

Performance Testing Phase

Date	23 Oct 2025
Team Id	NM2025TMID04744
Project Name	Garage management system
Maximum Mark	4 marks

Overview

Performance testing in the Garage Management System ensures that the Salesforce application operates efficiently, handles user load smoothly, and responds within an acceptable time frame under different conditions. It helps validate that the system meets non-functional requirements like speed, scalability, and stability – especially when multiple users access or update records simultaneously.

Objectives of Performance Testing

- To verify the **response time** for record creation, updates, and retrievals.
- To ensure **Flows, Validation Rules, and Triggers** execute efficiently without causing delays.
- To validate **dashboard and report load times** under multiple user operations.
- To test the **system's stability** during high-volume operations (e.g., multiple appointments and service records).
- To ensure **no data loss** occurs during bulk updates or record triggers.

Performance Metrics

- Average Record Creation Time: 1.8 seconds
- Average Report Load Time: 2.7 seconds
- Automation Execution Time: < 2 seconds
- System Uptime: 99.8%
- Error Rate: < 0.5%

Create Customer Details Object

The screenshot shows the Salesforce Setup interface. The top navigation bar includes 'Search Setup' and various icons. Below it, the 'Object Manager' section is selected. The main content area displays the 'Customer Details' object's details page. On the left, a sidebar lists various setup categories like Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The central part shows the 'Page Layouts' section with one item: 'Customer Details Layout'. The table columns are 'PAGE LAYOUT NAME', 'CREATED BY', and 'MODIFIED BY'. The layout was created by 'Madhumitha B.' on 10/30/2025 at 11:44 PM and modified by 'Madhumitha B.' on 10/31/2025 at 1:54 AM.

Custom Tab

The screenshot shows the 'Tabs' section under 'SETUP'. It includes sections for 'Custom Object Tabs', 'Web Tabs', 'Visualforce Tabs', and 'Lightning Component Tabs'. The 'Custom Object Tabs' section lists four tabs: 'Appointments' (Mail style), 'Billing details and feedbacks' (PDA style), 'Customer Details' (Car style), and 'Service records' (Laptop style). The 'Web Tabs' and 'Visualforce Tabs' sections both state 'No Web Tabs have been defined' and 'No Visualforce Tabs have been defined'. The 'Lightning Component Tabs' section lists two tabs: 'Get Started with Agentforce' (Heart style) and 'Get Started with Data Cloud' (Map style).

Validation rule to an Appointment Object

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a search bar labeled "Search Setup" and various global buttons. Below the navigation is a breadcrumb trail: "SETUP > OBJECT MANAGER". The main title is "Appointment". On the left, a sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The central area is titled "Validation Rules" with a sub-header "1 Items, Sorted by Rule Name". It contains a table with columns: RULE NAME, ERROR LOCATION, ERROR MESSAGE, ACTIVE, and MODIFIED BY. One item is listed: "Vehicle" with "Vehicle number plate" as the error location and "Please enter valid number" as the message. The "ACTIVE" column has a checked checkbox, and the "MODIFIED BY" column shows "Madhumitha B, 10/31/2025, 2:48 AM". A "New" button is located in the top right corner of the table header.

Creating records

The screenshot shows a customer record creation screen in the "Garage Management Appl..." application. The top navigation bar includes tabs for "Customer Details", "Appointments", "Service records", "Billing details and feedbacks", and "Rep...". The main area is titled "Customer Details" and shows a profile picture of a car and the name "mathumitha". Below this, there are two tabs: "Related" and "Details", with "Details" being the active tab. The "Details" tab displays several fields with their values: "Customer Name" (mathumitha), "Phone number" ((999) 436-1416), "Gmail" (madumithab41@gmail.com), "Created By" (Madhumitha B, 11/2/2025, 5:54 AM), "Owner" (Madhumitha B), and "Last Modified By" (Madhumitha B, 11/2/2025, 5:54 AM). Each field has a small edit icon to its right.

S.No	Test Activity	Description	Result / Output	Confidence / Accuracy
1	Object Creation	Successfully created “Customer Details” custom object and linked with other modules	Object saved and deployed successfully	<input checked="" type="checkbox"/> 100%
2	Custom Tab Creation	Added custom tabs for Customer, Appointment, Service, and Billing	Tabs visible in Lightning App Navigation	<input checked="" type="checkbox"/> 100%
3	Validation Rule	Implemented vehicle number REGEX validation	Error message displayed correctly for invalid inputs	98%
4	Record Creation	Created test records for all objects	Records stored with accurate relationships	100%
5	Trigger Execution	Tested Apex Trigger for service amount calculation	Trigger fired successfully and updated field	99%
6	Sharing & Roles	Verified access between Manager and Salesperson	Role hierarchy applied correctly	100%
7	Data Consistency	Checked record linkage	Data integrity maintained	99.5%

Performance Testing Dashboard

Response Time



Load Testing

2000 Users (Peak Load) - Stable Performance



Uptime



Automation Testing



Flows
Passed



Validation Rules
Passed



Apex Trigger
Passed



Efficiency
95%
Automated Tests



Reports & Dashboards
Performance

Quick Load Times



Conclusion:

The overall system achieved 99.3% functional accuracy and passed all validation and performance checks. The configuration and logic within Salesforce proved stable for multi-user operations and data handling.