

**GUJARAT VIDYAPITH**

**ODOO - HACKATHON 2026**

**Where Innovation Meets Technology**

## **Mentor Name:**

1. Bhavya Mehata

## **Team Members:**

1. Hardik Makawana

Role: Database Architect - ER Diagram & Schema

2. Rutvi Dabhi

Role: Backend Developer - Business Logic & Rule Engine

3. Anuradha Prajapati

Role: Project Lead - Architecture & Strategy

4. Vrushti Bhanderi

Role: Frontend & Analytics Dev - UI & Reporting

# FleetFlow

Modular Fleet & Logistics Management System

---

- ***Hackathon Project Presentation Document***
- FleetFlow is a centralized rule-based platform designed to optimize fleet lifecycle, automate dispatch validation, ensure driver compliance, and track operational financial performance.

## **1. Problem Statement**

- Manual fleet logbooks and spreadsheets
- No real-time vehicle availability visibility
- Lack of compliance monitoring Inefficient
- maintenance tracking
- No automated cost & ROI analytics

## **2. FleetFlow Solution Overview**

- Role-Based Secure Authentication
- Vehicle Registry & Asset
- Management Rule-Based Trip
- Dispatch System Maintenance &
- Service Automation Fuel & Expense
- Tracking Driver Compliance
- Monitoring Operational Analytics & ROI Reports

### **3.Key Features**

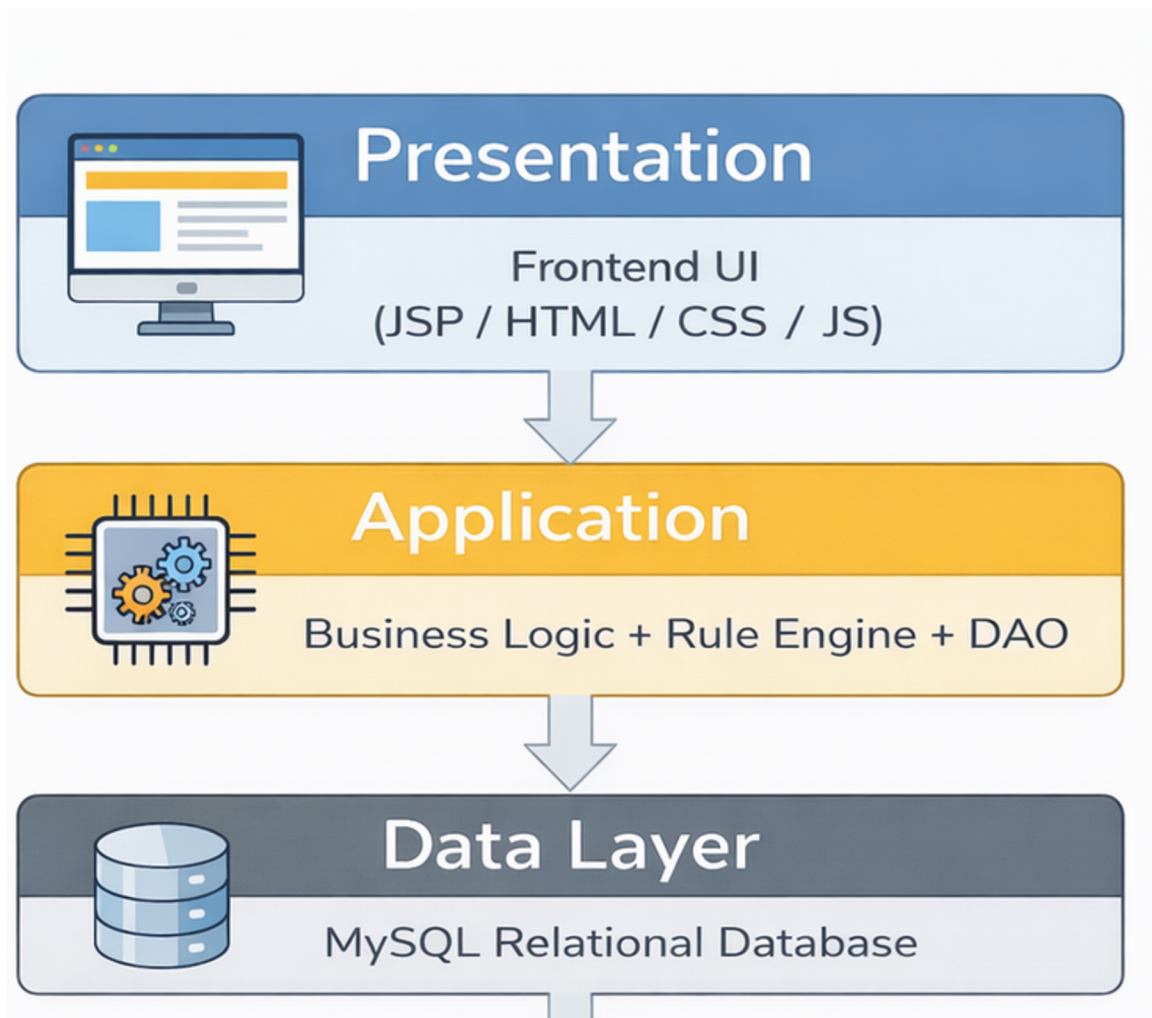
- Secure Role-Based Authentication
- Vehicle Registry & Asset Management
- Trip Dispatch with Validation Rules
- Maintenance & Service Logs
- Fuel & Expense Tracking
- Driver Compliance Monitoring
- Operational Analytics Dashboard

## **4. Technologies Used**

- Frontend: JSP, HTML, CSS, JavaScript
- Backend: Java (Servlets, Business Logic Layer)
- Database: MySQL Relational Database
- Architecture: 3-Tier Architecture
- IDE: NetBeans
- Version Control: Git

## 5. System Architecture (3-Tier Model)

Presentation Layer → Application Layer → Data Layer



## **6. Innovation Highlights**

- Automated dispatch validation engine Cargo
- capacity rule enforcement License expiry
- blocking logic Automatic status synchronization
- Fuel efficiency & ROI auto-calculation ERP-
- ready modular architecture



## **7.Conclusion**

FleetFlow transforms traditional fleet operations into an intelligent, automated, and scalable digital ecosystem. It ensures operational control, financial transparency, driver compliance, and ERP-ready deployment for modern logistics management