LIGHTNING TALK 2: PROBLEM AND USERS

AGENDA

Project Overview

Problem Statement

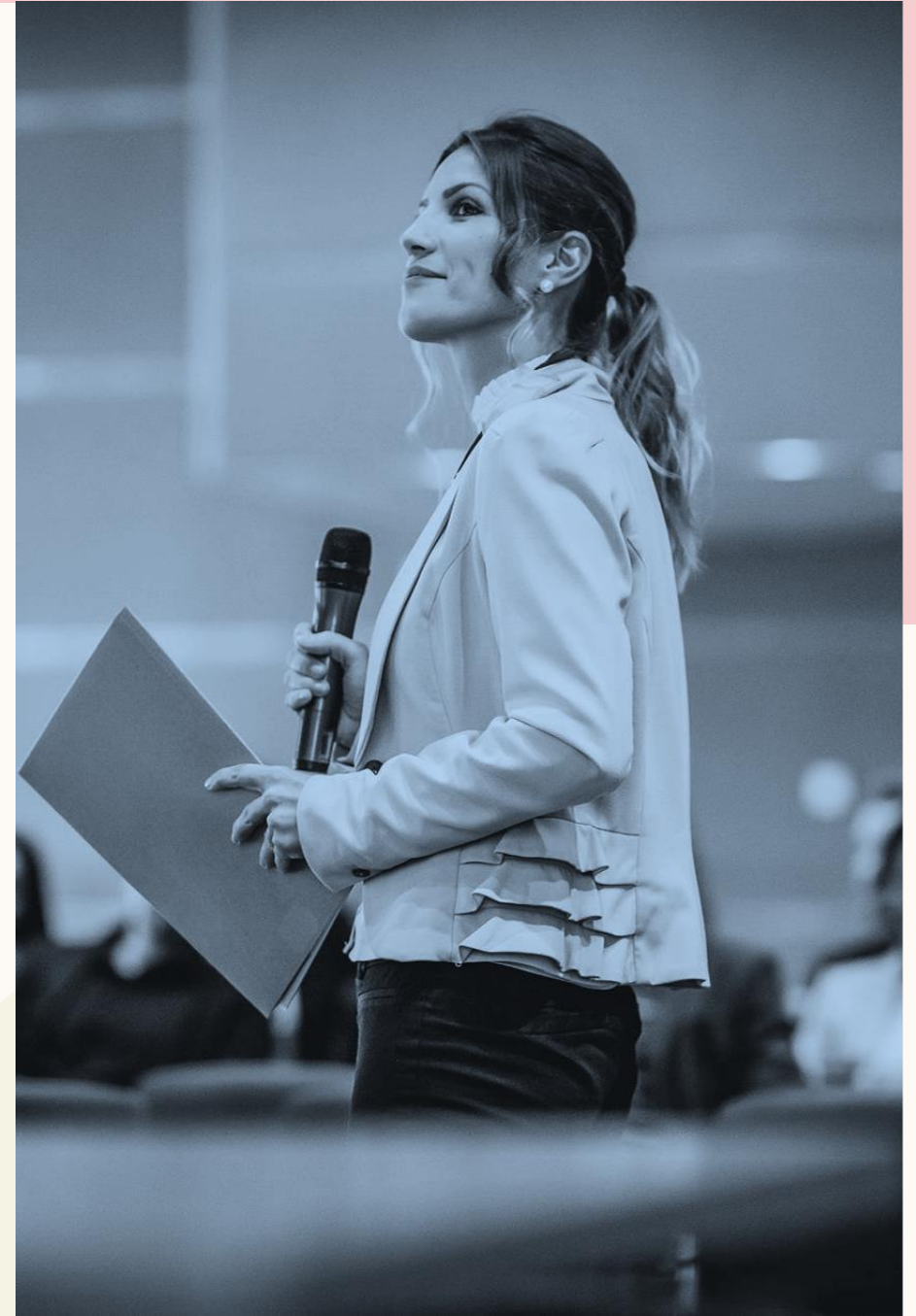Users (Personas)

User Needs

Conclusions

PROJECT TITLE: AI-BASED PREVENTATIVE MAINTENANCE FOR CARS

BRIEF DESCRIPTION: A PHONE APPLICATION DESIGNED TO MONITOR VEHICLE HEALTH USING AI, OBD-II DATA, AND COMMUNITY FEEDBACK TO PREDICT POTENTIAL FAILURES AND PROVIDE REAL-TIME MAINTENANCE ALERTS.

CHALLENGES FACED:

- Unexpected vehicle breakdowns leading to costly repairs and inconvenience.
- Car owners lack time or technical expertise to regularly check their vehicle's health.
- Manual inspections by dealers are time-consuming and require specialized knowledge.

USERS (PERSONAS)

- **Daily Car Commuter**
  - Relies on their car for daily commutes but often forgets about maintenance.
- **Tech-Savvy Car Enthusiast**
  - Uses OBD scanners but finds interpreting data difficult.
- **Car Reseller/Dealer**
  - Manages a large inventory and needs efficient ways to ensure vehicle readiness.

USER NEEDS

- **Daily Car Commuter:**

  - Needs real-time alerts for car health and simple maintenance guidance.

- **Tech-Savvy Car Enthusiast:**

  - Needs AI-driven insights to make OBD data more actionable.

- **Car Reseller/Dealer:**

  - Needs quick diagnostics and clear insights to maintain inventory quality.
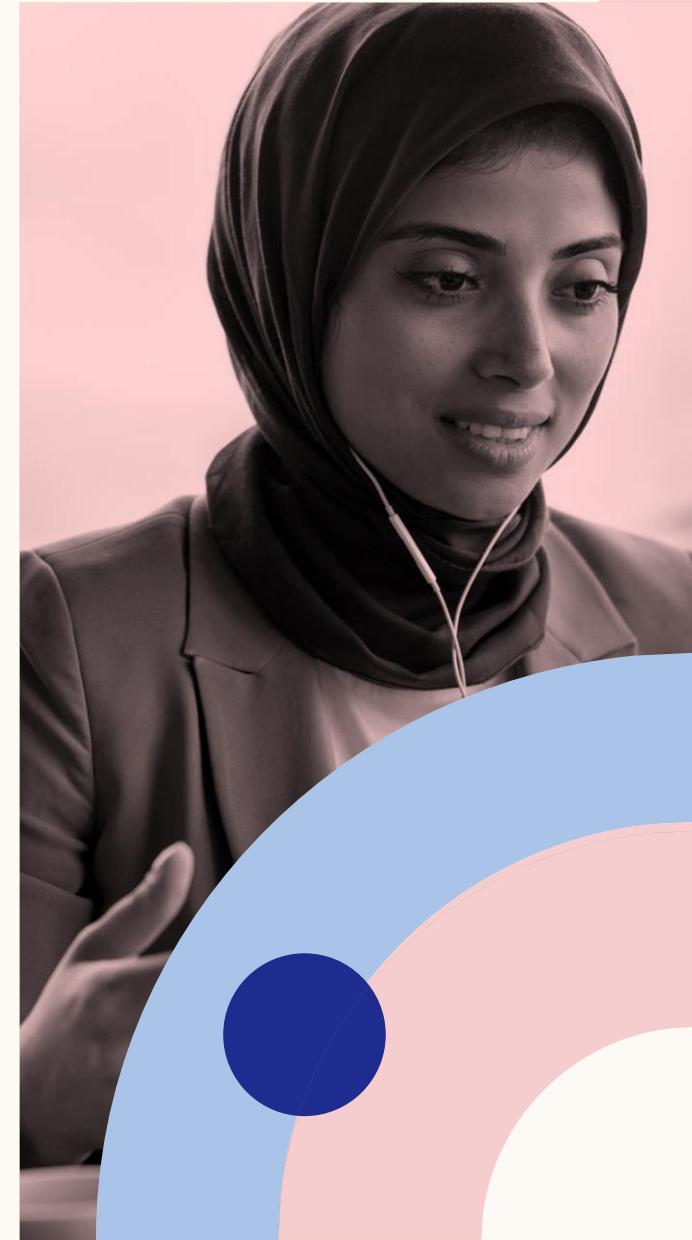
CONCLUSIONS

- **Benefits:**
  - Proactive maintenance reduces unexpected repairs and associated costs.
  - AI-driven insights make vehicle data more accessible for all user types.
  - Efficient inventory management for dealers enhances customer satisfaction.

- **Next Steps:** Further refine user requirements and begin prototyping key features.