

Project: CarCare – AI-Powered Vehicle Maintenance System

Team: CarCare

Date: December 2025

1. Purpose of Data Collection

CarCare collects specific data to provide:

- Accurate maintenance reminders
- Garage recommendations
- AI-based insights about vehicle health
- Cost tracking
- Better service experience for both users and mechanics

Only the data required to deliver these features is collected.

2. Types of Data Collected & Why

2.1 User Information

Data Collected:

- Name
- Email / Phone
- Password (encrypted)
- Location (with permission)

Purpose:

- To create and manage user accounts
- To personalize recommendations
- To locate nearby garages

2.2 Vehicle Information

Data Collected:

- Vehicle brand, model, year
- Fuel type
- Current mileage
- Last service date
- Service history

Purpose:

- To generate accurate service reminders
- To enable AI predictions
- To store complete maintenance records

2.3 Maintenance & Service Data

Data Collected:

- Service type (oil change, tires, brakes, battery, etc.)
- Parts replaced
- Uploaded bills / service cost
- Garage details
- Date of service

Purpose:

- To maintain long-term service history
- To estimate upcoming maintenance
- To provide cost patterns and monthly/yearly insights

2.4 Location Data

Data Collected:

- User's approximate location
- Garage locations
- Distance between user and service center

Purpose:

- To show nearest garages
- To support emergency assistance
- To calculate distance & travel estimation

2.5 Mechanic / Garage Data

Data Collected:

- Mechanic name, experience, location
- Services offered
- Service charges
- Availability slots

Purpose:

- To allow users to find appropriate mechanics
- To support job assignment and service matching
- To maintain quality of service

2.6 System Usage Data

Data Collected:

- Clicks
- Screens visited

- Session duration
- Login frequency

Purpose:

- To improve app design
- To identify popular features
- To detect usability issues

3. How The Data Is Used

To provide maintenance reminders

Mileage + last service date = automated reminders

To support AI recommendations

Service history + mileage pattern = predictive maintenance

To generate service cost insights

Monthly & yearly spending reports

To match mechanics with users

Mechanic skills + customer request = best match

To help users find nearby garages

GPS and maps integration

4. Data Storage & Security

Secure Databases

Stored in **Firestore (Firebase)** with encrypted connections.

Authentication

Powered by **Firebase Auth.**

Encryption

All communication uses **HTTPS / TLS**.

Privacy

- Passwords are never stored in plain text
- Location is collected only with permission
- Data is never sold to third parties

5. Data Sharing Policy

CarCare does **not** share personal data with vendors or advertisers.

Mechanics only see data relevant to service requests:

- Vehicle details
- Customer contact
- Service requested

Users control what data they upload.

6. Ethical Considerations

- Minimal data collection (only what's necessary)
- Transparency about usage
- User control over their data
- No sensitive personal data collected (address, Aadhaar, bank info, etc.)

7. Future Data Integration

CarCare may later integrate:

- OBD (On-Board Diagnostics) live data
- Insurance renewal reminders
- Predictive service cost modeling
- Driving pattern analytics

All future features will follow privacy and security standards.