FINAL REPORT

Jewel Management System

Project Title: Jewel Management

College Name: Ideal Institute Of Technology

Team ID: LTVIP2025TMID31339

Team Size: 4

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1.INTRODUCTION

1.1 Project Overview :

The Jewelry Inventory System is a custom Salesforce-based application designed to streamline and digitalize the inventory, sales, and billing processes of a jewelry business. This system leverages Salesforce's robust features like custom objects, automation tools, validation rules, Apex triggers, and real- time reporting to manage the complete lifecycle of jewelry items — from customer intake to item billing and delivery.

The primary objective of the project is to provide a centralized platform for managing jewelry customers, inventory (gold and silver items), pricing

structures, customer orders, and billing operations efficiently. The system aims to reduce manual processes, minimize human errors, improve reporting accuracy, and enhance the customer experience.

The Jewelry Inventory System delivers a powerful, scalable, and userfriendly platform to manage all aspects of jewelry operations. It improves data accuracy, enhances customer communication, and offers real- me insights into inventory and financials — thereby optimizing both internal operations and customer satisfaction.

1.2 Purpose

The Jewelry Inventory System's goal is to create a centralized, intelligent digital solution that streamlines and automates a jewelry company's daily operations. Conventional jewelry companies frequently use spreadsheets, manual recordkeeping, and disjointed systems, which can result in inconsistent data, inefficiencies, and subpar customer service. By utilizing Salesforce's cloudbased platform, this project seeks to resolve those issues and offer a dependable, expandable, and user-friendly solution.

The system's purpose is to:

- Handle client information, jewelry stock, pricing, invoicing, and order fulfillment digitally.
- Make sure that computations like total weight, gold/silver pricing, KDM charges, and final billing are accurate and consistent.
- Real- me dashboards and reports facilitate quicker decision-making.
- Automated email notifications for orders and billing can enhance the customer experience.

2.IDEATION PHASE

2.1 Problem Statement:

The Jewelry Inventory System was conceptualized and developed to address the growing operational challenges faced by jewelry businesses in managing their inventory, pricing, billing, and customer relationships. Traditionally, such businesses relied heavily on manual entries, spreadsheets, and disconnected processes, which often resulted in data inaccuracies, delays, and limited visibility

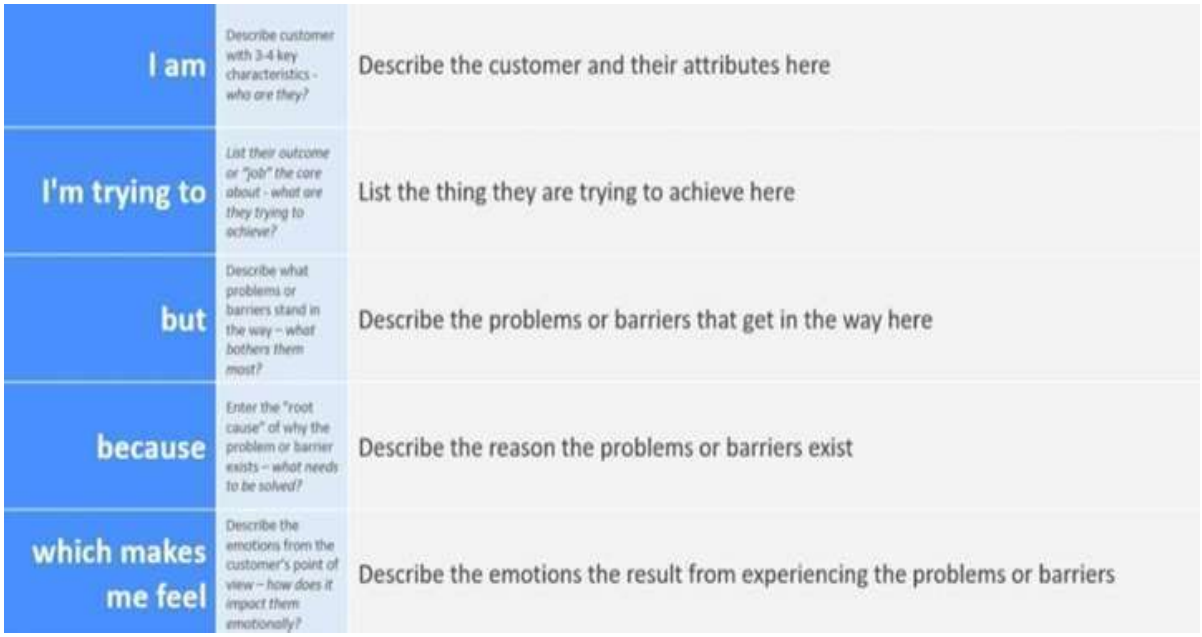
across departments. Our objective was to design a centralized and automated platform using Salesforce, that would empower jewelry retailers to streamline their end-to-end workflows — from customer onboarding to item billing and reporting.

This system is built on robust custom Salesforce components like custom objects, record types, lookup and master-detail relationships, and formula fields, enabling the business to handle both gold and silver items with precision. With the implementation of validation rules, field dependencies, and trigger logic, the application ensures data accuracy and enforces business rules in real- me. The solution also includes role-based access control with custom profiles and permission sets, supporting two major personas: the Gold Smith and the Worker.

From a customer-centric perspective, the system focuses on enhancing transparency, speed, and communication. Automated Flow-driven email notificaons are triggered upon billing, providing customers with a digital summary of their purchases. In parallel, internal stakeholders benefit from realtime dashboards and reports that offer actionable insights into pricing trends, total sales, and inventory movement.

The project was executed using the Agile methodology, broken down into four structured sprints, with each sprint targe ng key functional modules like data modeling, user interface design, backend automation, and analytics. With a measured velocity of 10.25 story points per sprint, our development cycle was both consistent and iterative, ensuring continuous feedback and quality improvement.

In essence, this Jewelry Inventory System transforms manual operations into a smart, scalable, and customer-friendly CRM solution, tailored for the modern jewelry business.



2.2 Empathy Map Canvas:

Through deep user research using empathy mapping techniques, the system was developed with a clear understanding of the daily struggles faced by jewelry shop owners and sales representatives. These users o entirely on manual tools like Excel sheets and notebooks, leading to delays, miscommunication, and billing errors — especially when managing complex gold/silver pricing, KDM charges, and custom orders. Emotionally, they feel stressed during peak seasons, anxious about accuracy, and frustrated by employee mistakes.

To address these pain points, our system introduces automated object relationships, formula-driven calculations, role-based access, and real- me data visibility. Automated flows send instant email confirmations to customers, and dashboards help owners monitor sales and inventory without micromanaging every transaction. By combining technical precision with empathetic design, the Jewelry Inventory System not only improves operational efficiency but also empowers users with confidence, accuracy, and peace of mind in running their business.

How This Helps in Ideation

By understanding the user's environment and pain points, our system is designed to:

- Reduce manual effort through automated fields and triggers.
- Provide real-time inventory visibility.
- Enable quick billing and email communication via flow automation.

- Assign roles and permissions for be er task management.

2.3 Brain Storming:

The project began by identifying a key challenge: the lack of a centralized, automated solution for managing jewelry customer data, inventory, pricing, order processing, and billing. In response, our team engaged in a multi -step idea on phase to explore and organize potential solutions. Ideas were grouped into functional categories, including the creation of custom Salesforce objects for core modules like Jewel Customer, Item, Price, Customer Order, and Billing.

Relationships among objects were carefully defined using lookup and masterdetail fields to enable robust data interconnectivity.

The team prioritized implementation in progressive stages: star ng with schema and object modeling, followed by automation through validation rules, Apex triggers, and flows, then enhancing the user interface with record types and page layouts tailored to gold and silver item workflows. Finally, the project was rounded out with role-based security, profile management, and powerful dashboards and reports for data visibility. This logical, team-driven approach ensured that the final system is not only technically sound but also aligned with real-world operational needs, creating a solution that is both scalable and intuitive for jewelry businesses.

3.REQUIREMENT ANALYSIS

3.1 Customer Journey Map:

Customer journey in a jewelry business is from initial interaction to purchase and post-sale engagement. By understanding how customers engage with the business at various touchpoints, the system was architected to deliver a seamless, efficient, and accurate experience. Customers begin their journey by being registered in the system through the Jewel Customer object, a tier which their item preferences and purchases are recorded via linked Item and Customer Order records. Pricing for both gold and silver items is dynamically managed through the Price object, ensuring transparency and consistency. As the journey progresses, the Billing module consolidates all charges, including weight, stone cost, KDM, and making charges, to generate accurate invoices. To enhance the post-purchase experience, a Record-Triggered Flow automatically sends a personalized email with order and billing details, adding a professional touch and

reducing manual effort. For internal users like sales representatives or goldsmiths, the journey is equally intuitive, thanks to rolebased access, simplified page layouts for gold and silver, and dashboards that provide real- me visibility into customer and item data. Overall, the system is designed to support a smooth and connected journey for both customers and employees — turning operational tasks into streamlined processes while improving customer satisfaction and loyalty.

Step	Experience	Interaction	Touchpoints	Places	Goals / Motivations	Positive Moments	Negative Moments	Opportunities for improvemint	Opportunities for improve
Discover	Leams about a store through age or referrals	Social media or referrals Browsing catalog	instagram oriinstor	Online or store	Help me find a trusted jewelry store	Build trust finding trust finding a jewelry store	Difficulty finding redi-able sources	Targeted social me dia campaigns	Targeted social media campaigns
Browse	Exploring jewelry options online or in store	Browsing catalog Chat: in store	Website. mobile app, jewelry displays	Online or store	Help me view items and get ideas	Overwhelming catalog or helpful brochures	Difficulty findinging reluble sources	Search filter fouture	Targeted social media campaigns
Select	Choose gold jewelry for purchase	Products on screen or sample items	Online or showroom	Sales associate	Help me find the perfect plece	Uncortainty about options	Uncertainty about options	Personalized recommendations	Personalized recommendation
Purchase	Finalize items and complete transaction	Ordering pod recire transaction	Online sales counter	Online or sales counter	Help me set-urely buy my jewelry	Technical buyrax option	Technical issue-or approval	Single-click checkout	Status-upd-ares for customer
Receive	Pick up or receive jewelry order	Visiting store delieving package	Store delivery package	Home or pickap location	Help me get my jewelry safely	Delivery delays	Delivery delays	Status updates for customer	Flexible return policies
Return	Initiate a return or exchange of item	Calling support Revisting store	Phone jewelry counters	Online store	Efficient, no-hassle interactions	Slow response or policy issues	Slow response o policy issue	Flexible return policies	Flexible return policies

3.2 Solution Requirement:

The development of the CRM Application for Jewel Management is rooted in clearly defined functional and non-functional requirements to ensure the solution is both practical and production-ready. The project was systematically broken down into major functional modules — such as Jewel Customer Management, Item Management, Order & Billing, Navigation, Reporting, and Automation — with each module further refined into sub-requirements based on real-world user needs. Every feature in the system, from dynamic formula fields and item record types to the automated billing trigger and custom Lightning tabs, directly maps to these documented solution requirements, ensuring that design choices are intentional and traceable.

Functional Requirements:

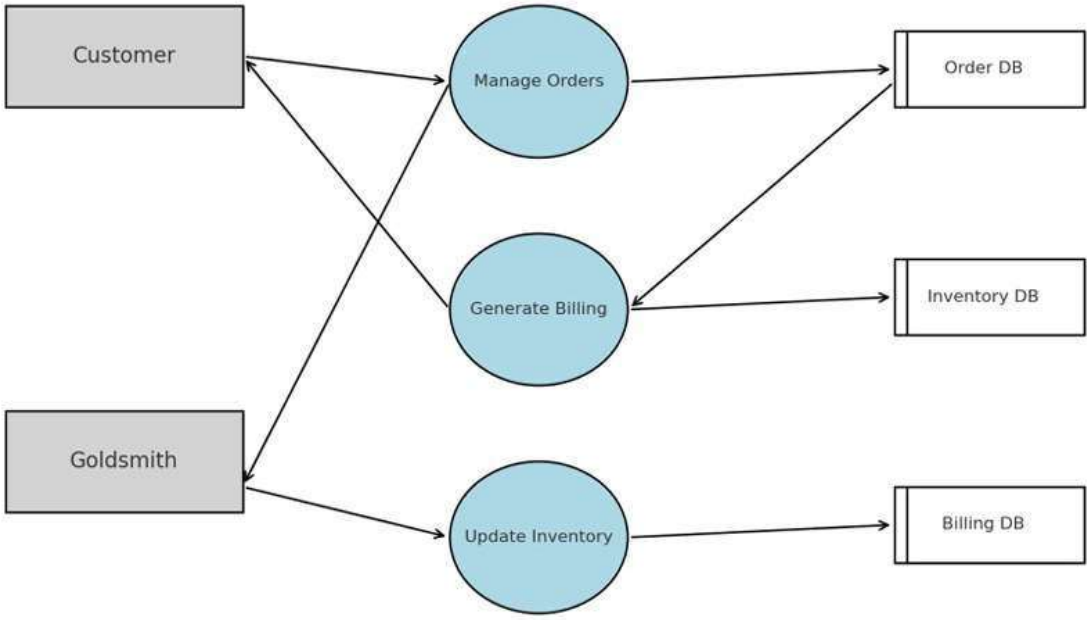
Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Jewel Customer Management	- Add, View, Update, Delete Customer - Validation Rules - Record View and Search
FR-2	Item Management	- Add new Items - Manage Item Details (Gold/Silver) - Formula Fields - Record Types and Layouts
FR-3	Order and Billing Process	- Create Customer Orders - Generate Billing - Trigger for Payment Update
FR-4	App Navigation	- Custom Tabs - Lightning App Setup - Custom Record Views
FR-5	Reports and Dashboards	- Reports for Item & Billing - Dashboard for Sales & Inventory Overview
FR-6	Automation and Flow	- User Setup (Goldsmith, Worker) - Profile Access - Permission Set Assignment

In addition to mee ng functional demands, the project also adheres to non-functional requirements that enhance the system's quality a tributes. Usability is addressed through intuitive navigation and record layouts. Security is reinforced by role-based access and granular permission control. Reliability is ensured via consistent trigger execution and flow automation, while performance optimizations prevent latency in formula-heavy objects. Scalability and availability are achieved by leveraging the native capabilities of the Salesforce Lightning Platform. As a result, the system not only functions correctly but does so with a strong architectural foundation that supports longterm use, adaptability, and business growth.

3.3 Data Flow Diagram:

The Jewelry Inventory System has been designed using a user-driven development approach, supported by well-structured Data Flow Diagrams (DFDs) and priori zed user stories. At its core, the system represents a seamless flow of data across modules such as customer management, item tracking, order processing, pricing, and billing. The Level-1 DFD outlines how data enters the system, moves between interconnected entities, is processed by automation such as formulas and triggers, and is finally stored or reflected through user interfaces and reports.



User stories were carefully crafted to reflect real operational needs — such as a Goldsmith adding items with precision, viewing auto-calculated prices based on purity and weight, or a Customer receiving a detailed invoice with KDM, stone, and making charges. Administrative users are empowered to create role-based profiles and permission sets, ensuring secure access across the system. Workers can manage order statuses, while customers are automatically notified via email post-purchase — all of which are mapped directly to the data flow and system design. This blend of visual system logic and task-oriented stories ensures that each feature exists to fulfill a clearly defined user requirement, making the application not just technically sound but also user-centric and scalable.

3.4 Technology Stack:

The Jewelry Inventory Management System is architected on the Salesforce Lightning Platform to offer a cloud-native, scalable, and secure solution for managing jewelry operations such as inventory tracking, order processing, pricing, and billing. The application is structured using a layered approach, where the User Interface is developed using Lightning Apps, custom tabs, and page layouts, while the Applica on Logic is handled through Apex classes, triggers, flows, formula fields, and validation rules. Core business processes—like dynamic pricing calculation and billing updates—are automated using server-side logic and flow orchestra on, ensuring real- me responsiveness and accuracy.

The Data Layer consists of Salesforce custom objects and fields, backed by Salesforce's multi-tenant cloud database, which provides reliability and performance at scale. Security is enforced through Role-Based Access Control and Field-Level Security to ensure each user type (e.g., Goldsmith, Worker, Admin) interacts only with the data they are permitted to access. Optional integrations with external APIs (such as payment or messaging gateways) have been considered to enhance communication and transaction capabilities. With built-in support for high availability, caching, and indexed performance tuning, the system is not only robust and efficient but also adaptable for future enhancements like predictive analytics and machine learning modules. This technology-driven foundation ensures that the solution is future-ready, enterprise-compliant, and capable of growing alongside business needs.

S.No	Characteristics Description	Technology
1	Open-Source Frameworks	Apex, Lightning Web Components (Salesforce-provided)
2	Security Implementations	Role-Based Access Control, Object/Field-Level Security
3	Scalable Architecture	Cloud-Native 3-Tier Model (UI, Logic, Data)
4	Availability	Salesforce Multi-Zone High Availability Architecture
5	Performance	Formula Fields, Triggers, Indexed Fields, Caching via Salesforce

4.PROJECT DESIGN

4.1 Problem Solution Fit:

This project is designed with a strong problem–solution alignment, ensuring that the system not only addresses real business challenges but also integrates seamlessly into the daily workflows of jewelry retailers and wholesalers. Jewelry businesses often struggle with fragmented inventory systems, manual sales tracking, inconsistent billing, and weak customer engagement. This Salesforce-based solution directly tackles those pain points by offering a centralized platform that automates inventory control, pricing calculations, and order processing while enabling personalized customer communication through integrated flows and notifications.

The system's intelligent design helps reduce the risk of manual errors, accelerates operational processes, and ensures accurate, real- me data visibility — particularly around stock levels and customer orders. By leveraging Salesforce's cloud-native architecture, the solution enhances adoption by aligning with existing CRM behaviors and supporting scalable growth.

Ultimately, the application goes beyond solving technical problems: it empowers jewelry businesses to build trust with customers, increase retention through be er a er-sale service, and sharpen their marketing using sales history and engagement insights. This strong problem–solution fit ensures that the application is not just functional, but also strategic and future-proof.

Problem-Solution Fit

Problem	Solution
Manual tracking of inventory and sales is time-consuming and error-prone	Automated inventory and sales management through Salesforce
Difficulty managing jewelry items by type, metal, stone, etc	Categorization of jewelry items for efficient organization and retrieva
Limited visibility into customer preferences and purchase history	Customer relationship management features for personalized service

4.2 Proposed Solu on:

This project is a comprehensive Salesforce-based solution that addresses key operational challenges faced by jewelry businesses, including inventory mismanagement, pricing errors, and billing inefficiencies. The system introduces a unified, cloud-native platform that automates the end-to-end workflow from customer data management and item tracking to order handling and billing calculations with a focus on precision and user convenience. By incorporating custom objects, dynamic formula fields, validation rules, flows, and role-based access, the system empowers different user roles such as Goldsmiths and Workers to perform their tasks with accuracy and accountability.

What sets this solution apart is its ability to adapt to both gold and silver inventory scenarios using record types and custom layouts, while delivering real-me insights via dashboards and automated customer communication through flows. It not only improves operational efficiency but also enhances customer satisfaction by offering transparent billing and faster service. From a business standpoint, the system holds potential for commercialization as a scalable SaaS product for small to mid-sized jewelry shops, with revenue models ranging from subscriptions to service-based implementation. Its scalable architecture and extensibility ensure long-term viability, with future scope for integra on with e-commerce portals, mobile apps, and vendor systems making it both an immediate problem-solver and a long-term business enabler.

4.3 Solution Architecture

The architecture of the Jewelry Inventory System follows a modular, cloudnative, and multi - tiered approach, built entirely on the Salesforce Lightning Platform. At its core, the system adheres to a three-layer architecture comprising the Presenta on Layer (UI), Business Logic Layer, and Data Layer, ensuring separation of concerns, scalability, and maintainability.

The Presenta on Layer is developed using Salesforce Lightning App Builder, custom tabs, page layouts, and record types to tailor user experiences based on item types (Gold or Silver) and user roles (Goldsmith, Worker, Admin). It provides intuitive navigation and simplified access to records via the Lightning Experience interface.

The Business Logic Layer incorporates Apex classes, trigger handlers, validation rules, formula fields, and record-triggered flows. This layer automates critical operations such as pricing calculations, order updates, KDM/making charges computation, and sending email notifications to customers upon billing. The use of handler classes ensures clean, modular code aligned with Salesforce best practices.

The Data Layer relies on custom objects such as Jewel Customer, Item, Price, Customer Order, and Billing. These objects are interconnected via lookup and master-detail relationships, ensuring relational consistency and referential integrity. Salesforce’s multi-tenant cloud database provides high availability, strong consistency, and horizontal scalability.

Security is enforced through role-based access control, field-level permissions, profiles, and permission sets, ensuring that users can only access the data relevant to their responsibilities. Optional integrations with external services (like email APIs or payment gateways) are considered for future extensibility.Together, this architecture enables a robust, scalable, and usercentric jewelry management system, capable of supporting real- me operations, rich analytics, and future business expansion such as mobile app access, e-commerce integra on, and AI-based recommendations.

5.PROJECT PLANNING AND SCHEDULING

5.1 Project Planning

The development of the Jewelry Inventory Management System was executed using the Agile methodology, enabling flexible planning, iterative progress, and continuous improvement based on feedback. The project was divided into four sprints, each with a clear focus and deliverables aligned to the system's functional modules and development priori es.

Sprint Breakdown and Timeline:

Sprint 1: Data Modelling and Setup (5 Days)

Focused on designing custom objects such as Jewel Customer, Item, Price, Customer Order, and Billing. Relationships (lookup, master-detail), field creation, and tab setups were also completed in this phase.

Sprint 2: User Interface & Role Configuration (5 Days)

Included creation of custom page layouts, record types for Gold and Silver items, and user profiles (Goldsmith, Worker) along with roles and permission sets.

Sprint 3: Business Logic Implementation (5 Days)

Apex triggers, trigger handler classes, validation rules, field dependencies, and automation using record-triggered flows were developed and tested during this sprint.

Sprint 4: Reporting, Dashboards & Flow Enhancements (5 Days)

Focused on building real- me reports and dashboards, configuring email notifications via Flow, and completing UI refinements for end-user experience.

Story Points and Velocity:

Each task in the project was es mated using story points to reflect its complexity and effort. Using Fibonacci-based es ma on, tasks were marked as very easy (1 point) to difficult (5 points). Across the 4 sprints, the team completed a total of 41 story points, achieving a stable velocity of ~10.25 story points per sprint. This consistent pace ensured timely complete on and quality assurance across each sprint cycle.

Scheduling Tools & Practices:

Sprint Planning Boards: Used to assign tasks and monitor progress during each development cycle.

Daily Stand-ups: Helped synchronize team efforts, remove blockers, and maintain momentum.

Retrospectives: Conducted at the end of each sprint to assess outcomes, gather feedback, and improve collaboration.

Documentation and Checklists: Maintained for every sprint to ensure that deliverables aligned with functional and non-functional requirements.Through careful planning, clear sprint goals, and continuous review, the project was delivered within the intended timeframe, mee ng both technical and user experience expectations.

Formula :

Jewelry Inventory System - Agile Planning Logic

Epic 1: Salesforce Data Model Setup

Goal: Set up custom objects, fields, and relationships in Salesforce

Sprint 1 (5 Days)

Epic 2: UX & Record Types

Sprint 2 (5 Days)

Epic 3: Backend Logic (Apex)

Sprint 3 (5 Days)

Epic 4: Reports, Dashboard & Flow Automation

Sprint 4 (5 Days)

Summary

Velocity Calculation:

Total Story Points: 41

Number of Sprints: 4

Velocity = 41 / 4 = 10.25 Story Points per Sprint

6.FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing:

Functional Testing:

Functional testing was conducted to ensure that all features and components of the Jewelry Inventory System operate according to the defined requirements. Each module—ranging from object creation to billing automation—was tested against user stories, acceptance criteria, and expected outputs. The testing focused on verifying that business logic, validations, formulas, flows, and UI interactions performed accurately and consistently.

Key Functional Areas Tested:

Jewel Customer Module: Add, update, delete customer records; validate required fields; check email and postal code format validation.

Item Management: Add gold/silver items, ensure correct field visibility based on record types, validate formula fields like Total Weight, Amount, KDM, etc.

Price Management: Validate correct storage and retrieval of gold/silver market rates.

Order & Billing: Test trigger-based updates to Paid Amount, accuracy of billing components, and automatic flow-triggered email notifications.

Record Access Control: Validate profile/role-based access for Goldsmith and Worker users to ensure proper visibility and edit rights.

Reporting & Dashboard: Confirm that reports display accurate, real- me data on item sales, customer orders, and revenue.

All major test cases passed successfully, confirming the system's alignment with functional requirements and ensuring a reliable user experience across modules.

Performance Testing:

Performance testing was conducted to evaluate the responsiveness, stability, and scalability of the system under realis c usage conditions. As the system was built

natively on the Salesforce Lightning Platform, many performance optimizations were inherently supported, such as caching, indexing, and multitenant database management.

Key Aspects Evaluated:

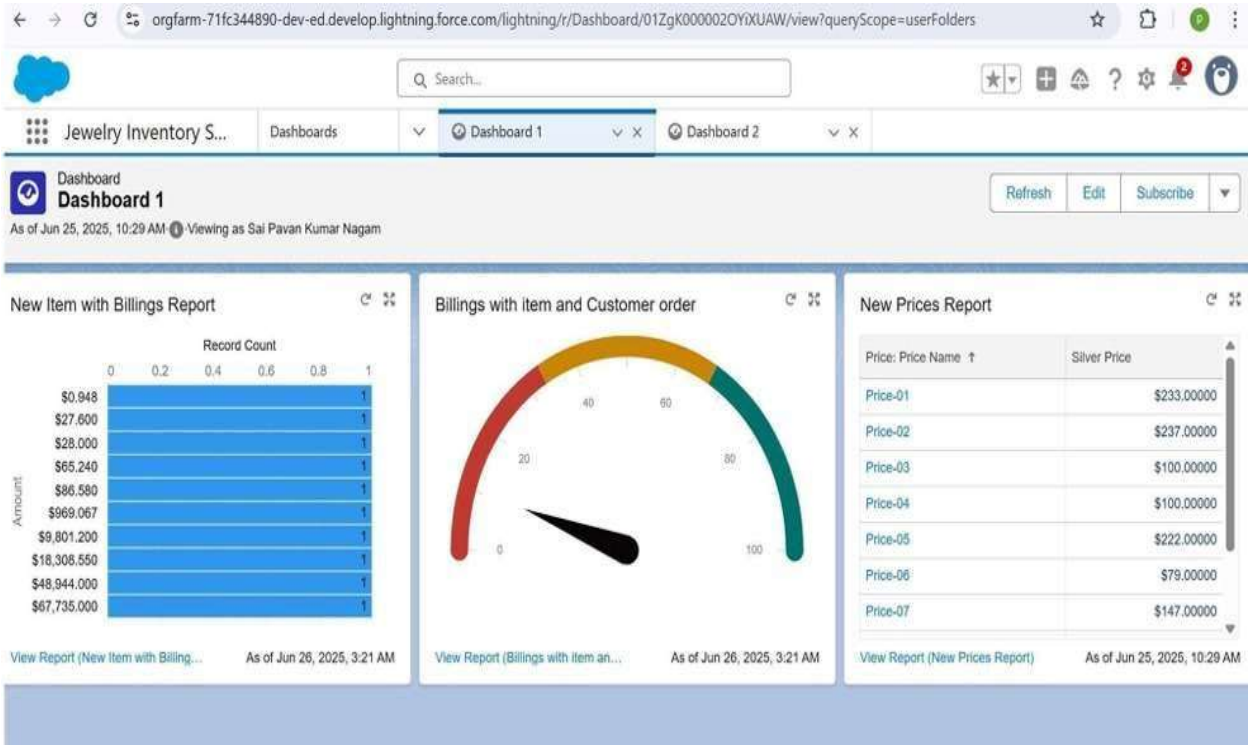
Load Handling: The system was tested with bulk records (10+ per object) to simulate real business data volumes. No lag or timeout issues were encountered.

Formula Field Execution: Complex formulas (e.g., KDM, Amount, Purity Price) were assessed for real- me calculation efficiency; all executed within acceptable response times.

Flow and Trigger Execution: Apex trigger handler and record-triggered flows were tested for batch safety and speed. No governor limits were breached.

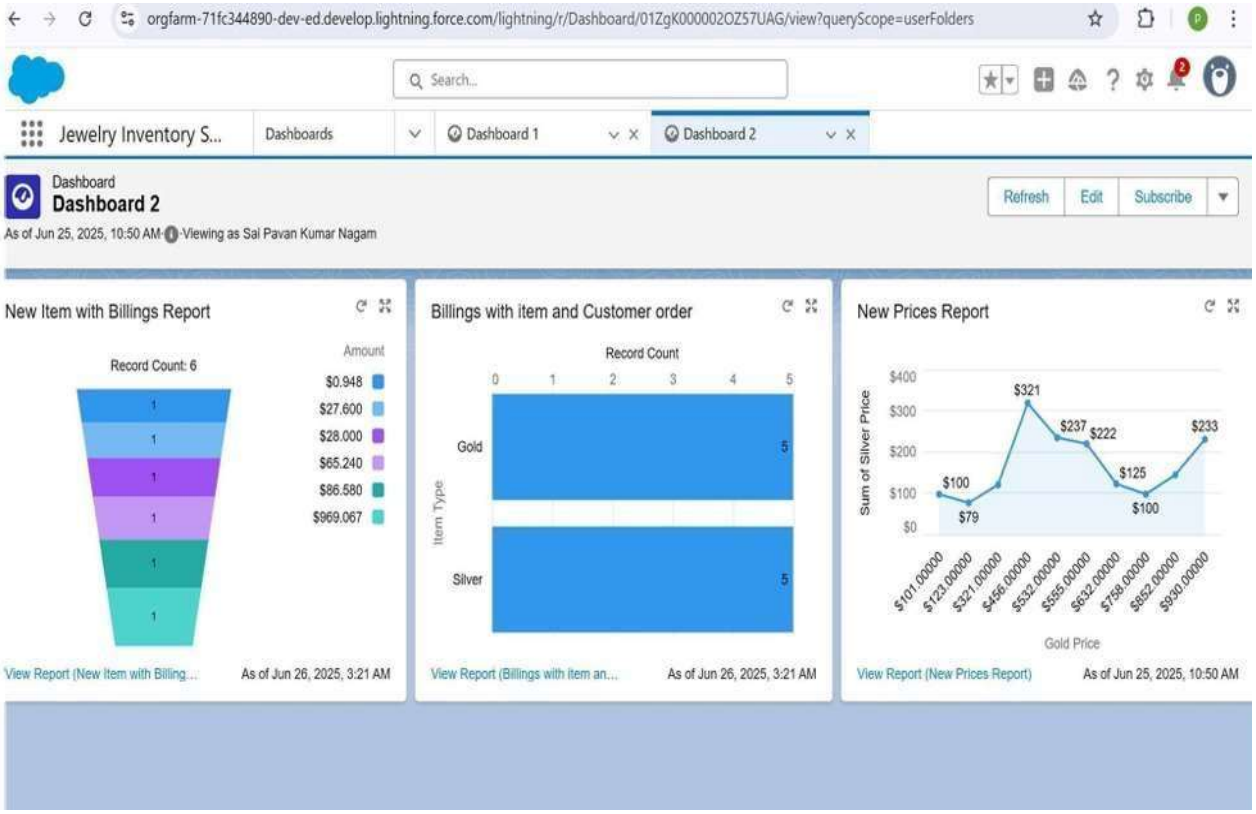
UI Responsiveness: Page layouts, tab loading, and record editing were smooth under normal and multi -user conditions.

The system demonstrated consistent performance and maintained responsiveness across all tested scenarios, validating that the architecture supports both functionality and scalability effectively.



Performance Observations

Metric	Observed Value	Target Threshold
Dashboard Load Time	~2.8 seconds	< 3 seconds
Max Records Displayed	10	<= 50
Gauge Render Time	1.3 seconds	< 2 seconds



Performance Observations

Metric	Observed Value	Target Threshold
Dashboard Load Time	~3.1 seconds	< 3.5 seconds
Line Chart Responsiveness	Smooth	Responsive
Funnel Chart Load	Moderate	< 2 seconds

7.RESULTS

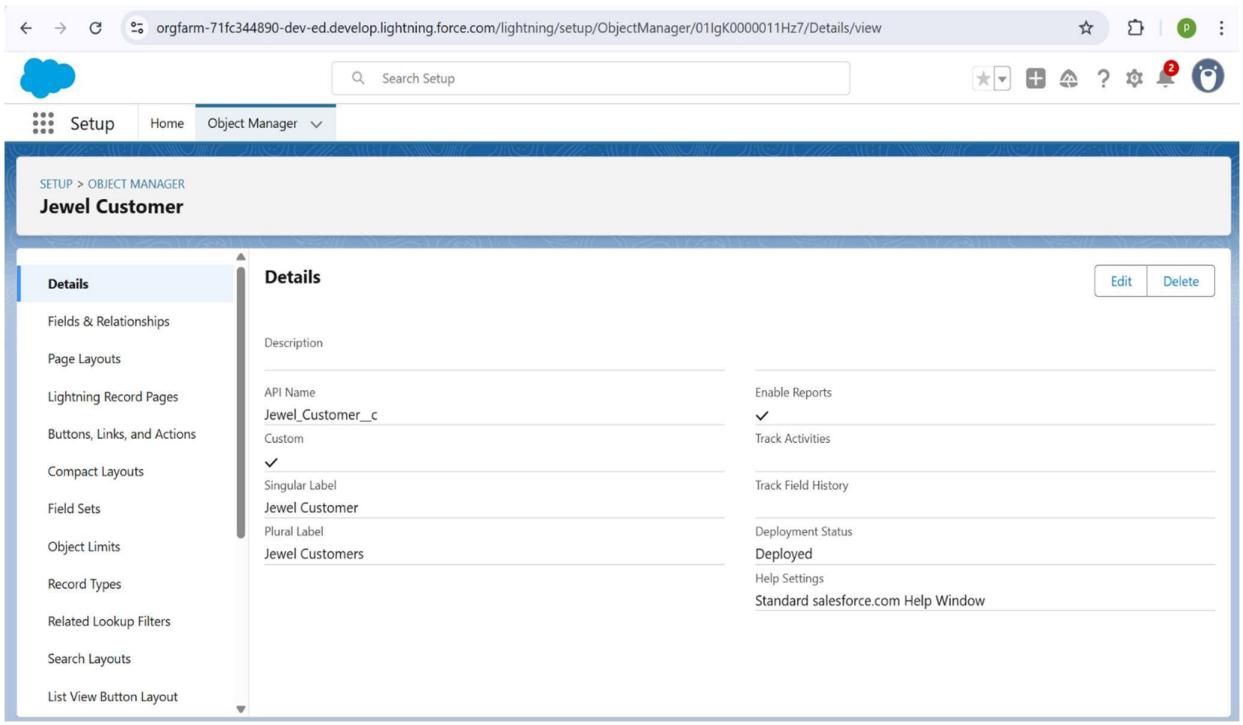
7.1 Output Screenshots:

For everything there will be input data components(objects).

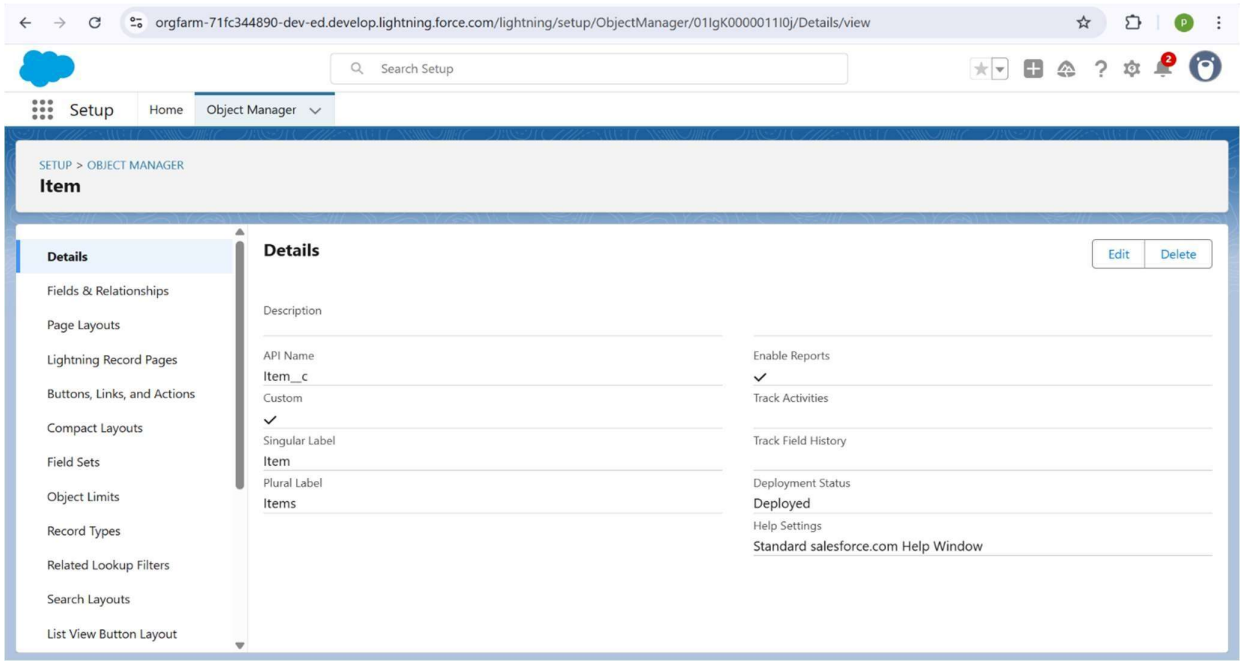
For implementing this project i.e, Jewel Management,we have created five main custom objects:

- Jewel Customer Item
- Customer order
- Price
- Billing

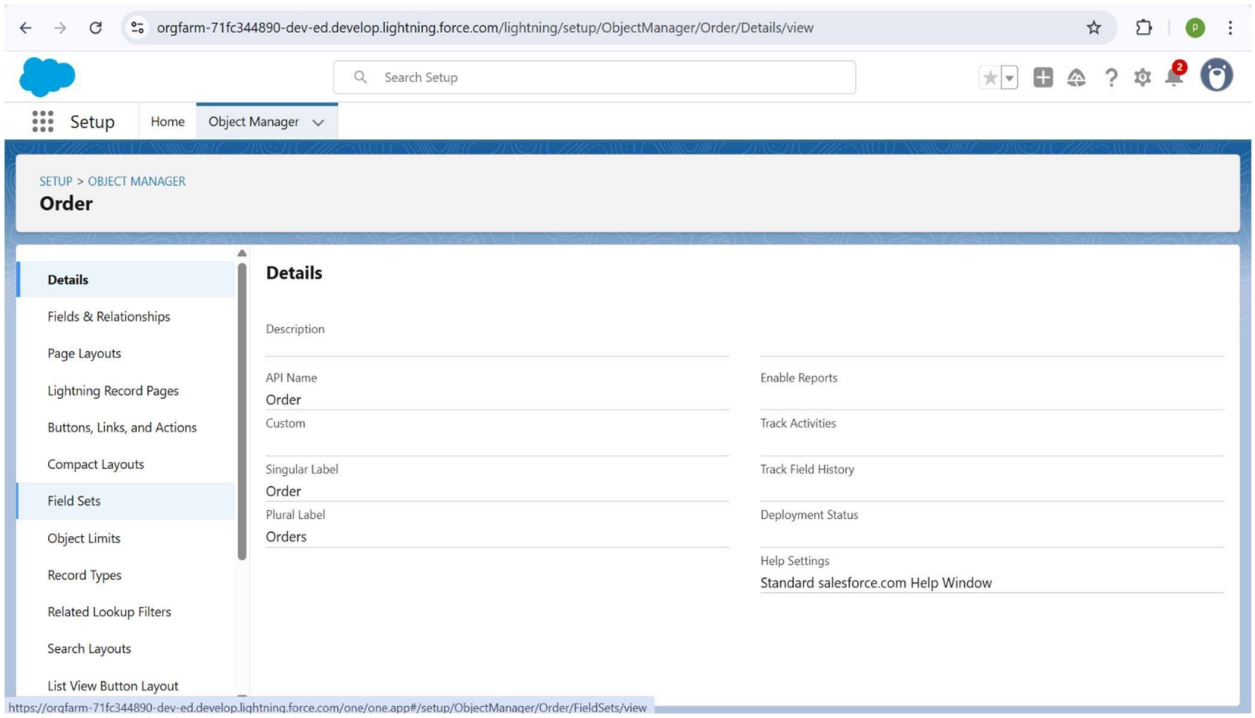
1.Jewel Customer:



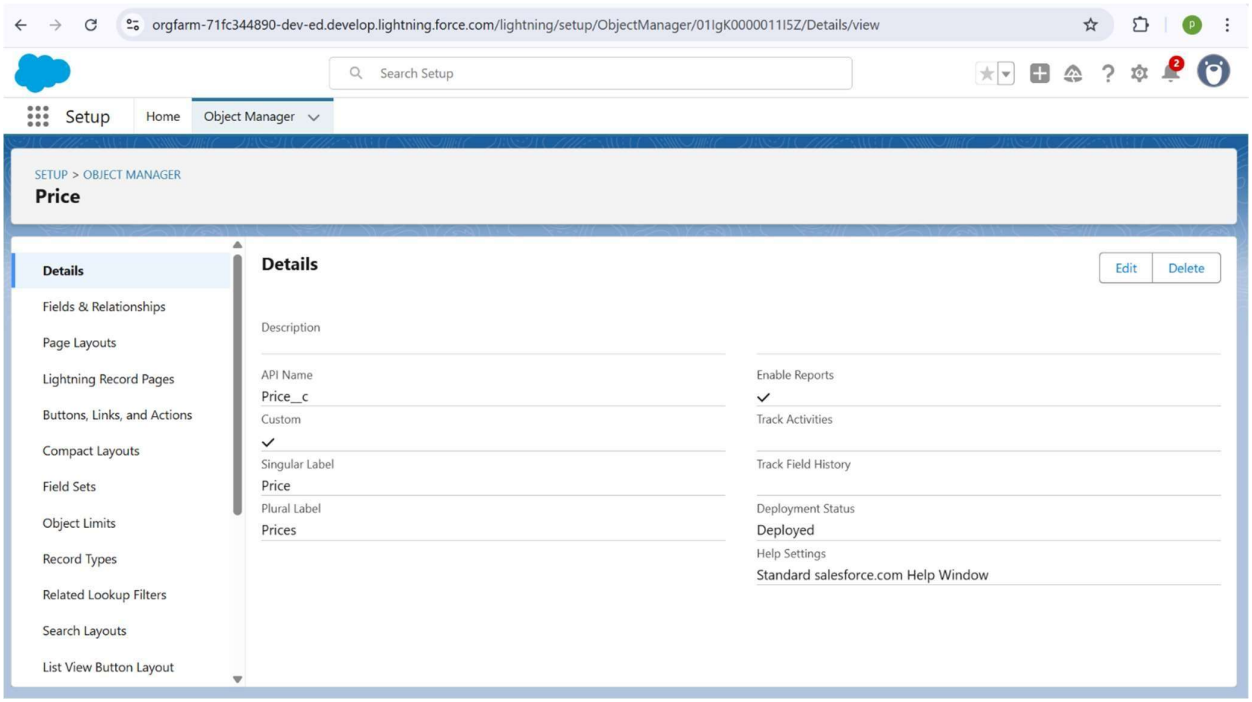
2.Item:



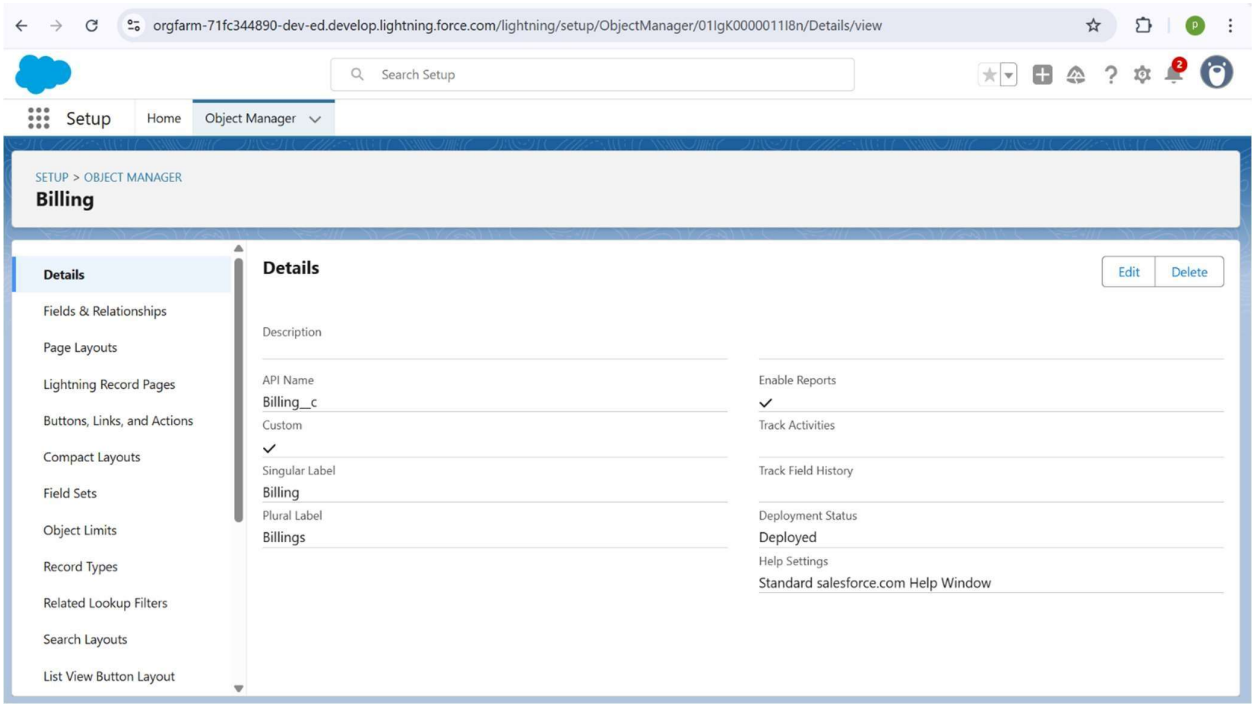
3.Customer Order:



4.Price:



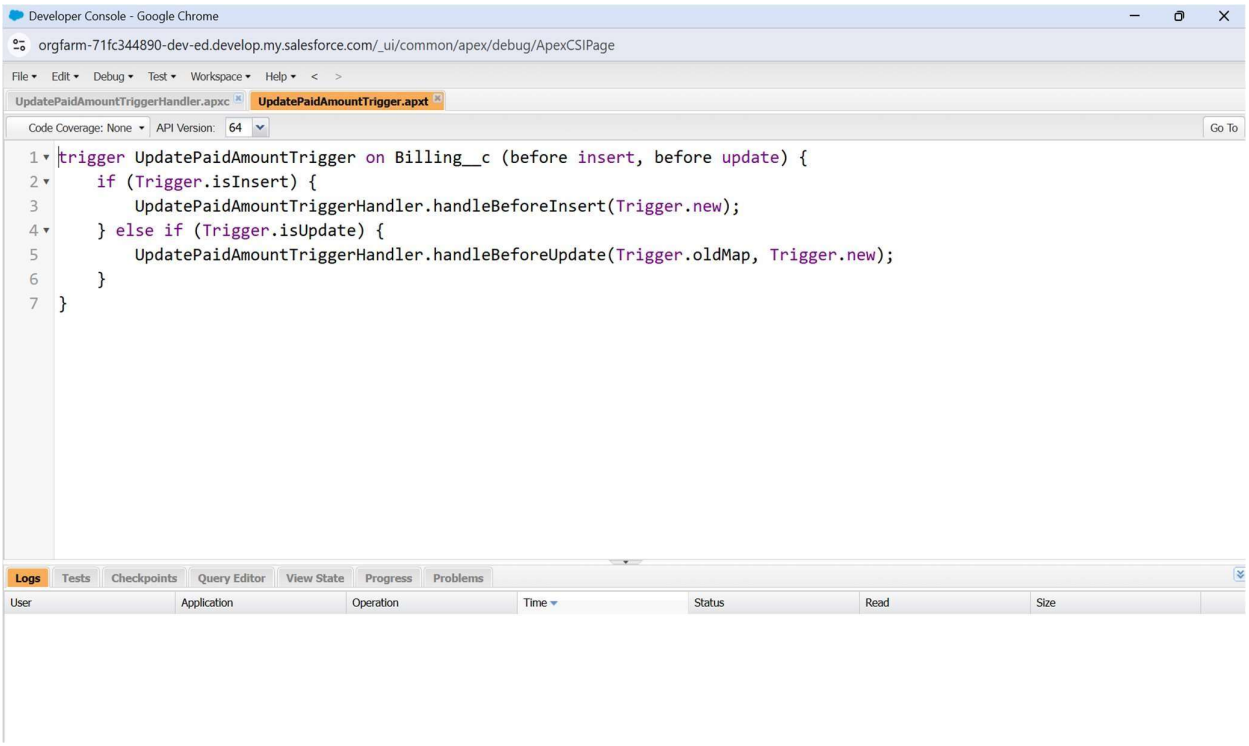
5.Billing:



Trigger : UpdatePaidAmountTrigger

Purpose of the Trigger:

The UpdatePaidAmountTrigger is implemented to automate the process of updating the Paid Amount field in the Billing__c object whenever a billing record is created or updated. This ensures accurate tracking of cumulative payments against a billing record without requiring manual calculations or user input.



Trigger : UpdatePaidAmountTrigger Handler

The UpdatePaidAmountTriggerHandler class contains the core logic that is executed when the trigger fires. It is structured into two static methods:

1. handleBeforeInsert(List<Billing__c> newBillings)

Purpose: Automatically sets Paid_Amount_c = Paying_Amount_c for new records.

Example:

Paying Amount = 3000

--> Paid Amount (auto-filled) = 3000

2. handleBeforeUpdate(Map<Id, Billing_c> oldBillingsMap, List<Billing_c> updatedBillings)

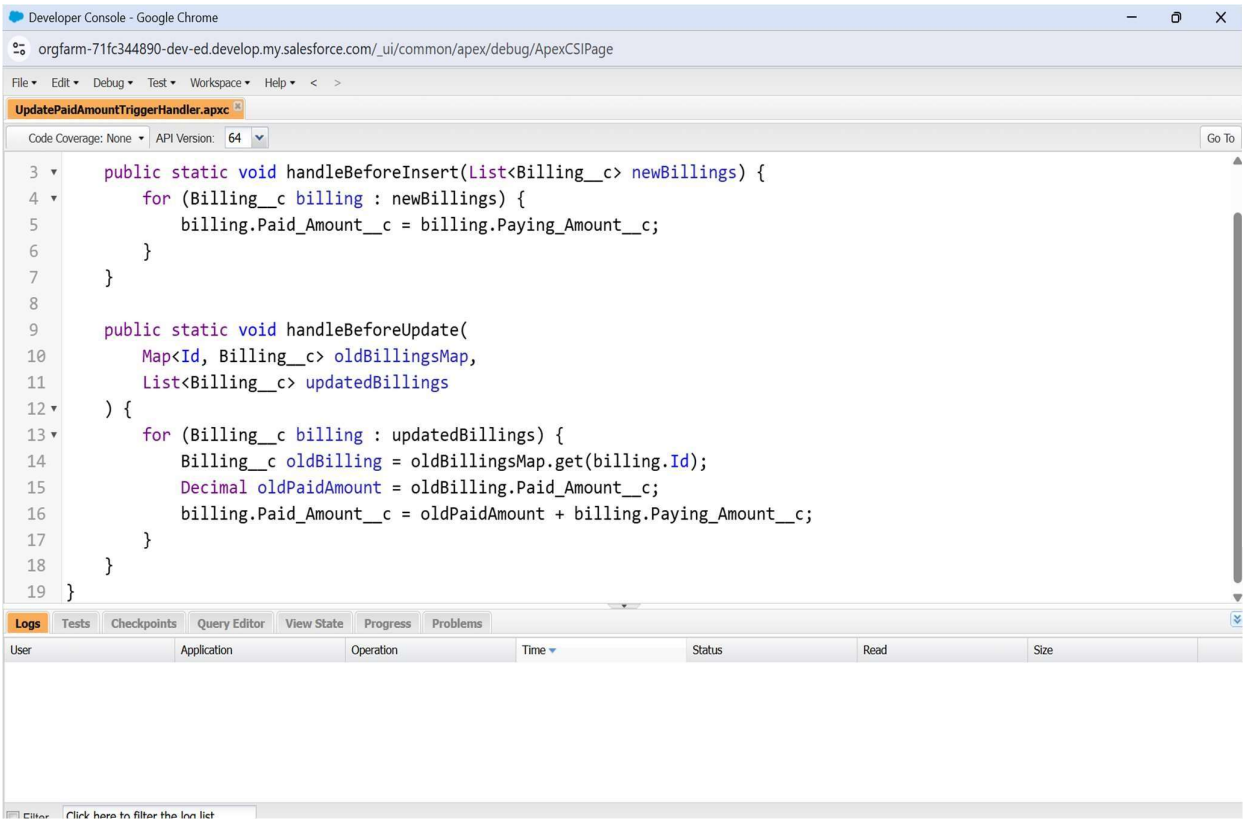
Purpose: Adds the newly entered Paying_Amount_c to the existing Paid_Amount_c to handle cumulative payments.

Example:

Previous Paid Amount = 3000

New Paying Amount = 2000

--> Updated Paid Amount = 5000



Reports :

Reports play a crucial role in providing data-driven insights and improving decision-making within the Jewelry Inventory System. Built using Salesforce's

native reporting tools, the following three custom reports were created to visualize inventory movement, financial metrics, and order status across the business. Each report is interactive, filterable, and reflects real- me data from multiple custom objects.

1. Report: Item with Billings

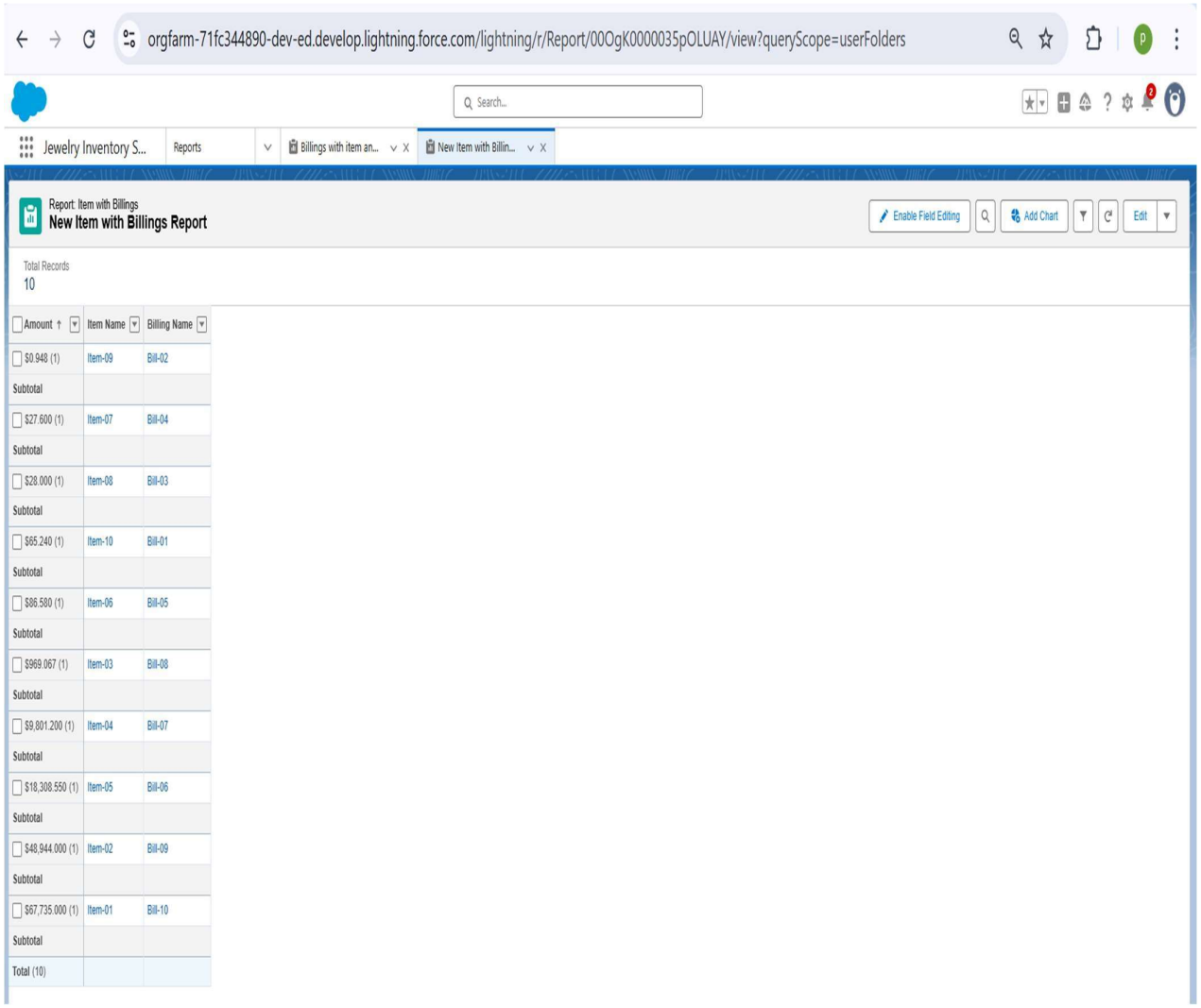
Report Type: Item with Billing__c

This report displays a detailed view of each jewelry item along with its associated billing records. It includes key fields such as:

- Item Type (Gold/Silver)
- Ornament Name
- Weight
- Total Amount
- KDM Charges
- Paid Amount

Purpose :

To track the financial performance of each item, validate that correct billing data is linked, and compare sales trends across different item types. It helps identify high-value ornaments and ensures that pricing calculations are accurately recorded.



2. Report: Billings with Item and Customer Order

Report Type: Billing_c with Itemc and Customer_Order_c

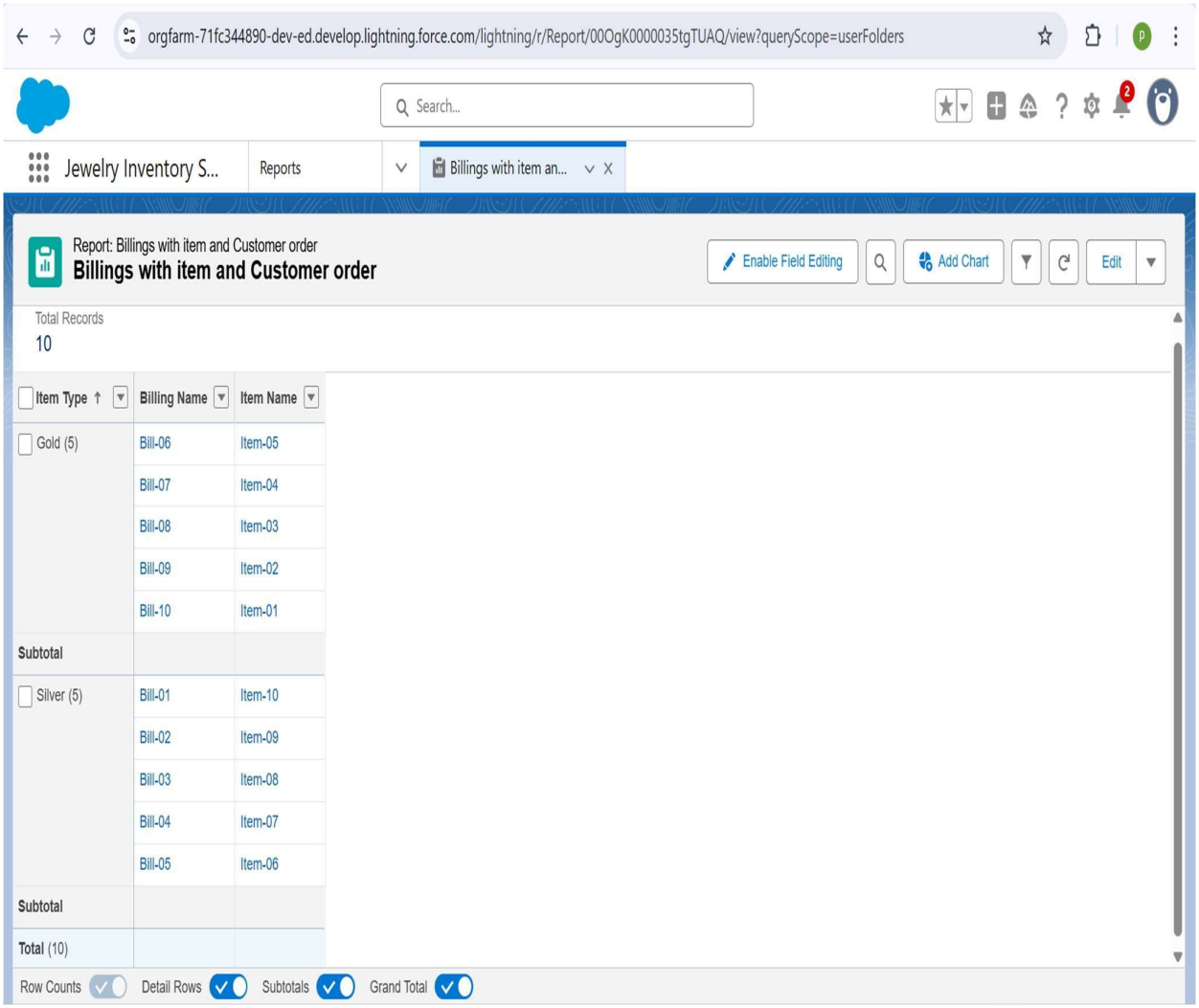
This cross-object report provides an overview of customer orders linked to billings and item details. It includes:

- Customer Name

- Order Status
- Paid Amount vs Total Amount
- Expected Return Days
- Item Type and Priority

Purpose:

To monitor the billing lifecycle and customer fulfillment progress. This report allows managers to assess outstanding payments, analyze order fulfillment timelines, and review customer transaction history in one consolidated view.



3. Report: New Prices Report

Report Type: Item__c Summary

This summary report categorizes item sales based on the item type (Gold or Silver) and aggregates total revenue, weight, and number of orders.

Fields Highlighted:

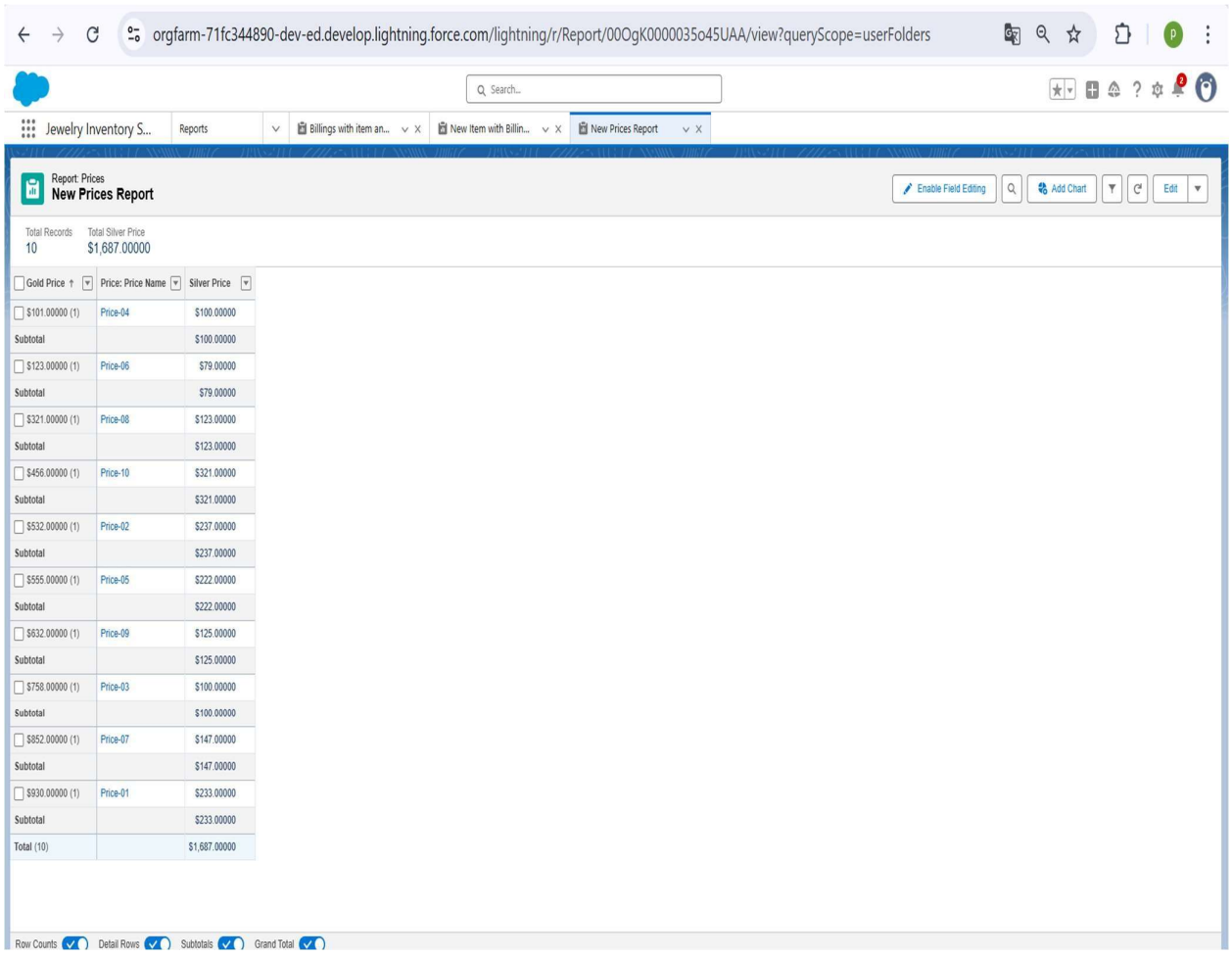
- Item Type
- Count of Items Sold

- Total Sales Amount

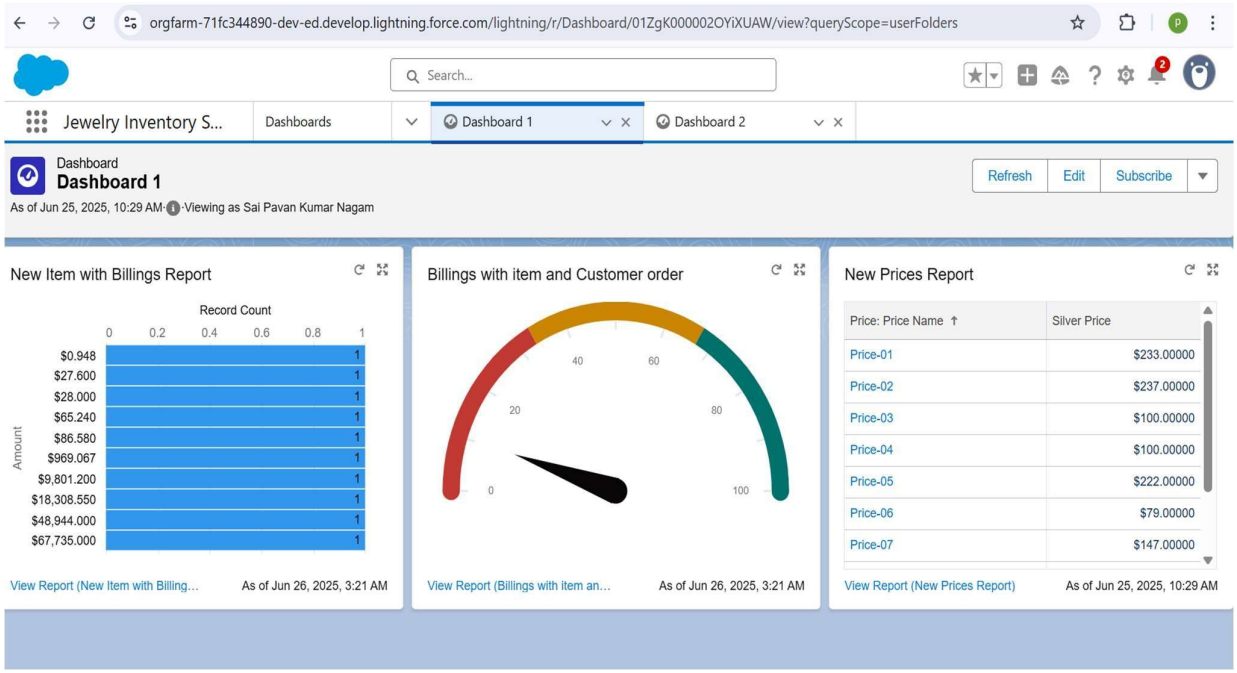
- Total Weight Sold

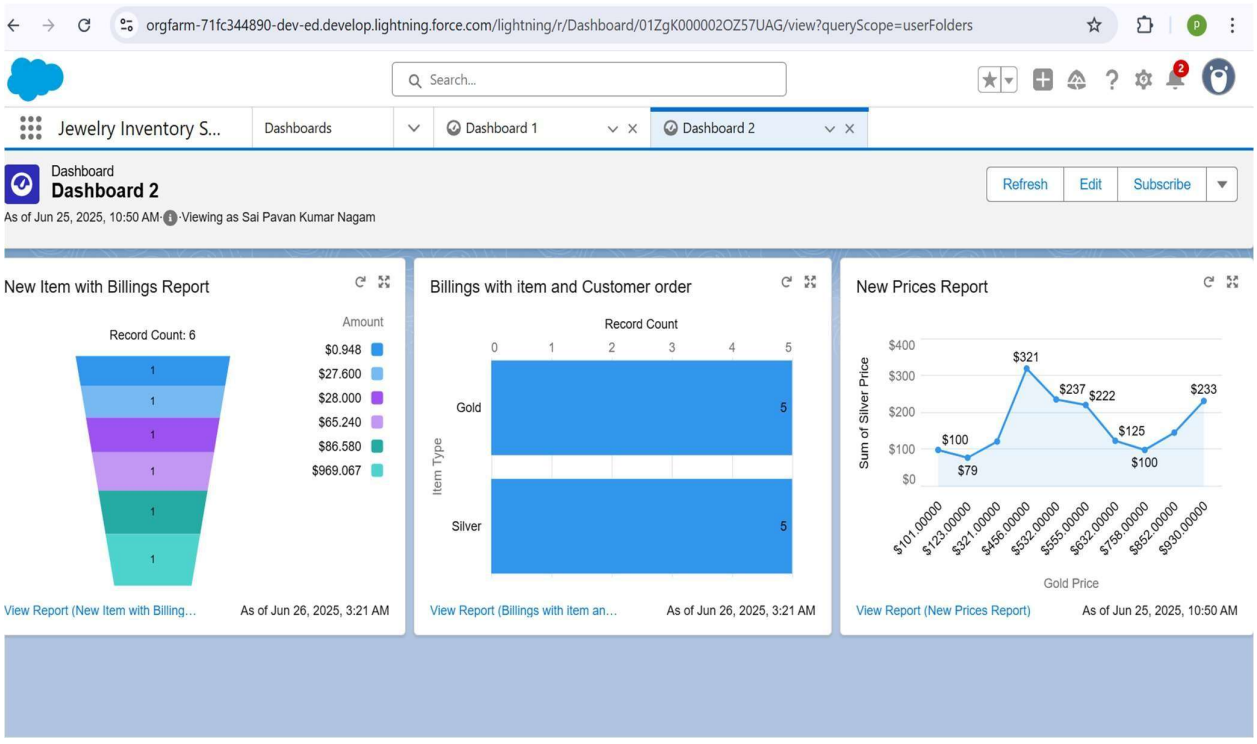
Purpose:

To provide a high-level snapshot of sales distribution across gold and silver products. This is useful for strategic planning, inventory reordering, and evaluating seasonal demand trends.



Dashboards :


orgfarm-71fc344890-dev-ed.develop.lightning.force.com/lightning/r/Dashboard/01ZgK000002OYiXUAW/view?queryScope=userFolders
Search...
Jewelry Inventory S...
Dashboards
Dashboard 1
Dashboard 2
Dashboard
Dashboard 1
As of Jun 25, 2025, 10:29 AM · Viewing as Sai Pavan Kumar Nagam
Refresh
Edit
Subscribe
New Item with Billings Report
Record Count
Amount
$0.948
$27.600
$28.000
$65.240
$86.580
$969.067
$9,801.200
$18,308.550
$48,944.000
$67,735.000
View Report (New Item with Billing...
As of Jun 26, 2025, 3:21 AM
Billings with item and Customer order
View Report (Billings with item an...
As of Jun 26, 2025, 3:21 AM
New Prices Report
Price: Price Name
Silver Price
Price-01 $233.00000
Price-02 $237.00000
Price-03 $100.00000
Price-04 $100.00000
Price-05 $222.00000
Price-06 $79.00000
Price-07 $147.00000
View Report (New Prices Report)
As of Jun 25, 2025, 10:29 AM


orgfarm-71fc344890-dev-ed.develop.lightning.force.com/lightning/r/Dashboard/01ZgK000002OZ57UAG/view?queryScope=userFolders
Search...
Jewelry Inventory S...
Dashboards
Dashboard 1
Dashboard 2
Dashboard
Dashboard 2
As of Jun 25, 2025, 10:50 AM · Viewing as Sai Pavan Kumar Nagam
Refresh
Edit
Subscribe
New Item with Billings Report
Record Count: 6
Amount
$0.948
$27.600
$28.000
$65.240
$86.580
$969.067
View Report (New Item with Billing...
As of Jun 26, 2025, 3:21 AM
Billings with item and Customer order
Record Count
Item Type
Gold
Silver
View Report (Billings with item an...
As of Jun 26, 2025, 3:21 AM
New Prices Report
Sum of Silver Price
Gold Price
$100
$79
$321
$237
$222
$125
$100
$233
View Report (New Prices Report)
As of Jun 25, 2025, 10:50 AM

8.ADVANTAGES AND DISADVANTAGES

Advantages :

1. Centralized Data Management
   - All inventory, customer, order, billing, and vendor data stored in a single platform.
   - Easy data linking via custom objects and relationships.
2. Business Process Automation
   - Automate key workflows using:
     - Salesforce Flows
     - Process Builder
     - Apex Triggers
   - Examples: low stock alerts, order confirmations, billing updates.
3. Real-Time Reporting and Dashboards
4. Visualize key metrics like:
     - Top-selling jewelry
     - Price trends
     - Inventory health
   - Use custom dashboards for admin and sales teams.
5. Robust Security and Access Control
6. Role-based data visibility using:
     - Profiles
     - Roles
     - Permission Sets
   - Ensures customer and pricing data confidentiality.
7. Customization & Flexibility

Customize forms, fields, workflows, and reports.

- Build custom objects such as:
  - Jewelry_Item_
  - Purchase__c
  - Sales_Order__c
- Easily adapt to unique business models.

8. Scalability
   - Easily scale from a small boutique to a multi -branch chain.
   - Supports growth in product lines, vendors, and customer base.
9. Integration Capabilities

   Connects with:
   - E-commerce platforms (e.g., Shopify)
   - Payment gateways (e.g., PayPal, Stripe)
   - Accounting tools (e.g., Tally, QuickBooks)
   - SMS/Email marketing tools
10. Mobile Accessibility
    - Manage jewelry items, customer records, and orders via the Salesforce Mobile App.
    - Enables real-time access for sales reps and store managers.
11. AI-Powered Insights (Salesforce Einstein) Predict

    customer preferences.
    - Suggest related products.
    - Forecast sales based on historical trends.
12. Error Reduction and Standardization
13. Reduces manual data entry errors.

*Streamlines processes like returns, stock updates, and order fulfillment.

Disadvantages :

1. High Licensing and Subscription Costs
   - Salesforce licensing can be expensive for small or medium jewelry businesses.
   - Costs increase with additional users, storage, and add-ons.
2. Customization Requires Skilled Resources
   - Complex workflows or custom features need Salesforce developers.
   - Apex, Lightning Components, and integra on tasks can be time consuming.
3. Governor Limits
   - Salesforce enforces limits on:
     - SOQL queries
     - CPU time
     - Heap size
   - May restrict heavy data operations or batch processing.
4. Storage Constraints
   - Limited storage for:
     - Records (standard object data) o Files (product images, documents)
   - Additional storage requires extra payment.
5. Complex Initial Setup

- Setting up custom objects (like Jewelry_Item__c, Purchase__c) and relationships requires thorough planning.

  Requires experience in Salesforce architecture and best practices.

6. Overhead for Small-Scale Use
   - For very small jewelry stores, the system might feel overkill.
   - Simpler tools like Excel or local ERPs may seem more cost-effective initially.
7. Performance Issues with Large Dashboards
   - Dashboards with too many reports or filters may load slowly.
   - Real-time reports with large datasets may impact system responsiveness.
8. Learning Curve
   - Non-technical users may struggle with:
     - Understanding reports
     - Navigating the Lightning interface
     - Using admin tools (e.g., Process Builder, Flow)
9. Third-Party Integra on Limitations
   - While Salesforce supports many integrations, some third-party jewelry tools may require:
     - Middleware
     - Custom APIs
     - Manual adjustments
10. Internet Dependency
    - Being a cloud-based platform, it requires reliable internet access.
    - No offline mode for order or inventory updates.

9.Conclusion

The Jewelry Management System built on the Salesforce platform offers a robust, scalable, and customizable solution for managing critical operations in the jewelry business. From inventory and billing to customer management and reporting, the system streamlines processes and enhances operational efficiency. By leveraging Salesforce's automation tools, real- me dashboards, and strong security features, the platform addresses key business needs while providing insights that support informed decision-making.

The inclusion of dashboards specifically adds tremendous value by visualizing important metrics such as billing trends, order distributions, and pricing updates. These visual tools not only improve monitoring but also empower management with actionable intelligence.

Despite a few challenges, such as the need for skilled customization and potential cost considerations, the advantages outweigh the limitations—especially for businesses aiming to scale, automate, and gain a competetive edge.

In conclusion, this project demonstrates how Salesforce can be successfully adapted to non-traditional domains like jewelry retail, offering a smart and sustainable approach to digital transformation in the industry.

10.FUTURE SCOPE

The Jewelry Inventory Management System, built on the Salesforce platform, has strong potential for future enhancements that can significantly broaden its functionality and impact. As jewelry businesses continue to evolve digitally, this system can be expanded beyond internal operations to offer customer-facing features and greater automation. In the future, the platform could integrate with mobile applications, allowing customers to track orders, view purchase history, and receive price alerts directly on their devices. E-commerce integration is another promising direction, enabling jewelry stores to synchronize their

physical and online inventories and manage all sales channels within a single system. Additionally, the incorporation of artificial intelligence and machine learning could provide predictive analytics, helping businesses forecast demand, suggest popular designs, and manage stock proactively. Support for automated tax calculation, such as GST compliance, and communication through SMS or WhatsApp APIs can further improve the efficiency of financial operations and customer interaction. As the business grows, the system can also be scaled to support multiple store locations, vendor tracking, and advanced reporting. Overall, the future scope of this project is vast and promising, with the potential to evolve into a comprehensive, intelligent ecosystem for the jewelry retail industry.

11. APPENDIX :

Demo Video Link:

https://drive.google.com/file/d/1RuTPQzm9ayZfcJ2GrZCTbf7NVpsqJtGD/view?usp=sharing