FIXIT

AI-BASED PREVENTATIVE MAINTENANCE FOR CARS

TEAM: SDMAY25-44

Project overview

- FIX IT is a phone application that leverages AI and data from OBD scanners, vehicle statistics, and community feedback to monitor vehicle health and predict maintenance needs.

- Unexpected vehicle failures cause inconvenience and pose safety risks, especially during long-distance drives. Current maintenance practices are largely reactive rather than predictive.

RELATED PRODUCTS

- Standard OBD II scanners: Offer real-time diagnostic codes but lack predictive capabilities.

- Manufacturer maintenance alerts: Basic reminders based on mileage, not real-time data.

- Apps like FIXD and CarMD: Provide diagnostic alerts but lack community integration and advanced AI.

MARKET GAP

- Limitations of Existing Products:
  - Reactive rather than predictive maintenance.
  - Limited community integration for shared experiences and feedback.
  - Lack of personalized insights based on user behavior and vehicle stats.
- Opportunity:
  - FixIT addresses these gaps by offering predictive insights, community feedback integration, and a more tailored user experience.

NEW IDEAS FROM RESEARCH

- AI-Powered Predictive Models:

  - Use real-time data combined with community feedback to forecast potential issues.

- Community Feedback Integration:

  - Gather and analyze data from forums to improve AI predictions and offer proactive advice.

- Focused Vehicle Pool:

  - By starting with 1-3 vehicle models, the system can be finely tuned for accuracy.

CONCLUSIONS

- Current Ideas vs. Existing Solutions:
  - FixIT adds a predictive layer to existing OBD data and incorporates real user experiences from forums.
  - This proactive approach to vehicle maintenance enhances safety and reduces unexpected breakdowns.