

Project Planning Phase

Planning Logic

Epics Overview:

1. User Management
2. Vehicle Management
3. Service Booking & Tracking
4. Billing & Payments
5. Inventory Management
6. Admin Dashboard
7. Deployment & Testing

Breakdown into User Stories and Story Points:

Sprint 1: User & Vehicle Management (5 Days)

Epic: User Management

- User Registration – 3 SP
- User Login/Logout – 2 SP
- Role-based Access (Admin, Mechanic, Customer) – 3 SP

Epic: Vehicle Management

- Add Vehicle Details – 2 SP
- Edit/Delete Vehicle – 1 SP

Total: 11 SP

Sprint 2: Service Booking System (5 Days)

Epic: Service Booking & Tracking

- Book a Service – 3 SP
- View Booking Status – 2 SP
- Assign Mechanic – 2 SP
- Update Job Status (In Progress, Completed) – 3 SP

Total: 10 SP

Sprint 3: Billing & Payments + Inventory (5 Days)

Epic: Billing & Payments

- Generate Invoice – 3 SP
- Apply Discounts/GST – 2 SP
- Mark Payment Received – 2 SP

Epic: Inventory Management

- Add/Update Spare Parts – 2 SP
- Track Part Availability – 3 SP

Total: 12 SP

Sprint 4: Admin Dashboard + Reports (5 Days)

Epic: Admin Dashboard

- View All Bookings – 2 SP
- Daily Revenue Report – 3 SP
- Mechanic Performance Report – 2 SP

Epic: Notifications

- Email Confirmation for Booking – 1 SP
- Reminder Before Service Date – 2 SP

Total: 10 SP

Sprint 5: Testing & Deployment (5 Days)

Epic: Testing & Deployment

- Unit Testing – 3 SP

- Integration Testing – 3 SP
- UI Testing – 2 SP
- Deploy to Cloud (Flask/Node + HTML/CSS) – 3 SP

Total: 11 SP

Velocity & Timeline

- Average Velocity: ~11-12 SP per Sprint
- Number of Sprints: 5
- Total Estimated Duration: 5 Weeks (25 Working Days)

Prioritize Minimum Viable Product (MVP)

We isolate what's needed to launch:

- User registration & vehicle input
- Booking flow
- Invoice generation
- Deployment

MVP helps test the product early, then add enhancements like:

- Feedback system
- Advanced analytics
- Mobile UI

Planning Logic

Phase	Goal	Reason
1 Epics → Stories	Functional breakdown	Clarity & trackability
2 Story Points	Effort estimation	Relative sizing, flexibility
3 Sprint Planning	Organize by priority	Maximize value early
4 Velocity Tracking	Predict capacity	Plan realistically
5 MVP Focus	Early launch	Market validation

Outcomes

- Fully working Garage Management System Web App
- Role-based login
- Vehicle and service tracking
- Invoice and inventory management
- Admin dashboard with insights
- Hosted live on a platform (e.g., Heroku, Render, or AWS)