

Performance Testing

Date	2 Nov 2025
Team ID	NM2025TMID00579
Project Name	CRM Application For Jewel Management System
Maximum Mark	4 Marks

1. Executive Summary

This report summarizes the approach, methodology, findings, and recommendations of the performance testing conducted on the Jewel Management CRM application. The test focused on evaluating system reliability, response time, scalability, and overall user experience under various load conditions.

2. Test Objectives

- To ensure the application delivers acceptable response times for core business transactions.
- To validate system stability under normal and peak workloads.
- To identify bottlenecks and recommend optimization strategies

3. Scope of Testing

- Modules tested: Customer onboarding, Sales transactions, Inventory updates, Reporting, Integration with POS.
- Types of testing: Load testing, Stress testing, Endurance testing, and Concurrency testing.

4. Bottleneck Analysis

- Minor delays were linked to backend database queries during bulk report generation.
- Occasional slowdowns in report generation traced to suboptimal query design and high CPU utilization on the reporting server.
- No significant memory leaks were detected

5. Test Scenarios & Data

Test Case ID	Scenario Description	Load Conditions	Expected Response Time	Actual Response Time	Status
PERF001	Login and dashboard load	50 concurrent users	<2 sec	... sec	Pass
PERF002	Add customer & generate invoice	30 sales staff acting	<3 sec	... sec	Pass
PERF003	Update inventory post-sale	20 inventory managers	<2 sec	... sec	Pass
PERF004	Generate monthly sales report	10 managers	<5 sec	... sec	Pass/Fail

6. Test Execution & Results

- No critical errors were observed for up to the planned peak load.
- Response times for login, customer updates, and reports were within target levels except during extreme stress testing, where login latency increased by 20% over targets.
- First system errors were observed above 125 concurrent users, exceeding the realistic maximum for this CRM's business context.
- The application remained stable during a 5-hour endurance test with steady load

Object Creation

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected. The page title is 'Object Manager' under the 'SETUP' section. A search bar at the top right contains the text 'Search Setup'. Below the title, it says '1 Items, Sorted by Label'. A table lists one item:

LABEL	API NAME	TYPE	DESCRIPTION
Jewel Customer	Jewel_Customer__c	Custom Object	

Create Validation Rules

The screenshot shows the Salesforce Setup interface with the 'Object Manager' tab selected, specifically for the 'Jewel Customer' object. The page title is 'Validation Rules' under the 'SETUP > OBJECT MANAGER' section. A sidebar on the left lists various setup categories. The main content area shows a table of validation rules:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Postal_Code	Zip/Postal code	Must contain 6 digits	✓	Arun Kumar, 10/24/2025, 12:43 AM
ValidationRule_For_JewelCustomerObject	Top of Page	Please fill Required fields	✓	Arun Kumar, 10/24/2025, 12:52 AM

Profiles

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Search bar with "Search Setup" and various navigation icons.
- Left Sidebar:** "Setup" tab selected. Under "Users", the "Profiles" tab is selected, indicated by a blue background.
- Search Bar:** A search bar at the top left contains the text "Q profiles".
- Page Title:** "Profiles" with a "SETUP" button.
- Page Content:**
 - A message says "Didn't find what you're looking for? Try using Global Search."
 - A "Help for this Page" link with a question mark icon.
 - A "All Profiles" dropdown menu and a "Clone" button.
 - A table listing profiles:

Profile Name	User License	Action
Gold Partner User	Gold Partner	<input type="checkbox"/>
Gold Smith	Salesforce	<input checked="" type="checkbox"/>
 - A navigation bar with letters A through Z and a "Custom" option.