

# CRM Application – Jewel Management

## *Developer Documentation*

### 1. Overview

The Jewel Management CRM Application is designed to manage customer relationships, inventory, sales, and service requests for jewelry businesses. It provides a unified platform for tracking customers, managing jewelry items, processing orders, and handling after-sales services. This documentation is for developers who are building, extending, or maintaining the application.

### 2. Architecture

Frontend: React (or Lightning Web Components if Salesforce)

Backend: Node.js / Apex classes

Database: MySQL / Salesforce Objects

APIs: RESTful APIs for integration

Authentication: OAuth 2.0 / Salesforce login

Deployment: GitHub → CI/CD → Cloud

### 3. Modules

Customer Management: Maintain customer profiles.

Jewelry Inventory: Track items.

Sales & Orders: Record orders.

Service & Repairs: Manage repair requests.

Reports: Generate analytics.

### 4. Data Model

Core Objects/Tables: Customer, Item, Order, OrderItem, ServiceRequest.

Relationships:

Customer 1-n Order

Order n-n Item (via OrderItem)

### 5. API Endpoints (Examples)

GET /api/customers – Retrieve all customers

POST /api/customers – Add a new customer

GET /api/items – Retrieve inventory items

POST /api/orders – Create a new order

PUT /api/service-requests/:id – Update service request status

### 6. Developer Setup

1. Clone repository: `git clone ...`
2. Install dependencies: `npm install`
3. Configure environment variables: `.env`
4. Run locally: `npm start`

5. Salesforce org setup: Deploy Apex classes, configure custom objects, assign permissions

## **7. Deployment**

Push changes to GitHub main branch.  
CI/CD pipeline runs tests and deploys to staging.  
Manual or automatic deployment to production.

## **8. Extending the Application**

Add new custom objects or fields.  
Integrate with payment gateways.  
Build Lightning or React components for new UI features.  
Use webhooks to sync with third-party systems.

## **9. Testing**

Unit Tests: Jest / Apex test classes  
Integration Tests: Postman / Newman  
UI Tests: Cypress or Selenium

## **10. Security**

Ensure sensitive data is encrypted at rest.  
Enforce field-level and object-level security.  
Audit logs for every update.

## **11. Contribution Guidelines**

Fork the repository  
Create a feature branch: feature/  
Commit with conventional messages  
Submit a Pull Request

## **12. License**

Specify your license (MIT, Apache 2.0, etc.)