IDEATION PHASE

Brainstorm & idea Prioritization Template

Date: 29 june 2025

Team ID: LTVIP2025TMID29273

Project Name: Garage Management

Project Overview & Stakeholder Mapping

The Garage Management System aims to transform how local garages operate by introducing a digital platform that connects garage owners, staff, and customers seamlessly.

This system will help garages move away from manual paperwork and fragmented communication channels, replacing them with automated scheduling, transparent billing, real-time updates, and continuous feedback loops.

Stakeholders:

- Garage Owners: Need better revenue tracking, reduced admin tasks, and data insights to grow their business sustainably.
- Mechanics & Staff: Need clear daily job cards, live updates on tasks, inventory status, and simple communication with owners and customers.
- Customers: Want a stress-free experience easy booking, accurate estimates, live status tracking, and trusted payments.

Understanding each stakeholder's perspective ensures that the solution is relevant and practical.

Brainstorming

Our team conducted multiple brainstorming sessions to identify opportunities for improvement.

Key Themes:

- 1. Automation: Eliminate repetitive tasks like manually calling customers or writing paper invoices.
- 2. Transparency: Give customers clarity about what is happening with their vehicles.
- 3. Convenience: Provide easy online booking and instant estimates.
- 4. Feedback & Improvement: Collect reviews after every service to adapt and grow.
- 5. Accuracy: Ensure parts and labor costs are tracked correctly.

- 6. Customer Engagement: Collect feedback and ratings after each service.
- 7. Scalability: Design flexible data models for multiple branches.

Sample Ideas:

- Create a booking website and mobile app with available slots.
- Use QR codes to check job status.
- Automatically send invoices by email or SMS.
- Integrate payment gateways for easy digital payments.
- Offer service reminders based on mileage.

Why these ideas matter:

- -By automating repetitive tasks, garages free up staff time to focus on actual repair work.
- -Transparency builds trust, which can turn first-time customers into loyal ones.
- -Convenience reduces missed appointments and cancellations. Feedback helps identify gaps in service quality.
- -Together, these ideas address root problems faced daily.

Expanding Ideas:

- Use AI to predict maintenance needs based on driving patterns.
- Introduce a digital wallet or loyalty program for repeat customers.
- Develop dashboards for owners to track KPIs like daily revenue, job completion rate, and customer satisfaction scores.
- Implement barcode scanning for inventory management.

Best Practices:

- Engage garage staff when brainstorming. They know workflow pain points best.
- Keep the customer journey in mind: What happens before, during, and after service?
- Document every idea, even the unrealistic ones. They may spark better ideas later.

These sessions create a foundation for defining what goes into the MVP.

Key Focus Areas:

- 1. Customer Convenience
 - -How can customers easily book appointments? (Online portal, phone, walk-ins)
 - -How will we keep them informed about service progress? (SMS/Email updates)
 - -How will we handle rescheduling or cancellations?

2. Service Operations

- -How to record vehicle issues, assigned mechanics, and parts used?
- -How do we track service status (e.g., Pending, In Progress, Completed)?
- -How to avoid overbooking mechanics or bays?

3. Billing and Payments

- -How will service charges be calculated?
- -Should there be options for discounts, loyalty points, or bundled services?
- -How do we handle partial or pending payments?

4. Feedback and Quality

- -What's the best way to collect customer feedback post-service?
- -How do we use ratings to improve staff performance?
- -Should mechanics get performance scores or incentives?

Empathy Mapping

Person: Rahul - Busy Professional with a Family Car

SAYS:

- "I do not have time to wait at the garage."
- "I want to know the exact cost upfront."

THINKS:

- "Are they using genuine parts?"
- "Can I trust the mechanic?"

DOES:

- Schedules maintenance late due to lack of reminders.
- Tries to compare prices but ends up going to the nearest garage.

FEELS:

- Anxious about unexpected costs.
- Frustrated when repairs take longer than promised.
- Relieved when the garage communicates updates clearly.

Why This Matters:

By mapping out Rahul's thoughts, feelings, and actions, we see the friction points. He worries about trust, timing, and cost. These insights drive design decisions for features like real-time tracking, transparent invoices, and trusted payment gateways.

Additional Persons:

Ravi - Head Mechanic

- SAYS: "I need to know my daily tasks clearly."
- THINKS: "If parts are missing, my work gets delayed."
- DOES: Spends time asking the owner about customer approvals.
- FEELS: Stressed when customers call him directly for updates.

Insights:

Mechanics want a clear workflow with fewer distractions. This means the system should automatically update both the mechanic and the customer about approvals and status.

Key Takeaways for Empathy Maps:

- Multiple personas ensure you cover different viewpoints.
- Empathy maps guide user stories for development.
- The maps are living documents that evolve as you learn more from users.

Common Patterns & Themes

- -Trust: Customers worry about being overcharged or cheated on parts quality.
- -Time: Customers hate waiting without updates. Mechanics hate downtime caused by approval delays.
- -Transparency: Everyone wants clarity on costs, service status, and next steps.
- -Automation: Reduces repetitive calls and follow-ups for front desk staff and mechanics
- -Ownership: Staff feel motivated when performance is visible and recognized.

Design Ideas from Empathy Insights

- Parts Authenticity: Show customers photos or serial numbers of genuine parts used.
- -Role-Based Access: Mechanics see only relevant jobs; front desk sees financials; owner sees everything.
- -Upfront Estimates: Clear cost breakdown before work starts reduces surprises and conflicts.
- Automatic Reminders: System sends SMS/emails for upcoming maintenance no more missed servicin

Final Tips

Keep empathy maps updated as you interview real customers and staff.

Use the insights to prioritize which features really solve users' pain points.

Share empathy maps with developers so they build with users in mind.

Problem Statement

The Core Problem:

Garage owners and customers face a lack of efficiency and transparency. Many garages still rely on pen-and-paper for appointments, job cards, and billing. This leads to mistakes, delays, and customer dissatisfaction.

Customers like Rahul do not trust vague estimates and often feel stressed about hidden costs.

Mechanics like Ravi get frustrated with unclear instructions and back-and-forth approvals.

This broken communication loop wastes time and money for everyone.

Poor Communication & Transparency

Customers have to call repeatedly to check status.

No real-time updates on service progress or cost changes.

Inaccurate Billing & Cost Estimates

Manual calculation of service charges and parts often leads to errors.

Unexpected costs create disputes and reduce customer trust.

No Feedback Loop

Customer feedback is rarely collected systematically.

Missed opportunity to improve service quality or recognize top-performing mechanics.

Time Wasted on Repetitive Tasks

Staff spend too much time calling customers for approvals, status updates, or payment follow-ups.

Mechanics waste time waiting for parts or instructions.

Lack of Data for Insights

No clear dashboards for revenue, service trends, or staff productivity.

Difficult to make informed decisions for growth and efficiency.

Inventory & Parts Mismanagement

No real-time tracking of parts used, leading to delays when parts are unavailable.

Trust & Authenticity Concerns

Customers worry about being overcharged or given fake parts due to lack of transparent documentatio

Evidence:

- Missed appointments due to no reminders.
- Manual invoices prone to errors.
- Lost revenue because of poor customer follow-up.

A clear problem statement sets the direction for the entire project: Digitize garage operations for better efficiency, transparency, and customer satisfaction.

Impact if Not Solved:

- Continued revenue loss for garage owners.
- Low repeat business due to poor customer experience.
- High stress for staff juggling manual processes.

The Opportunity:

A Garage Management System can solve this by:

- Automating appointment bookings, reminders, and billing.
- Providing real-time status updates for customers.
- Tracking service history and feedback to improve quality.

This solution aligns the needs of all stakeholders - customers get transparency and convenience, mechanics get clear instructions, and owners get reliable business insights.

Impact

Customers: Experience delays, surprises in cost, and low trust.

Mechanics: Feel frustrated by unclear workflows, missing parts, or poor communication.

Business: Missed revenue opportunities, low customer retention, and wasted time.

Managers: Lack clear visibility into operations, revenue leakages, and opportunities for improvement.

Next Steps

What is Next:

- Refine user personas and journey maps.
- Draft wireframes for booking, billing, and status tracking screens.
- Validate concepts with real garage owners, mechanics, and customers.
- Prioritize features for MVP.
- Plan phased development with clear milestones.
- Keep iterating based on real feedback.