Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	27 OCT 2025
Team ID	NM2025TMID01965
Project Name	CRM Application for Jewel Management
Maximum Marks	4 Marks

Technical Architecture:

The deliverable includes an architectural overview of the Salesforce-based CRM Application for Jewel Management, which integrates inventory control, customer data management, sales tracking, and automated workflows.

This architecture ensures real-time business operations for jewellery stores or manufacturers by combining Salesforce CRM, custom data models, and automation tools into a unified ecosystem.

Example: Order processing during pandemics for offline mode

Guidelines:
- Include all core modules (Inventory, Customers, Sales, Automation, Reports).
- Define infrastructure layer (Salesforce Cloud-based SaaS).
- Highlight external APIs (Email and Payment Integrations).
- Identify data storage and automation components (Objects, Flows, Validation Rules).
- Showcase analytical components (Reports & Dashboards).

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Custom web-based interface for managing jewellery items, customers, and sales.	Salesforce Lightning App Builder
2.	Application Logic-1	Handles CRUD operations for jewellery inventory and customer management.	Salesforce Apex Classes, Triggers
3.	Application Logic-2	Automates stock updates and sends alerts when stock levels are low.	Salesforce Flow Builder
4.	Application Logic-3	Generates email alerts for new sales and customer updates.	Email Alerts & Templates in Salesforce
5.	Database	Stores jewellery data, sales records, and customer profiles.	Salesforce Object Database (Standard & Custom Objects)
6.	Cloud Database	Managed on Salesforce's cloud infrastructure.	Salesforce Cloud (SaaS Platform)
7.	File Storage	Stores invoices, customer reports, and logs.	Salesforce Files, Attachments
8.	External API-1	Connects to third-party payment gateway for transactions.	REST API Integration

S.No		Description	
9.	External API-2	Integrates with email or SMS services for customer communication.	Salesforce Messaging API
10.	Machine Learning Model	Optional integration for predictive sales and recommendations.	Salesforce Einstein Analytics
11.	Infrastructure (Server / Cloud)	Hosted on Salesforce's scalable and secure cloud platform.	Salesforce Cloud Infrastructure (SaaS)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Salesforce platform uses proprietary components; open-source not applicable.	-
2.	Security Implementations	Multi-level security through role-based access, field-level security, and authentication.	Salesforce Role Hierarchies, Permission Sets
3.	Scalable Architecture	Cloud-native design allows vertical and horizontal scalability for multi-store environments.	Salesforce Cloud Architecture
4.	Availability	High availability with Salesforce's distributed data centers and replication.	Salesforce Multi-tenant Cloud
5.	Performance	Optimized by indexed fields, automated workflows, and data caching.	Salesforce Optimizer, Flow Builder