Project Planning Phase

Project planning (Scope, Resource Allocation and Security Planning, Milestone and Deliverable Plan)

Date	26 October 2025
Team ID	NM2025TMID02695
Project Name	Garage Management system
Maximum Mark	5 Marks

Overview

This document presents the detailed project planning for the Garage Management System (GMS) built on the Salesforce Platform. It outlines the defined scope, roles, security framework, milestones, and deliverables to ensure structured and controlled development.

3.1 Scope Definition

The scope of the GMS project is centered around developing a cloud-based garage management solution on Salesforce that enhances efficiency and transparency across the garage service lifecycle.

3.1.1 In-Scope Deliverables

The project includes the following key components:

- **Custom Objects**:
    - *Customer Details*, *Appointment*, *Service Records*, and *Billing Details* with unique auto-number formats.
- **Field and Relationship Setup**:
    - All necessary fields (Phone, Email, Currency, Picklists, etc.) with Lookup and Master-Detail relationships.
- **Validation and Business Rules**:
    - 2 Validation Rules for enforcing data consistency (Vehicle number format and rating input).
    - 1 Required Lookup Filter on Service Records for valid Appointment selection.
- **Automation Flows**:
    - 2 Record-Triggered Flows for automatic Service Amount updates and Quality Check validations.
- **Security Model**:

    - Configured using Profiles, Roles, OWD settings, and Sharing Rules.

- **UI and Analytics**:
    - Custom *Garage Management Application* Lightning App.
    - Report Types, Dashboard Folders, and secure Report Sharing.

3.1.2 Out-of-Scope / Future Enhancements

The current project version excludes complex or external integrations. These may be implemented as future improvements:

- Integration with third-party accounting systems (e.g., QuickBooks, Tally).
- Mobile optimization using Salesforce Field Service Lightning.
- Inventory and parts management for garage stock tracking.
- SMS/Email notification templates for real-time appointment updates.

3.1.3 Scope Control

The project will adhere to a **change control policy**, meaning that any modifications to data model, automation, or roles during implementation must be documented and approved within the team's versioning log.

3.2 Resource Allocation and Security Planning

Proper planning of Salesforce users, roles, and security ensures that data is protected while maintaining efficient collaboration between managers and salespersons.

3.2.1 Role Hierarchy

The project follows a simple but functional **two-level role hierarchy**:

Manager (Top Level)

└── Sales Person (Subordinate)

- **Manager Role**: Oversees service operations and can view/edit all related records.
- **Sales Person Role**: Restricted to their own created records only.

This ensures data visibility aligns with organizational authority and accountability.

3.2.2 Profile and User Setup

To manage access at the feature level:

- **Profiles**:
    - *Manager Profile*: Cloned from Standard User with Create, Read, Edit, and Delete (CRED) permissions on all GMS objects.

    - *Sales Person Profile*: Restricted permissions (Create and Read) on Service and Billing objects.

- **Users**:
    - *Niklaus Mikaelson* → Role: Manager → Profile: Manager
    - *Tom Cruise* → Role: Sales Person → Profile: Sales Person
    - *Anade armas* → Role: Sales Person → Profile: Sales Person
    - *Qoqsik* → Role: Sales Person → Profile: Sales Person

Profiles were mapped to appropriate roles to align data access with job responsibility.

3.2.3 Security Policies

- **Session Timeout**: 8 hours of inactivity.
- **Password Expiration Policy**: Set to *Never Expire* for project simplicity (can be enhanced later).
- **Minimum Password Length**: 8 characters with at least one numeric value.
- **Organization-Wide Defaults (OWD)**:
    - *Service Records*: Private
    - *Appointment*: Controlled by Parent
    - *Customer Details*: Public Read/Write
- **Sharing Rule**:
    - Allows *Managers* to view and edit all *Service Records* owned by *Sales Persons* reporting to them.

3.2.4 Security Rationale

This security design follows the **Principle of Least Privilege (POLP)** — users only get access to what they need to perform their tasks. It maintains data confidentiality while ensuring management-level transparency.

3.3 Milestone and Deliverable Plan

A milestone-based approach ensures systematic project progression and traceability.

Milestone ID	Phase	Deliverable	Owner	Status	Description

M-1	Data Model	Creation of 4 Custom Objects with Auto-Numbers	Admin	✅ Complete	Established foundational structure for Customer, Appointment, Service, and Billing.
M-2	Field Implementation	Setup of all custom fields (Phone, Email, Currency, Picklists, Formula)	Admin	✅ Complete	Defined data types and relationships across objects.
M-3	UI/UX	Creation of the *Garage Management Lightning App*	Admin	✅ Complete	Created a unified navigation experience with related tabs.
M-4	Data Integrity	Implementation of Validation Rules and Lookup Filter	Admin	✅ Complete	Enforced consistency in vehicle numbers and rating input.
M-5	Automation	Creation of 2 Record-Triggered Flows	Admin	✅ Complete	Automated updates of service amounts and status tracking.
M-6	Security	Setup of OWD, Roles, Profiles, and Sharing Rules	Admin	✅ Complete	Implemented data privacy and role-based visibility.
M-7	Analytics	Creation of Custom Report Type, Report Folder, and Dashboard Folder	Manager	✅ Complete	Enabled managers to view summarized service data and trends.

3.4 Project Governance and Review

3.4.1 Review Cycle

Project progress is reviewed weekly using the milestone tracking table. Any delays or issues are documented with resolutions in the project log.

3.4.2 Communication Plan

- **Team Collaboration**: Through Salesforce Chatter and internal documentation.
- **Status Updates**: Shared with SmartInternz mentors weekly.
- **Feedback Loop**: Incorporated after each module is tested or deployed.

3.4.3 Risk Considerations

Risk	Impact	Mitigation
Incorrect relationship setup between objects	Data inconsistency	Use Schema Builder for visual verification before implementation.
Access control misconfiguration	Unauthorized access	Perform role-based user testing post-setup.
Flow or Validation errors	Record save failures	Validate automation in Sandbox before deployment.

3.5 Conclusion

The Project Planning Phase establishes a structured roadmap for the Garage Management System (GMS). It ensures that development is aligned with Salesforce best practices for security, scalability, and user experience. The defined milestones, roles, and controls enable efficient tracking and successful guided project completion.