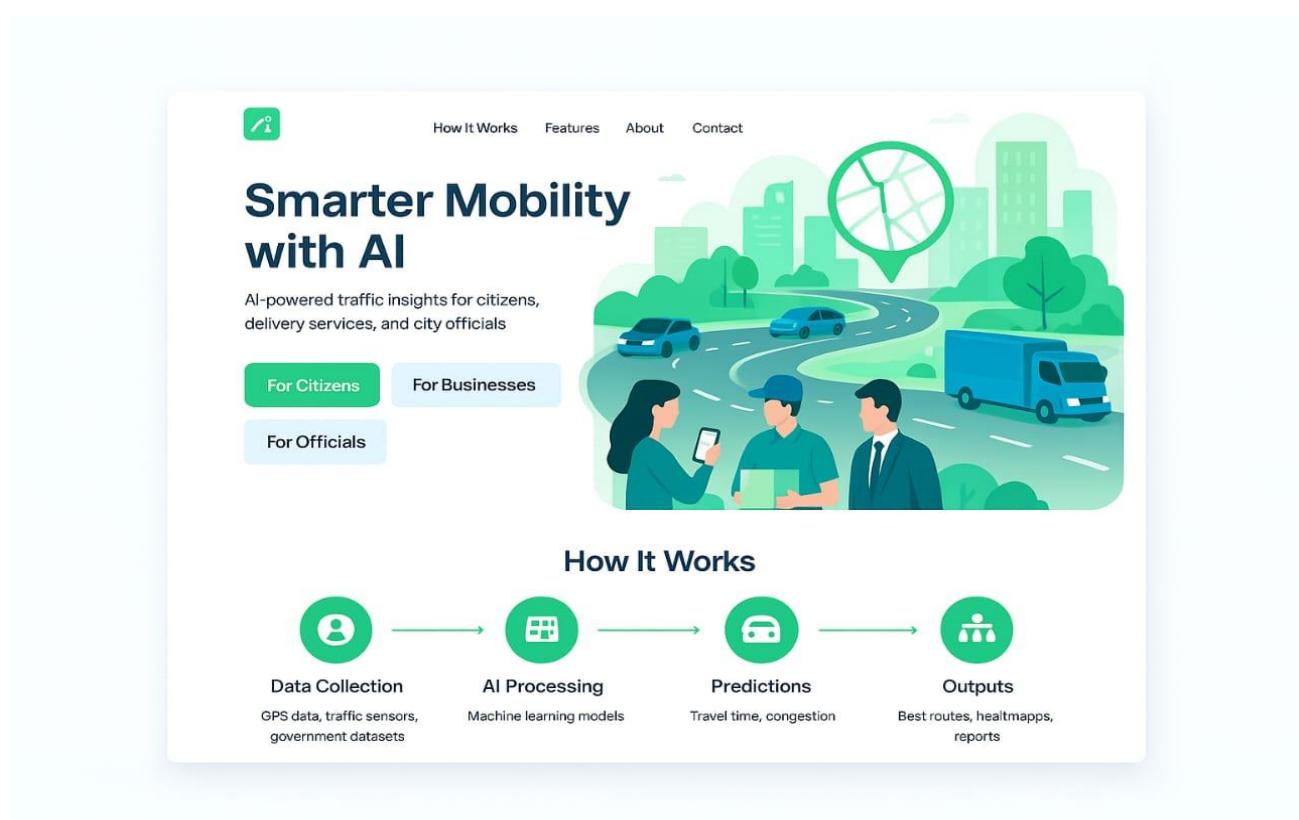


AI - FUSION

AI-Powered Traffic Insights System

Team:-

Acro Techs



Team Lead

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Team Members:-

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Problem:



- Cities face traffic jams and delays .
- People don't know exact travel times.
- City officials lack real-time insights.

Solutions:

AI system that:

- Collects data from GPS,Sensors, govt.data.
- Uses Machine Learning to predict travel time &find jams.
- Suggest best routes for citizens & delivery.
- Shows heatmaps & reports for city officials.

Who Benefits:

- Citizens: Accurate ETA & faster routes.
- Delivery: Optimized routes, save time & fuel.
- City Officials: Heatmaps & traffic reports for planning.

Benefits:

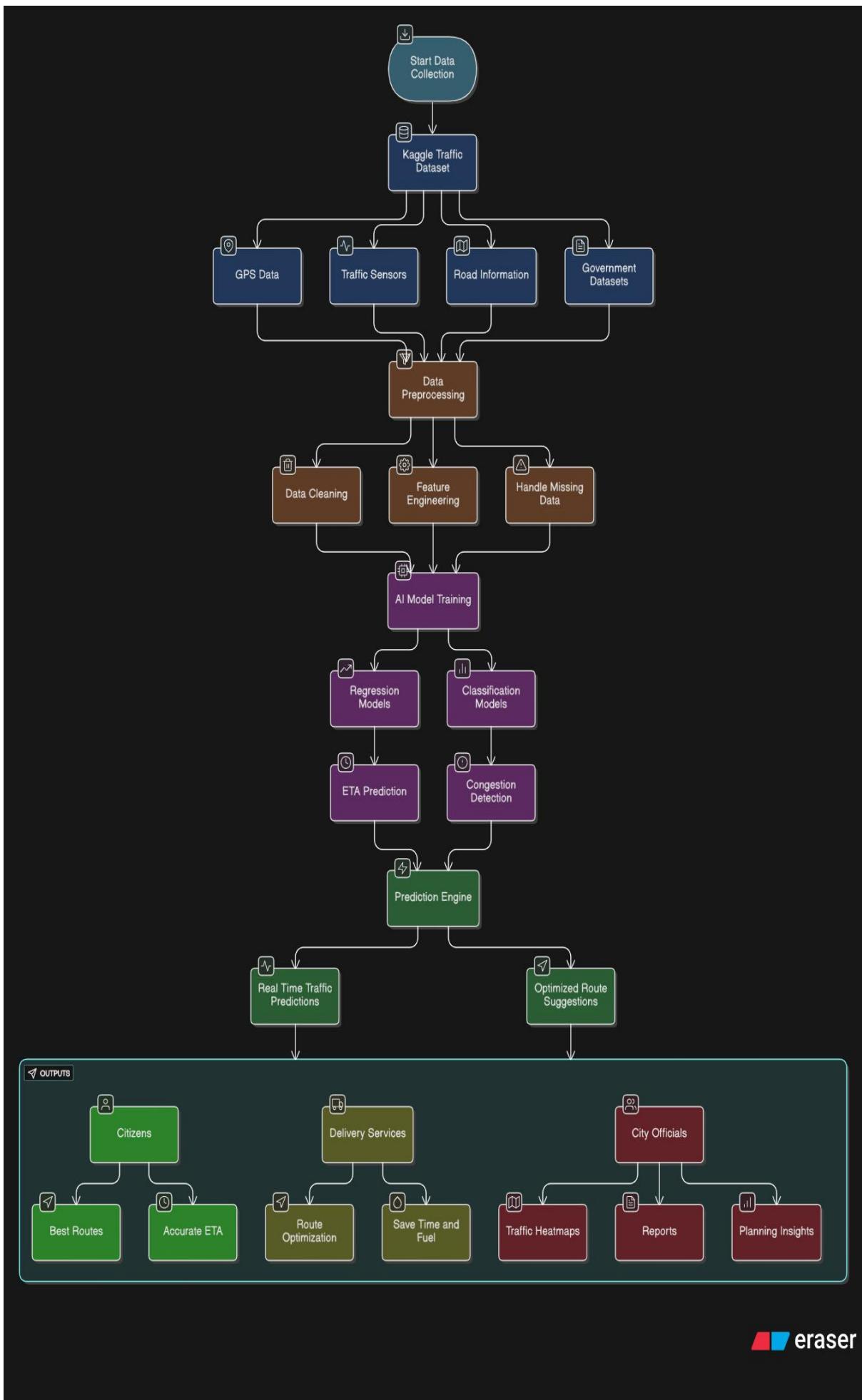
- Save time in traffic.
- Lower costs for delivery.
- Smarter city planning.

Future Scope:

- AI- controlled traffic lights.
- Integeration with public transport.
- Real- time CCTV- based predictions.

Buisness Model:

- Subscription Model (B2B): Logistics & delivery Companies pay for route optimization & delay prediction services.
- Licensing Model (B2G): Sell the dashboard & analytics platform to municipalities and traffic authorities.
- Freemium (B2C): Citizens use free ETA+ best route services; premium features (alerts,alternative rote planning) available via subscription.
- Partnerships: Integrate with google maps, Uber, Swiggy, Zomato,Amazon for snarter routing.



AI Traffic Insights in Indore:

1. Collect Data:

Use Kaggle traffic datasets.

Get city data: traffic sensors, GPS from rides/deliveries, road maps.\

Optional: weather, events, holidays.

2. Preprocess Data:

Clean data, remove errors.

Features: distance, peak/off-peak, speed per road, historical patterns.

3. Train AI Models

Predict travel time (ETA) with Random Forest or LightGBM.

Classify congestion levels.

Use local Indore data for accuracy.

4. Prediction Engine

Real-time ETA predictions.

Suggest best routes for citizens and delivery services.

Show heatmaps for city officials.

5. Deployment

Citizen app: enter origin/destination → get ETA and best route.

Delivery dashboard: optimize fleet routes.

City dashboard: visualize traffic patterns.

6. Collaborate Locally

Work with Indore municipal authorities for sensors and road updates.

Partner with delivery and ride apps for GPS data.

7. Pilot & Expand

Start in busy zones (MG Road, Vijay Nagar). Refine using feedback, then scale citywide.
