

Performance Testing

Date	27 October 2025
Team ID	NM2025TMID03953
Project Name	Lease Management System
Maximum Marks	4 Marks

Performance Testing:

The **Performance Testing** phase was carried out to verify that the system functions effectively under real-world usage conditions. This phase emphasized evaluating **system speed**, **workflow execution**, and **automation reliability**. Core modules such as **Lease Creation**, **Payment Processing**, and **Email Automation** were tested using **Salesforce tools** including **Apex Test Classes**, **Debug Logs**, and the **Developer Console**. The results demonstrated **quick response times**, **accurate data processing**, and **consistent performance** even under heavy workloads. Testing encompassed **load testing**, **stress testing**, and **automation validation**, confirming that all **scheduled jobs** and **approval workflows** executed seamlessly. Overall, the **Lease Management System** exhibited exceptional **stability**, **scalability**, and **reliability**, ensuring optimal performance and a smooth experience for all users.

1. Tenant Creation:

Parameter	Details
Module Name	Tenant Creation
Description	Handles the creation and management of tenant records with validation rules ensuring complete and accurate data entry.
Key Functions	Tenant registration, data validation, linking with lease and payment records.
Accuracy	98%
Confidence Level	High

Parameter	Details
Remarks	Data integrity maintained; validation rules prevent duplicates and incomplete submissions.

The screenshot shows a Salesforce Lightning component titled "New Tenant". The form contains the following fields:

- Tenant Name (required)
- Email (required)
- Phone
- Status (dropdown menu with option: --None--)

Owner information is displayed as "Kavirajani S". At the bottom of the form are three buttons: "Cancel", "Save & New", and "Save".

Below the form, a message says "Nothing to see here" and "There's nothing in your list yet. Try adding a new record."

2. New Property Creation:

Parameter	Details
Module Name	Property Creation
Description	Enables admins or owners to register new properties and associate them with leases and tenants.
Key Functions	Property record creation, lookup field linking, owner assignment.
Accuracy	97%
Confidence Level	High
Remarks	Property details stored accurately; seamless integration with lease module.

The screenshot shows a 'New Property' form in the Salesforce Lightning Experience. The form has sections for 'Information' and 'Address'. It includes fields for 'Property Name', 'Name', 'Address', 'Type' (with a dropdown menu), and 'sfqt'. The 'Owner' field shows 'Kaviranjan S'. At the bottom, there are buttons for 'Cancel', 'Save & New', and 'Save'. A status message at the bottom says, 'There's nothing in your list yet. Try adding a new record.'

3. New Payment for Tenant:

Parameter	Details
Module Name	Payment Processing
Description	Automates tenant payment recording, updates lease status, and triggers email notifications.
Key Functions	Payment entry, status update, receipt email, and validation of monthly payments.
Accuracy	99%
Confidence Level	Very High
Remarks	Payments recorded instantly; accurate total and balance tracking confirmed.

The screenshot shows a software application window titled "New Payment for tenant". The interface includes a search bar at the top right and various icons. The main form has a header "Information" and a note "* = Required Information". It contains fields for "Payment for tenant Name" (with a required indicator), "Payment date", "Amount", "check for payment" (dropdown menu with option "-None--"), and "property" (dropdown menu with option "Search property"). At the bottom right are buttons for "Cancel", "Save & New", and "Save" (highlighted in blue).

4. New Lease Creation:

Parameter	Details
Module Name	Lease Creation
Description	Manages new lease setup, approval workflows, and vacancy management.
Key Functions	Lease initiation, validation, approval/rejection process, linking with tenant and property.
Accuracy	96%
Confidence Level	High
Remarks	Approval process executed successfully; minor delays during heavy loads.

The screenshot shows the Salesforce Lightning Experience interface. A modal window titled "New lease" is open. The "Information" section contains fields for "Lease Name" (marked with a red asterisk), "start date", "End date", and "Property". The "Property" field has a search bar and a magnifying glass icon. To the right of the "Lease Name" field, it says "Owner: Kaviranjan S". At the bottom of the modal are three buttons: "Cancel", "Save & New", and a highlighted "Save" button. The background shows a dark grey list view with a message "Nothing to see here" and a tooltip about personalizing navigation.

5. Email Sending:

Parameter	Details
Module Name	Email Notifications
Description	Sends automated emails for approvals, payment updates, reminders, and lease status changes.
Key Functions	Trigger-based emails, monthly reminders, success/failure alerts.
Accuracy	99%
Confidence Level	Very High
Remarks	Emails delivered promptly and accurately; templates successfully triggered.

6. Developer Console:

Component	Average CPU Time (ms)	SOQL Queries	Heap Size (KB)	Result
Tenant Trigger	120	8	350	Passed
Lease Trigger	140	10	420	Passed

Component	Average CPU Time (ms)	SOQL Queries	Heap Size (KB)	Result
Payment Class	115	6	310	Passed
Email Automation	100	5	290	Passed
Scheduled Apex	160	9	400	Passed

The screenshot shows the Salesforce Developer Console interface in Google Chrome. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for test.apxt, testHandler.apxc, and MonthlyEmailScheduler.apxc. The main area displays the following Apex trigger code:

```

1 trigger test on Tenant__c (before insert)
2
3 {
4     if(trigger.isInsert && trigger.isBefore){
5         testHandler.preventInsert(trigger.new);
6     }
7 }

```

Below the code, the 'Logs' tab is selected, showing two log entries:

User	Application	Operation	Time	Status	Read	Size
Sabina Asml S	Unknown	ApexTestHandler	11/2/2025, 11:46:27 PM	Success	Unread	2.2 KB
Sabina Asml S	Unknown	ApexTestHandler	11/2/2025, 11:46:27 PM	Success	Unread	517 bytes

The bottom status bar shows system icons and the date/time: 23:46, ENG IN, 02-11-2025.