

Trackwise - Train Scheduling and Forecasting Platform

Introduction

Trackwise is an intelligent train scheduling and forecasting website, built to simulate the core functionalities of the Indian Railway's IRCTC system. It allows users to discover trains, book tickets, track live status, receive alerts, and get real-time platform information through a sleek and intuitive interface.

Key Features

Home Page

Welcoming user interface with a promo banner and quick access to essential services.
Clean header navigation bar with icons for easy usability.

Discover Trains

Users can explore available train routes, timings, and travel days.
Search functionality for trains between selected stations.

Book Tickets

Ticket booking form where users can select source, destination, date, and class.
Discount code available for first-time users.

Live Train Status

Real-time tracking of train locations on an interactive map using Leaflet.js.
Simulated live tracking with route progress.

PNR Status Check

Allows users to check PNR status and seat confirmation.

Platform Information

Displays upcoming train platforms using forecasting based on train patterns.

Travel Alerts

Notifications about delays, cancellations, and changes.
24-hour ticket confirmation alerts for unconfirmed bookings.

Emergency Contact

Dedicated contact page for reaching out in emergencies.

24-Hour Ticket Confirmation Alert Feature

Overview:

If a user's ticket is not confirmed, Trackwise sends an alert 24 hours prior to the departure.

Working:

System checks PNR status in intervals.

If status is still in WL/RAC and train departure is within 24 hours, the user gets an alert via email/SMS/notification.

Technologies Used

- Frontend: HTML5, CSS3, JavaScript, Font Awesome, Tailwind CSS (optional for components)
- Mapping: Leaflet.js for live train visualization
- Backend: Node.js / PHP (customizable)
- API: Integration-ready for IRCTC or simulated JSON APIs

Future Enhancements

- Real IRCTC API integration
- User login and ticket history
- AI-based delay prediction
- Multilingual support
- Payment gateway integration

Contact

For feedback or queries, please visit the Contact page on the Trackwise website.

About the Developer

This project was developed by a B.Tech Computer Science student as a part of academic learning and portfolio enhancement.

Trackwise - On Track, On Time. Your Journey, Our Priority!