - Bot: “Your order is in stitching stage and delivery is on 12 December.”
  - Customer: “Mera due payment kitna hai?”
  - Bot: “Your pending amount is ₹250.”
- The bot checks the database and responds smartly.

# TECHNOLOGY STACK

## WEB APPLICATION

### FRONTEND

- React.js
- Tailwind CSS
- Axios for API calls

### BACKEND

- Node.js (Express.js)
- Baileys for WhatsApp automation
- Google Gemini API
- JWT authentication

### DATABASE

- MongoDB
- Mongoose ORM

### OTHER TOOLS

- QR Code Generator
- PDF generator for bills
- Cloudinary (optional) for storing images
- Cron jobs for scheduled message reminders

### CONCLUSION

The Tailor Management System will modernize traditional tailor shops by automating daily operations, improving communication, and providing detailed insights into business performance.

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