

TECHNOLOGY STACK(ARCHITECTURE & STACK)

Date	31 OCTOBER 2025
Team ID	NM2025TMID04251
Project Name	CRM Applicaton for Jewel Management-(Developer) in Salesforce
Maximum Marks	4 Marks

Technical Architecture

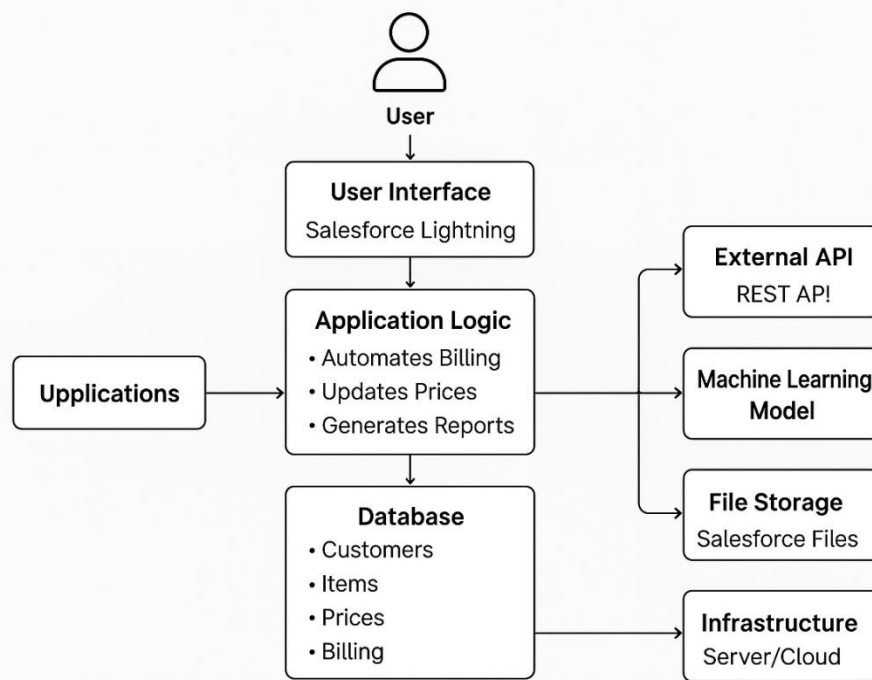
The deliverable includes the architecture diagram and detailed component information as outlined below.

Example: CRM-based jewelry management application with real-time automation and reporting using Salesforce Lightning.

Reference:

<https://developer.salesforce.com/docs>

<https://www.salesforce.com/in/products/platform/overview/>



CRM Application for Jewel Management

Guidelines:

- Include all system modules (Customer, Item, Price, Billing, Dashboard).
- Show separation between application logic and cloud infrastructure.
- Highlight Salesforce's role as the main platform for database, automation, and UI.
- Indicate any external services such as payment APIs or data imports.
- Define data storage and reporting layers clearly.

Components & Technologies:

S.No	Component Description	Technology Used
1.	User Interface – The admin and staff interact via a Salesforce Lightning web dashboard and mobile app.	Salesforce Lightning Experience, App Builder
2.	Application Logic – 1 Automates billing generation and total price calculation after item selection.	Record-Triggered Flow, Formula Fields
3.	Application Logic – 2 Automatically updates price records when metal rates change.	Flow Builder, Process Automation
4.	Application Logic – 3 Generates sales and performance reports dynamically.	Salesforce Reports & Dashboards
5.	Database – Stores all business data such as customers, jewelry items, prices, and invoices.	Salesforce Object Database (Custom Objects)
6.	Cloud Database – Managed through Salesforce's secure multi-tenant architecture.	Salesforce Cloud (Force.com Platform)
7.	File Storage – Used for storing invoices and customer purchase documents.	Salesforce Files, Document Storage
8.	External API – 1 (Optional) – Integrate metal rate updates or third-party payment gateways.	REST API Integration (Salesforce Apex)
9.	External API – 2 – Optional CRM extensions for external email/SMS alerts.	Salesforce Connect, Email API
10.	Machine Learning Model (Future Scope) – Predicts jewelry sales trends and customer preferences.	Einstein Analytics (Salesforce AI)
11.	Infrastructure (Server/Cloud) – Entire system hosted and maintained on Salesforce Cloud.	Salesforce Cloud Infrastructure (SaaS)

Application Characteristics:

S.No	Characteristics	Description	Technology Used
1.	Open-Source Frameworks	Not applicable – Salesforce is a proprietary platform with built-in tools.	-
2.	Security Implementations	Role-based access control, permission sets, profile restrictions, and encrypted connections.	Profiles, Permission Sets, Role Hierarchies
3.	Scalable Architecture	Highly scalable due to Salesforce multi-tenant cloud platform.	Salesforce Cloud Architecture
4.	Availability	Ensures 99.9% uptime with globally distributed cloud servers.	Load-Balanced Salesforce Instances
5.	Performance	Optimized using asynchronous automation and indexed objects for faster query execution.	Apex Batch Jobs, Flow Optimization

Conclusion

The **CRM Application for Jewel Management** utilizes Salesforce’s cloud-native architecture to achieve automation, scalability, and robust data management. It integrates advanced CRM capabilities with automation flows, dashboards, and security features to deliver a complete, efficient, and intelligent jewelry management system.

This architecture ensures high performance, real-time insights, and secure access for all users, aligning with modern CRM development standards.