Performance Testing

Date	03 Nov 2025
Team ID	NM2025TMID02722
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
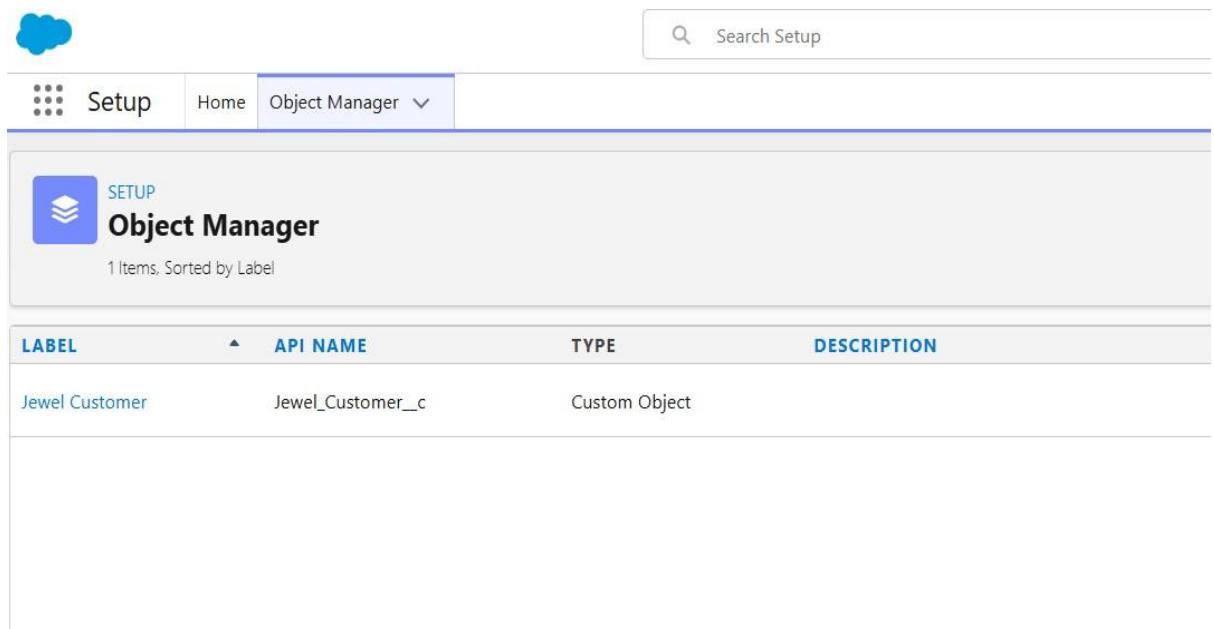
- Minor delays were linked to backend database queries during bulk report generation.

- 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 postsale	20 inventory managers	<2 sec	... sec	Pass
PERF004	Generate monthly sales report	10 managers	<5 sec	... sec	Pass/Fail
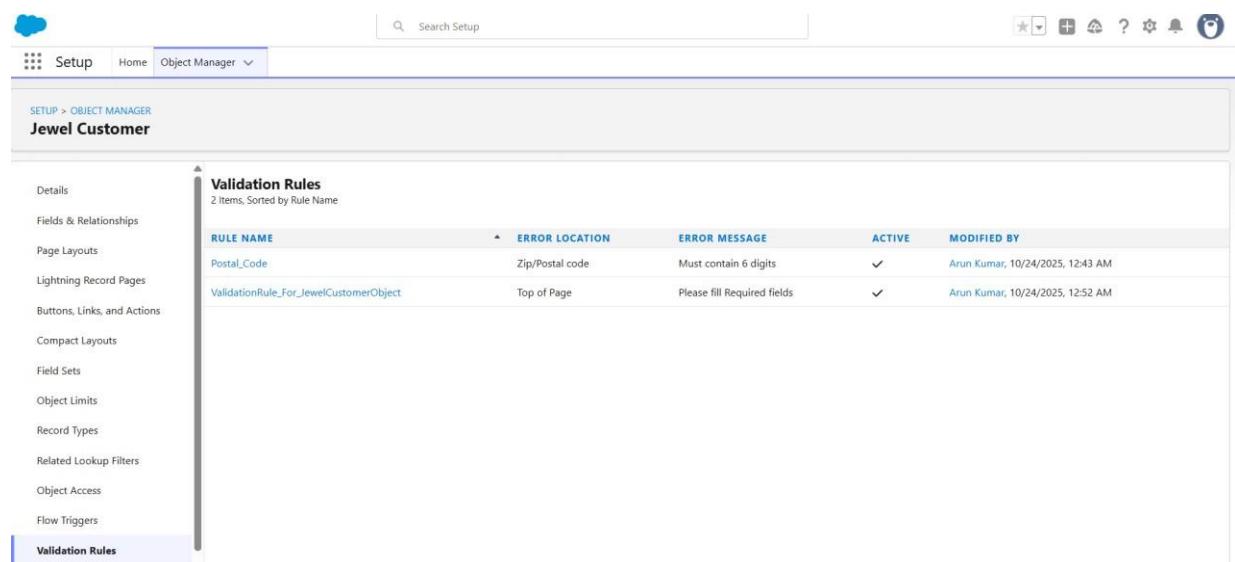
6. Test Execution & Results

- 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**

Create Validation Rules

Profiles