

Requirement Analysis Phase

Technology Stack Template

1. Introduction

The Technology Stack defines the set of platforms, tools, and technologies used to design, develop, test, and deploy the Salesforce CRM for Jewel Management system.

A well-structured technology stack ensures seamless integration, efficient development, enhanced performance, and long-term maintainability.

This project primarily utilizes the Salesforce ecosystem and its declarative and programmatic capabilities to deliver a scalable and cloud-based CRM solution.

2. Technology Overview

The Salesforce CRM for Jewel Management leverages the Software as a Service (SaaS) model, hosted entirely on the Salesforce Cloud Platform.

The stack integrates both declarative tools (point-and-click configuration) and programmatic tools (custom code) to build a secure, flexible, and user-friendly solution for jewelry business management.

Category	Technology / Tool	Purpose / Description
Platform	Salesforce Developer Edition	Core development and deployment environment for CRM application creation.
Frontend (UI Layer)	Lightning App Builder, Lightning Pages, Record Pages	Design interactive and user-friendly interfaces in Salesforce Lightning Experience.
Backend (Logic Layer)	Apex Classes, Apex Triggers	Implements business logic, data validation, and automation beyond declarative capabilities.
Database Layer	Salesforce Objects (Standard & Custom)	Stores records such as Jewel Customers, Items, Orders, and Reports in relational structured format.
Automation Tools	Flow Builder, Validation Rules, Workflow Rules	Automates repetitive processes, maintains data accuracy, and triggers system actions.
Security Management	Profiles, Roles, Permission Sets, Role Hierarchies	Manages user access and ensures data security for Goldsmiths, Workers, and Admins.
Reporting & Analytics	Reports and Dashboards	Provides insights into sales performance, inventory health, and customer engagement.

Category	Technology / Tool	Purpose / Description
Testing & Debugging	Developer Console, Apex Test Execution, Debug Logs	Supports application testing, debugging, and performance validation.
Version Control / Deployment	Change Sets, Salesforce Setup Menu	Used for migration of configurations and deployment across environments.
Documentation & Collaboration	Trailhead, Salesforce Setup Notes	Platform for documentation, training, and continuous skill development.

4. Integration and Cloud Services

Although the CRM primarily functions within the Salesforce environment, it remains open to future integrations with external tools such as:

- Email Services (e.g., Outlook Integration) for customer communication.
- Salesforce Mobile App for on-the-go access and management.
- Einstein Analytics (optional) for advanced reporting and AI-driven insights.

5. Advantages of the Chosen Stack

- 100% Cloud-Based, ensuring no infrastructure management.
- High scalability and reliability using Salesforce’s multi-tenant architecture.
- Seamless data automation through Flows and Triggers.
- Strong built-in security and compliance features.
- Rapid development using low-code and no-code tools.

6. Summary

The Technology Stack for the Salesforce CRM for Jewel Management system is a robust combination of Salesforce’s declarative tools and Apex-based customization capabilities.

This integrated ecosystem provides a secure, scalable, and user-friendly platform that simplifies jewelry business operations—from managing customers and inventory to tracking orders and analyzing performance.