

# NeuroFleetX Project Update

## Milestone 1 Update

In the first milestone, I have completed the sign-in, sign-up, and dashboard implementation with secure role-based access.

## Current Work

Currently, I am focusing on building and integrating the backend services with MySQL database. This involves setting up APIs, ensuring secure data flow, and preparing the system for real-time fleet management.

## Future Plans

In the upcoming milestone, I plan to complete backend integration, implement AI-driven alert mechanisms, and enhance the dashboard with more analytics features. I will also prepare a detailed presentation for the next review meeting.

## UserDto Class

This is a UserDto class that holds user details such as name, contact, email, password, and address information. It also uses validation annotations to ensure data correctness, and includes audit fields like createdBy and updatedAt.

## Key Stats (Dashboard Metrics)

Metric	Description
Total Vehicles	Total number of vehicles connected to the NeuroFleetX system. Shows the fleet size by region.
Active Trips	Vehicles currently on the road and in operation. Helps track utilization vs. idle vehicles.
Fuel Efficiency	Average fuel efficiency across all vehicles. Key for cost saving and sustainability.
AI Alerts	Smart alerts raised by AI for issues or risks. Ensures safety and predictive maintenance.
Drivers	Total registered drivers in the system. Helps in trip assignment and shift management.