

Empathize & Discover

Empathy Map Canvas:

In the Empathize & Discover phase, the team studies how garage owners, mechanics, and customers interact during daily operations. They discover that garage staff often feel frustrated due to manual recordkeeping, unclear service status updates, and communication delays between mechanics.

By interviewing stakeholders such as service managers, mechanics, and vehicle owners, the team uncovers pain points like misplaced service records, confusion in work scheduling, and lack of real-time updates on vehicle repairs. Customers, on the other hand, express frustration over not knowing when their vehicles will be ready or how much a repair will cost.

Gathering these insights helps the team understand the real challenges in garage management workflows. Understanding these day-to-day struggles shows the need for a centralized digital system that provides service tracking, automatic notifications, and transparent billing. These findings guide the design of a Garage Management System that simplifies operations, reduces delays, and improves customer trust.

Reference: <https://www.mural.co/templates/empathy-map-canvas>

The empathy map helped us visualize user challenges in managing garage operations. It revealed their pain points, goals, and needs for a more transparent and automated workflow. This process guided us to design an intelligent Garage Management System that supports all stakeholders — owners, mechanics, and customers — with real-time communication and task visibility.

Example: Vehicle Service & Maintenance Management

By deeply understanding users through empathy mapping, we identified key frustrations in daily garage activities — such as unclear service tracking, manual billing errors, and poor communication between staff and customers. These insights highlighted the need for automation and a digital service workflow.

As a result, we designed a Garage Management System that integrates:

- Digital service scheduling and assignment tracking
- Automatic reminders and service status alerts
- Centralized billing and inventory management

This ensures smooth coordination between mechanics and managers, minimizes service delays, and enhances customer satisfaction. The system ultimately improves accountability, transparency, and efficiency in garage operations.

