

Phase 3: Project Design Phase

Project Title: CRM Application for Jewellery Management

Introduction

The design phase is one of the most important stages in project development. It focuses on converting the planned ideas and requirements into a structured system model. In this phase, the design of the **CRM Application for Jewellery Management** is created to show how the system will work, what components it includes, and how data will flow between different modules. The goal is to ensure that the system is user-friendly, efficient, and meets the business objectives of jewellery management.

System Design Overview

The Jewellery CRM system is designed using **Salesforce tools** and follows a modular approach. It contains several components such as **objects, relationships, flows, reports, and dashboards**. The design ensures that customers, jewellery products, and sales orders are all interconnected for smooth business operation.

Architectural Design

The system architecture is based on the **Client-Server Model** provided by Salesforce's cloud infrastructure.

- **Client Side:** Accessed by users (jewellery shop owners or staff) through Salesforce's web interface.
- **Server Side:** Salesforce servers store and manage the data of customers, jewellery items, and transactions.

All users interact with the Salesforce platform, which handles processing, data storage, and reporting.

Entity Relationship (ER) Design

The **ER Diagram** represents the logical structure of the database in Salesforce. The major entities and their relationships are:

1. **Customer Object:** Stores details like Name, Contact Number, Email, and Address.

2. **Jewellery Object:** Contains fields such as Item Name, Type, Material, Weight, and Price.
3. **Order Object:** Links Customer and Jewellery objects; stores Order ID, Date, and Total Amount.
4. **Feedback Object:** Stores Customer feedback and satisfaction details.
5. **Relationships:**
 - A **Customer** can place **many Orders**.
 - Each **Order** can include **multiple Jewellery items**.
 - Each **Order** may have one **Feedback record**.

This relationship ensures that customer and order information is properly connected for easy tracking and analysis.

Data Flow Design

The data flow in the system can be described in the following steps:

1. The customer details are entered and stored in the Customer Object.
2. Jewellery products are added with their descriptions and pricing.
3. When a customer purchases an item, an Order record is created linking both the Customer and Jewellery objects.
4. Automated workflows update stock details and send notifications.
5. Reports and dashboards display total sales, popular items, and performance summaries.

This design ensures a smooth flow of data and reduces manual effort.

User Interface Design

The user interface is designed using Salesforce's standard layouts and Lightning App Builder.

- **Home Page:** Displays summary dashboards of total customers, sales, and stock.
- **Customer Page:** Allows adding and viewing customer records.
- **Jewellery Page:** Lists jewellery items with details such as price and availability.
- **Order Page:** Shows order history and links with customer and jewellery data.
- **Reports & Dashboards:** Display visual insights on sales performance and trends.

The design focuses on a simple and clean layout for easy navigation and understanding.

Functional Design

The system includes the following functions:

- **Customer Management:** Add, view, edit, and delete customer details.
 - **Product Management:** Manage jewellery stock with attributes like weight, material, and price.
 - **Order Tracking:** Create new orders, link customers, and track purchases.
 - **Automation:** Use Salesforce Flows to send notifications and update records automatically.
 - **Reporting:** Generate analytical reports and dashboards for sales and performance tracking.
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Security and Access Design

The project ensures secure access to data by assigning roles and permissions.

- Only authorized users can modify jewellery or customer records.
 - Admins have full control over the system.
 - Data security is maintained using Salesforce's built-in access control and encryption.
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Output Design

The expected outputs from the system include:

- Automated sales reports.
 - Dashboard charts showing top-selling items and revenue trends.
 - Notifications for low stock or new customer registrations.
 - Summary views of orders and customer activities.
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Conclusion

The Project Design Phase establishes the visual and logical structure of the CRM Application for Jewellery Management. With well-defined objects, relationships, and data flow, the system ensures efficient management of jewellery inventory and customer records. The Salesforce-based design provides a robust, secure, and user-friendly platform for improving business operations and customer satisfaction.