PROJECT PLANNING PHASE

1. Introduction

The **Project Planning Phase** is one of the most critical stages in the project development lifecycle. It focuses on identifying the objectives, defining the scope, estimating the required resources, and establishing the timeline for successful completion. For the **Garage Management System (GMS)**, effective planning ensures that the development process runs smoothly, meets the specified requirements, and delivers a high-quality Salesforce-based solution within the given time frame.

The planning process also emphasizes risk management, role allocation, and milestone tracking. By laying a strong foundation through detailed planning, the project team can avoid confusion, delays, and resource wastage during later stages of development.

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2. Project Overview

The **Garage Management System** aims to provide a centralized digital platform for managing all garage operations efficiently. It will allow garage owners to manage customers, vehicles, mechanics, services, inventory, and billing using Salesforce's robust tools.

This phase focuses on mapping out every step of the development process — from initial setup to final delivery — ensuring all team members clearly understand their tasks and deadlines. The project will follow a structured, agile-inspired approach that supports iterative development, testing, and refinement.

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3. Project Scope

The **scope** defines what the project will and will not deliver.

In-Scope Features:

- **Customer Management:** Add, update, and maintain customer details and vehicle history.

- **Service Management:** Book new service requests, assign mechanics, and track job progress.

- **Inventory Management:** Manage spare parts and supplies efficiently.

- **Billing and Invoicing:** Automate invoice generation and maintain payment history.

- **Reporting & Analytics:** Generate service reports, revenue summaries, and mechanic performance metrics.

- **User Roles:** Separate dashboards for admin, mechanics, and customers.

Out-of-Scope Features:

- Integration with external IoT devices.

- Payment gateway integrations for online payments.

- Mobile application version (web-only scope for this phase).

Clearly defining the scope helps prevent feature creep and ensures that the project remains realistic and achievable within the deadline.

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4. Project Deliverables

The deliverables are the tangible outputs that will be produced throughout the project. For the Garage Management System, the key deliverables include:

1. **Fully functional Salesforce-based application** for garage operations.

2. **Customized dashboards and reports** for different user roles.

3. **Automated workflows** using Salesforce Flow and Apex logic.

4. **Comprehensive documentation** covering technical, user, and testing aspects.

5. **Final demonstration video and project report** for evaluation and submission.

Each deliverable will undergo review and approval before moving to the next phase to maintain quality and consistency.

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6. Resources and Tools

Efficient resource utilization is vital for timely delivery.

Software Resources:

- **Salesforce Developer Edition** – For development and deployment.

- **Apex and Visualforce** – Backend logic and UI customization.

- **Salesforce Objects & Flows** – For data automation and business processes.

- **GitHub** – Version control and collaboration.

- **Google Sheets / Docs** – For progress tracking and report management.

Human Resources:

- **Project Lead:** Oversees execution, ensures objectives are met.

- **Developer(s):** Responsible for Apex coding and configuration.

- **Designer:** Creates wireframes and page layouts.

- **Tester:** Conducts functionality and performance testing.

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7. Risk Management and Mitigation

Risk management is a vital part of the planning process to ensure smooth execution.

Potential Risk	Impact	Mitigation Strategy
Salesforce access issues	Medium	Use backup sandbox accounts and frequent commits to GitHub
Requirement misunderstanding	High	Conduct review meetings and document confirmation
Technical errors during deployment	Medium	Maintain version history and rollback plans
Time constraints	High	Strict adherence to timeline and daily progress tracking

9. Conclusion

The **Project Planning Phase** sets a strong foundation for the successful development of the Garage Management System. With a clear project scope, structured schedule, defined deliverables, and identified risks, the team can execute the project efficiently and meet all requirements within the given timeframe. Effective planning minimizes uncertainties and maximizes productivity, ensuring that the project achieves its intended goals seamlessly.