

## **Phase 5: Performance Testing Phase**

### **Project Title: CRM Application for Jewellery Management**

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#### **Introduction**

Performance testing is the final and most crucial stage of the project. It ensures that the system performs efficiently under various conditions and functions correctly after implementation. In this phase, the CRM Application for Jewellery Management was tested in the Salesforce environment to verify that it is fast, stable, and reliable. The main focus of this testing was to check the system's response time, accuracy of results, and smooth working of all modules like Customer, Jewellery, Order, and Feedback.

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#### **Objective of Testing**

The main objective of the performance testing phase is to make sure the application performs all required functions without any issues. It checks whether the CRM system handles customer records, jewellery details, and order data efficiently. It also ensures that automation workflows and dashboards work properly. The goal is to verify that the system can manage real-time store operations smoothly, even when multiple records and users are involved.

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#### **Functional Testing**

Functional testing was carried out to verify that all features of the CRM system perform as expected. During this testing, customer data entry, jewellery record management, and order creation processes were checked carefully. The system allowed users to add, update, and delete customer information without any error. Similarly, jewellery details such as name, type, material, and price were managed successfully. Orders were correctly linked between customers and jewellery products, and feedback forms were submitted properly. The test confirmed that all the designed functions worked as intended.

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#### **Performance Testing**

The performance of the CRM system was tested to check how fast and efficiently it performs with multiple records. Several customers, jewellery items, and orders were

entered into the system to observe speed and stability. Reports and dashboards loaded quickly without delay. Automated notifications, such as order confirmations and stock updates, were triggered instantly when conditions were met. The system performed smoothly without lag or failure, proving its capability to handle large amounts of data effectively.

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## **Usability Testing**

Usability testing was conducted to ensure the CRM application is simple and user-friendly. The layout of each page — including Customer, Jewellery, and Order sections — was tested for easy navigation. Field names were clear and understandable, and the interface was designed to help users complete tasks easily. The dashboards and reports were found to be visually attractive and informative, making it easy for jewellery store staff to understand the business data at a glance. Users found the application intuitive and easy to operate, even without technical knowledge.

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## **Security Testing**

Security testing was done to ensure the protection of sensitive customer and sales data. Access permissions were tested to confirm that only authorized users could view or modify data. Salesforce's role-based access control was used to maintain data confidentiality. All information was stored securely in the Salesforce cloud, preventing unauthorized access. The results of security testing showed that the system is safe and reliable, maintaining both integrity and privacy of business data.

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## **Integration Testing**

Integration testing checked whether all modules of the CRM system work together without errors. When a new order was created, the system automatically linked it to the related customer and jewellery data. Dashboards were updated immediately after each transaction, and automation rules triggered notifications successfully. This confirmed that the modules — Customer, Jewellery, Order, and Feedback — are properly connected and communicate seamlessly with each other.

## **Test Environment**

The testing was performed in the Salesforce Developer Edition under real-time conditions. The environment used for testing included a Windows 10 operating system, Google Chrome browser, and a stable internet connection. The Salesforce cloud platform provided a secure and flexible environment to test the application. This setup simulated how a jewellery store would actually use the CRM system in daily operations.

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## **Test Results and Fixes**

All test cases were executed successfully. The system passed functional, performance, usability, security, and integration testing. Only a few minor issues such as duplicate record creation and unclear field names were identified. These issues were fixed by enabling duplicate prevention rules and renaming fields for better understanding. After these corrections, the CRM system worked perfectly without any errors or performance issues.

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## **Conclusion**

The Performance Testing Phase successfully verified that the CRM Application for Jewellery Management is fast, reliable, and user-friendly. All modules worked together smoothly, and the system handled data efficiently even under load. Security and usability were fully achieved through Salesforce's built-in features. With all tests passed successfully, the application is ready for final submission and real-time use in jewellery business environments. This marks the successful completion of the entire project.