

ADVANCED COURIER TRACKING SYSTEM

Title

Advanced Courier Tracking System

Problem Definition

Traditional courier services rely on manual updates and delayed tracking information, which prevents customers from knowing the exact location and status of their parcels. Courier companies also face challenges in managing large volumes, tracking delivery agents, optimizing dispatch routes, and preventing parcel misplacements. The Advanced Courier Tracking System provides a real-time, automated, and transparent courier management platform to enhance accuracy, reliability, and user satisfaction.

Platform / Technology Used

Frontend: HTML,CSS,JS

Backend: PHP

Database: MongoDB

Module List

1. User Module
2. Booking / Courier Creation Module
3. Tracking Module
4. Delivery Agent Module
5. Admin Module
6. Route & Dispatch Management Module
7. Status Update Module
8. Notification Module
9. Payment Module
10. Authentication & Security Module

Module Definition

User Module:

Manages user profiles, login, and courier history.

Booking Module:

Allows users to create courier requests and generates tracking IDs.

Tracking Module:

Displays real-time parcel location, route, and delivery.

Delivery Agent Module:

Allows agents to update parcel status from mobile devices.

Admin Module:

Manages parcels, routes, hubs, users, and delivery agents.

Route & Dispatch Module:

Assigns parcels to agents based on nearest hub/location.

Status Update Module:

Automated and manual status updates during transit.

Notification Module:

Sends SMS/Email alerts for each status update.

Payment Module:

Handles online payments and transaction logs.

Highlights / Advantages

- ✓ Real-time courier tracking
- ✓ Automated delivery status updates
- ✓ Transparent parcel workflow
- ✓ Faster delivery through agent auto-assignment
- ✓ Secure and reliable PHP–MySQL architecture
- ✓ Reduced manual errors
- ✓ Admin dashboards for monitoring performance
- ✓ Cost-effective and scalable system