# INVOICEPRO – AUTOMATED INVOICE & PAYMENT REMINDER CRM

## Phase 1 Completion Report

### 1. REQUIREMENT GATHERING

Key Requirements:

- Automatic creation and tracking of invoices.
- Prevention of duplicate invoice records.
- Automated email reminders for pending and overdue payments.
- Real-time dashboards for finance teams and managers.
- Reporting for payment status, overdue invoices, and financial trends.

Objectives:

- Reduce manual workload and errors in invoice processing.
- Improve on-time collections and cash flow management.
- Enhance transparency and financial decision-making.

### 2. STAKEHOLDER ANALYSIS

Primary stakeholders and benefits:

Finance Teams
- Efficiently create and track invoices.
- Receive automated reminders to follow up with customers.

Managers & Business Owners
- Monitor outstanding payments and cash flow in real-time.
- Make informed financial decisions based on dashboard insights.

Customers
- Receive timely reminders and clear invoices.
- Reduce miscommunication or missed payments.

### 3. BUSINESS PROCESS MAPPING

Core Processes Include:

- Generating and sending invoices to customers automatically.
- Detecting and preventing duplicate invoice records.
- Sending automated email reminders for upcoming and overdue payments.

- Tracking payment status and updating records in real-time.
- Generating financial reports and dashboards for performance analysis.

## 4. INDUSTRY-SPECIFIC USE CASE ANALYSIS

Applicable Sectors: SMEs, retail, service-based businesses, and any organization handling recurring invoices.

Use Cases:

- Automating invoice generation and management.
- Sending proactive reminders to customers for faster payments.
- Providing actionable insights for finance teams to manage cash flow.
- Maintaining accurate records for accounting, reconciliation, and compliance.

## 5. APP EXCHANGE EXPLORATION

Salesforce CRM enables:
- Centralized invoice and customer data management.
- Automated workflows and email reminders.
- Real-time dashboards and reporting for financial performance.
- Role-based access for finance teams, managers, and customers.

Benefits:

- Scalable and maintainable financial operations.
- Reduced manual errors and duplicate records.
- Improved cash flow and operational efficiency.
- Enhanced decision-making with actionable insights.

# Phase 2: Org Setup & Configuration- Completion Report

### Project: InvoicePro Automated Invoice Payment Reminder CRM

Institute: Prof. Ram Meghe Institute of Technology & Research

## 1. Salesforce Edition

- Developer Org used for implementation

## 2. Company Profile Setup

- Company Name: InvoicePro Corp ○ Default Locale: English (India) ○ Default Currency: INR
  - Default Time Zone: (GMT+05:30) India Standard Time (Asia/Kolkata)

  - Process Flow: Setup → Company Information → Edit Company Profile

Company Information
InvoicePro Corp
Help for this Page

The organization's profile is below.

User Licenses [10+] | Permission Set Licenses [10+] | Feature Licenses [11] | Usage-based Entitlements [10+]

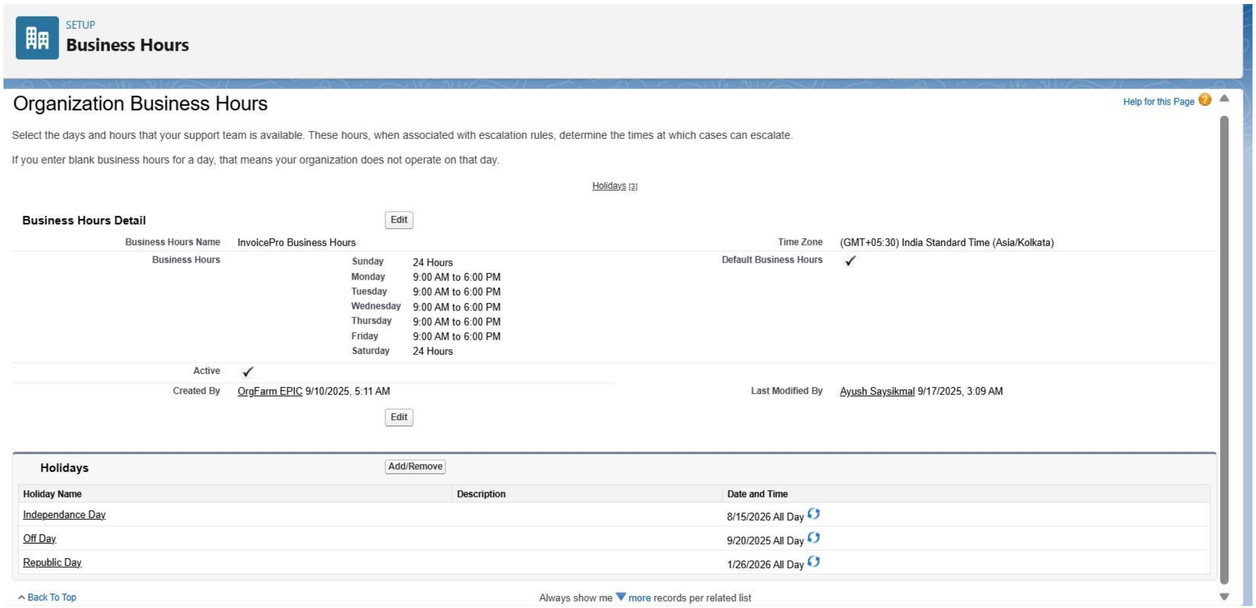
**Organization Detail** Edit

| | | | |
|---|---|---|---|
| Organization Name | InvoicePro Corp | Phone | (555) 123-4678 |
| Primary Contact | OrgFarm EPIC | Fax | (555) 123-4678 |
| Division | | Default Locale | English (India) |
| Address | 123 Business Avenue<br>Amravati 12356<br>Maharashtra<br>India | Default Language | English |
| Fiscal Year Starts In | January | Default Time Zone | (GMT+05:30) India Standard Time (Asia/Kolkata) |
| Activate Multiple Currencies | ☐ | Currency Locale | English (India) - INR |
| Enable Data Translation | ☐ | Used Data Space | 342 KB (7%) [View] |
| Newsletter | ✓ | Used File Space | 17 KB (0%) [View] |
| Admin Newsletter | ✓ | API Requests, Last 24 Hours | 0 (15,000 max) |
| Hide Notices About System Maintenance | ☐ | Streaming API Events, Last 24 Hours | 0 (10,000 max) |
| Hide Notices About System Downtime | ☐ | Restricted Logins, Current Month | 0 (0 max) |
| Locale Formats | ICU | Salesforce.com Organization ID | 00DgK00000BEq5F |
| | | Organization Edition | Developer Edition |
| | | Instance | CAN96 |

## 3. Business Hours & Holidays

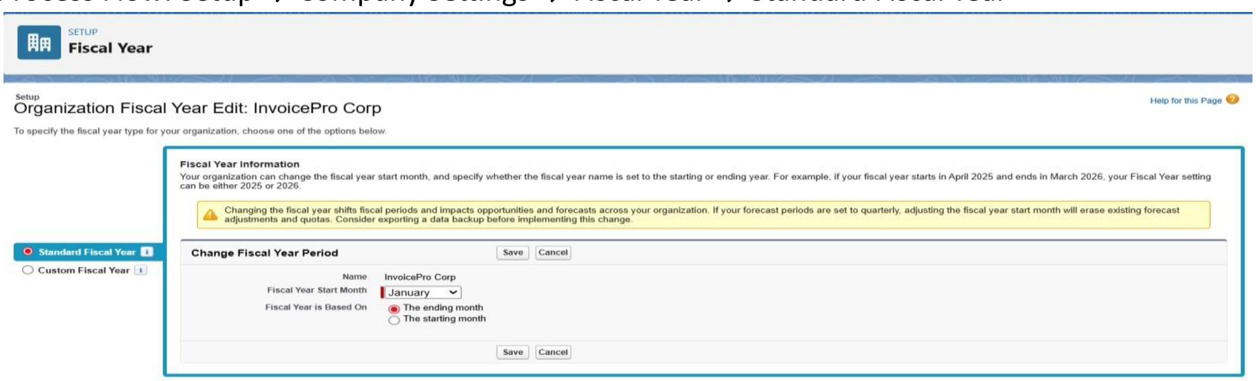
- Business Hours: All days, 09:00 AM – 06:00 PM
- Holidays: Independence Day (15 Aug)
  Republic Day (26 Jan)
  Off Day (Saturday & Sunday- Weekly)

- Process Flow: Setup → Company Settings → Business Hours → Define & Assign




## 4. Fiscal Year Settings

- **Fiscal Year:** Standard, January (The ending month)
- Process Flow: Setup → Company Settings → Fiscal Year → Standard Fiscal Year



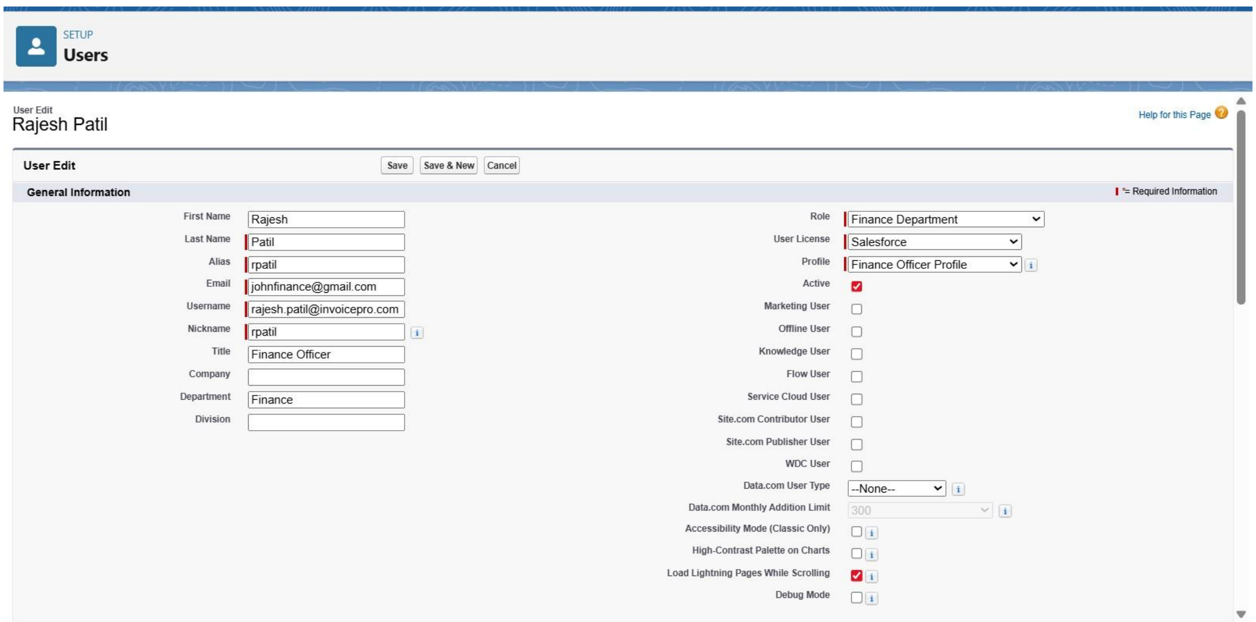

## 5. User Setup & Licenses

- Finance Officer: License = Salesforce, Profile = Finance Officer Profile, Role = Finance Department

- Finance Manager: License = Salesforce, Profile = Finance Manager Profile, Role = Finance Manager

- Sales Representative: License = Salesforce Platform, Profile =Sales User Profile, Role = Sales Department

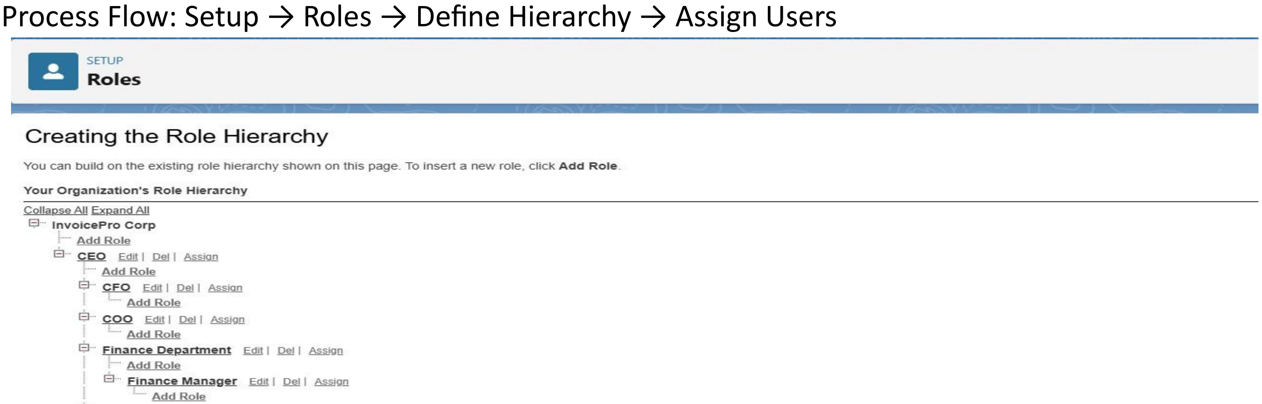
Process Flow: Setup → Users → New User → Assign License & Profile




## 6. Roles

- CEO → Finance Department → Finance Manager
- Sales Department under CEO

Process Flow: Setup → Roles → Define Hierarchy → Assign Users



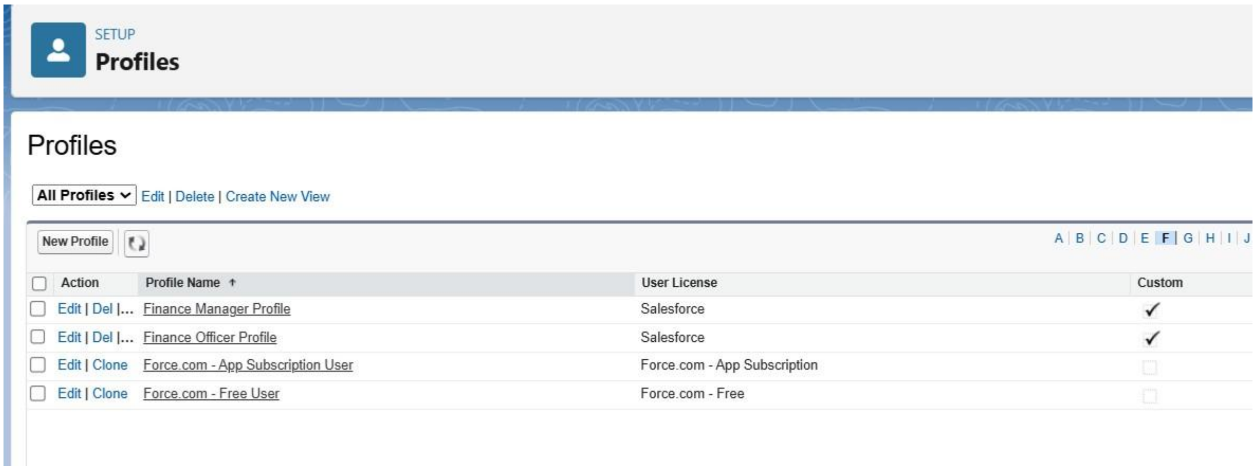

## 7. Profiles

- Finance Officer Profile

- Finance Manager Profile

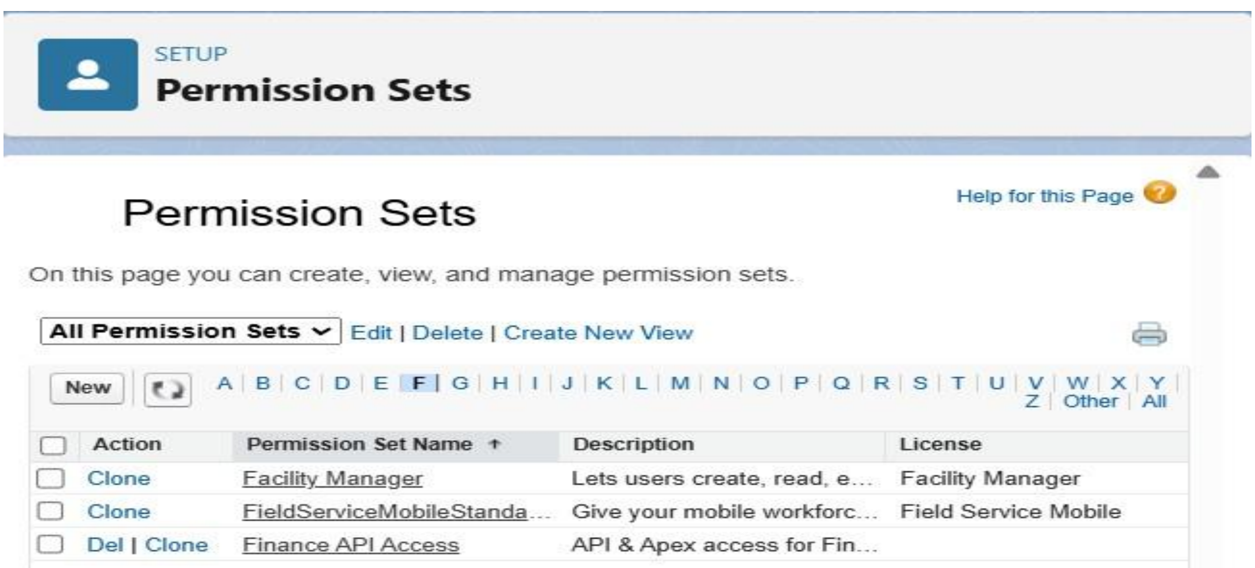
- Sales User Profile

Process Flow: Setup → Profiles → New Profile




## 8. Permission Sets

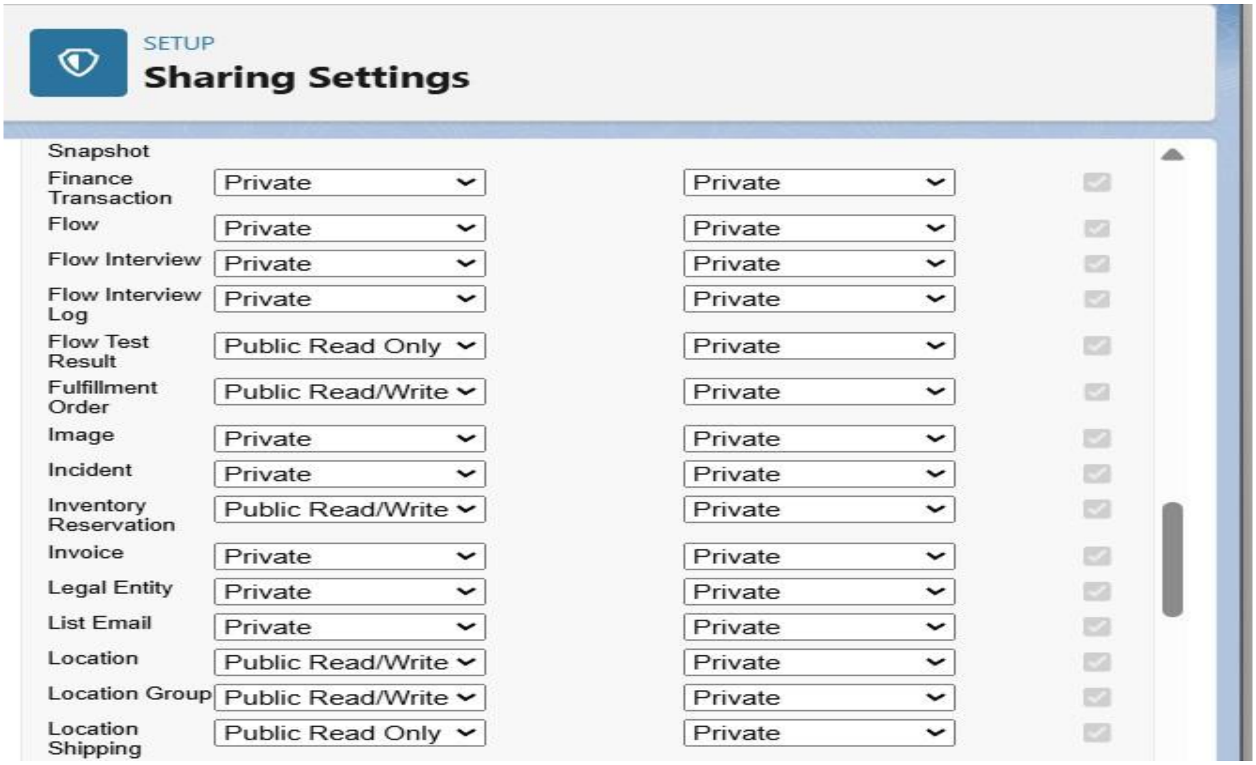
- Finance API Access → Finance Officer
- Reports Editor → Finance Manager
- View Invoices




## 9. Organization- Wide Defaults (OWD)

- Invoice=private

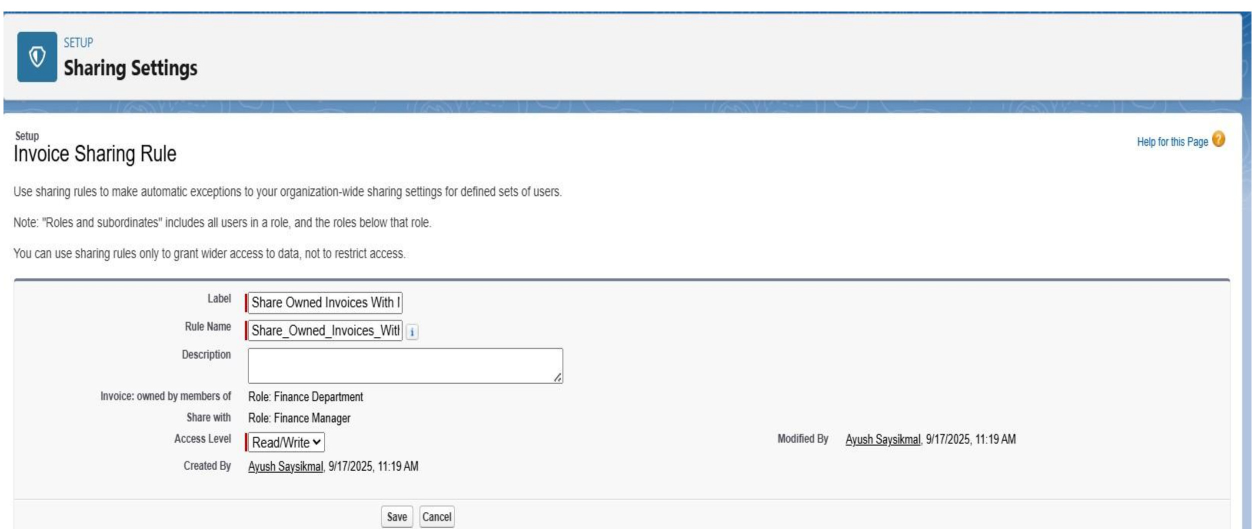
Process Flow: Setup → Sharing Settings → Define OWD




## 10. Sharing Rules

- Invoice: Shared with Finance Manager

Process Flow: Setup → Sharing Settings → New Sharing Rule → Define Access




**Outcomes of Phase 2:**

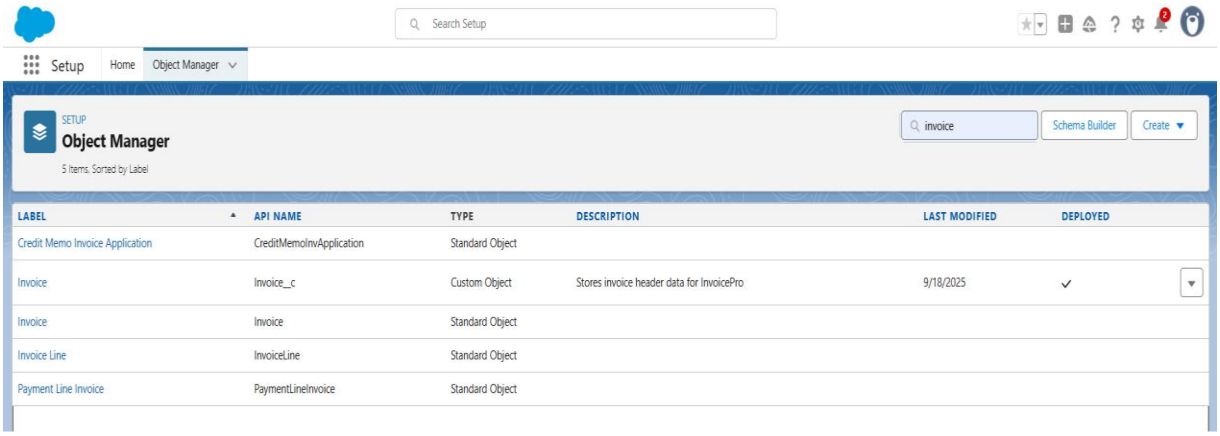
- Developer Org successfully configured
- Company information standardized.
- Roles, profiles, and permission sets created and assigned.

- OWD and Sharing Rules enforced for record-level security.
- Finance Officer and Finance Manger have proper controlled on invoices,etc.
- Phase 2 deliverables completed. Ready to proceed to Phase 3: Data Modeling & Relationships.

# Phase 3 — Data Modeling & Relationships

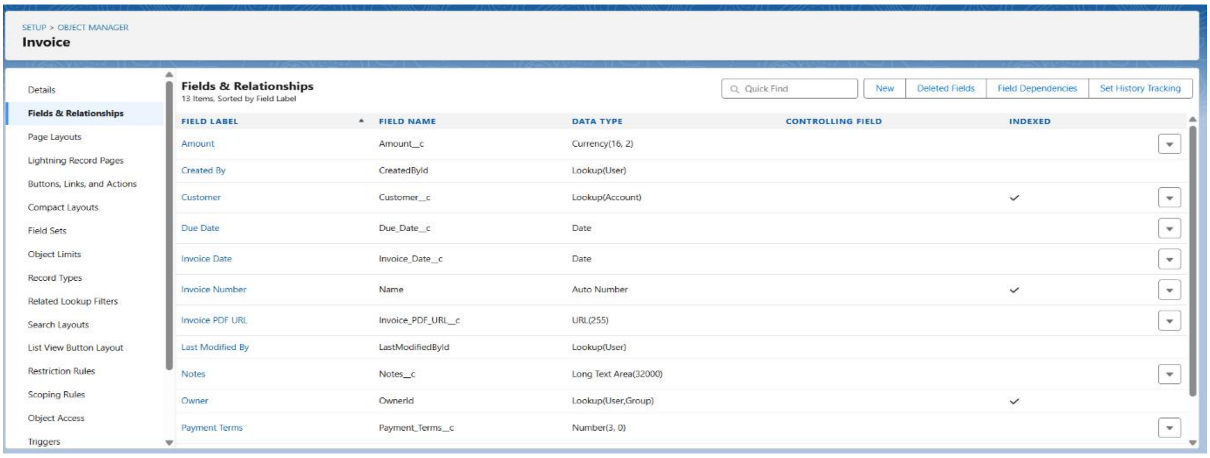
## 1. Create Custom Objects

- **Setup → Object Manager → Create → Custom Object**
  - Invoice → Invoice__c → Auto Number: INV-{0000}
  - Payment → Payment__c → Auto Number: PAY-{0000}
  - Reminder → Reminder__c → Auto Number: REM-{0000}



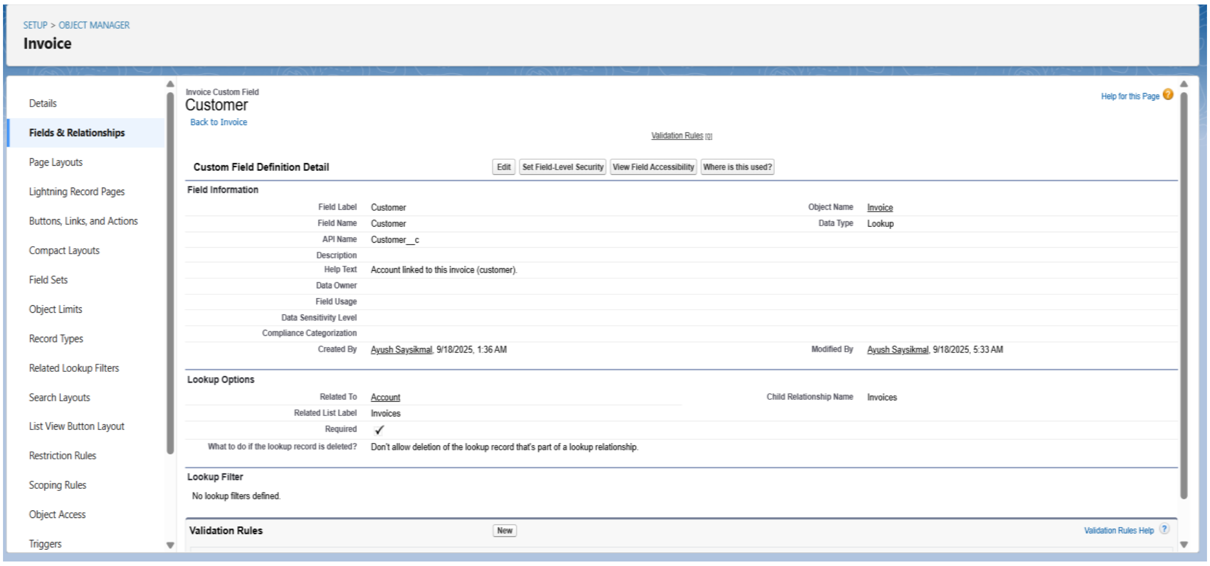

## 2. Add Fields to Objects

- **Setup → Object Manager → Invoice → Fields &Relationships → New**
  - Invoice__c Fields
  - Payment__c Fields
  - Reminder__c Fields



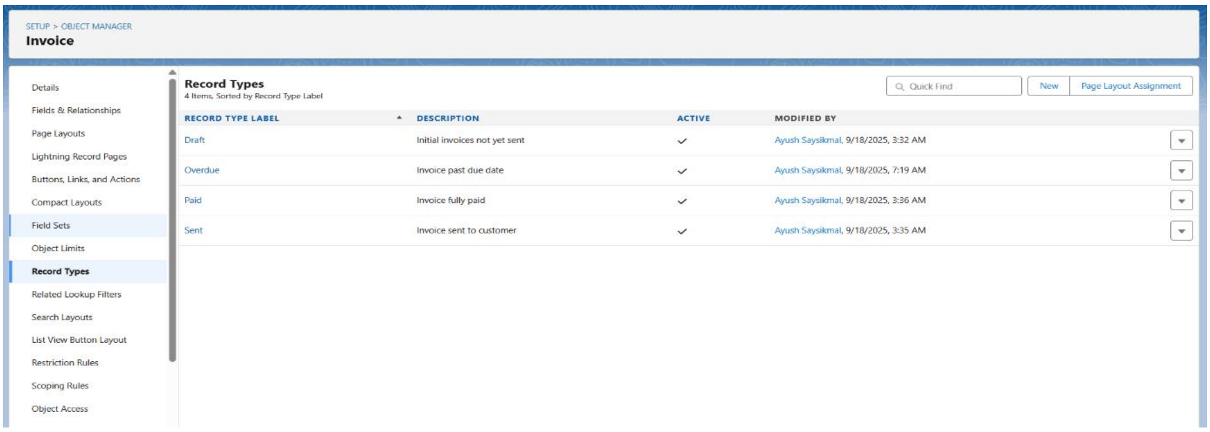
## 3. Relationships

- **Payment → Master-Detail → Invoice** → Payments inherit owner/sharing
- **Reminder → Lookup → Invoice** → Reminders related list
- **Invoice → Lookup → Account** → Customer linked




## 4. Record Types (Invoice)

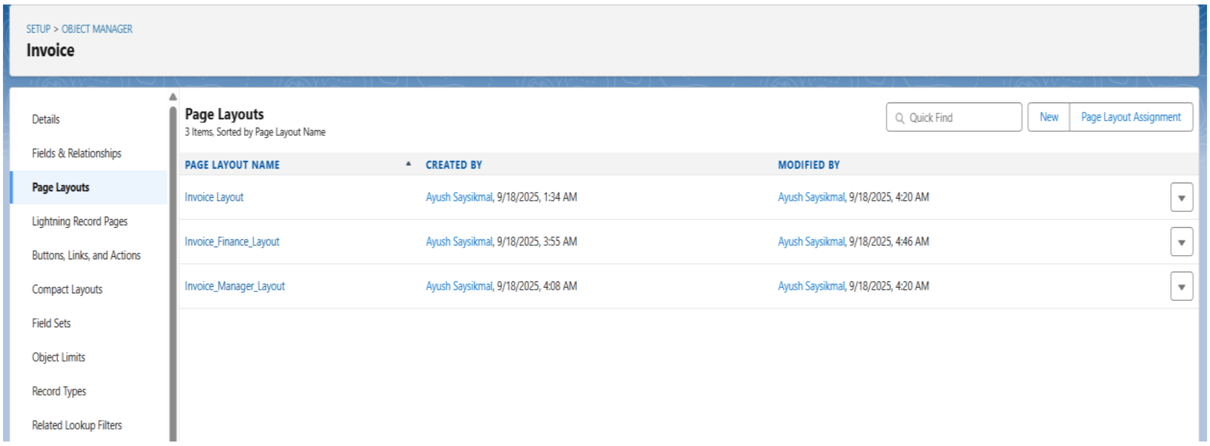
- **Setup → Object Manager → Invoice → Record Types → New**
  - Draft → Default for Finance Profile
  - Sent → Finance, Manager profiles
  - Paid → Finance, Manager profiles
  - Overdue → Finance, Manager profiles

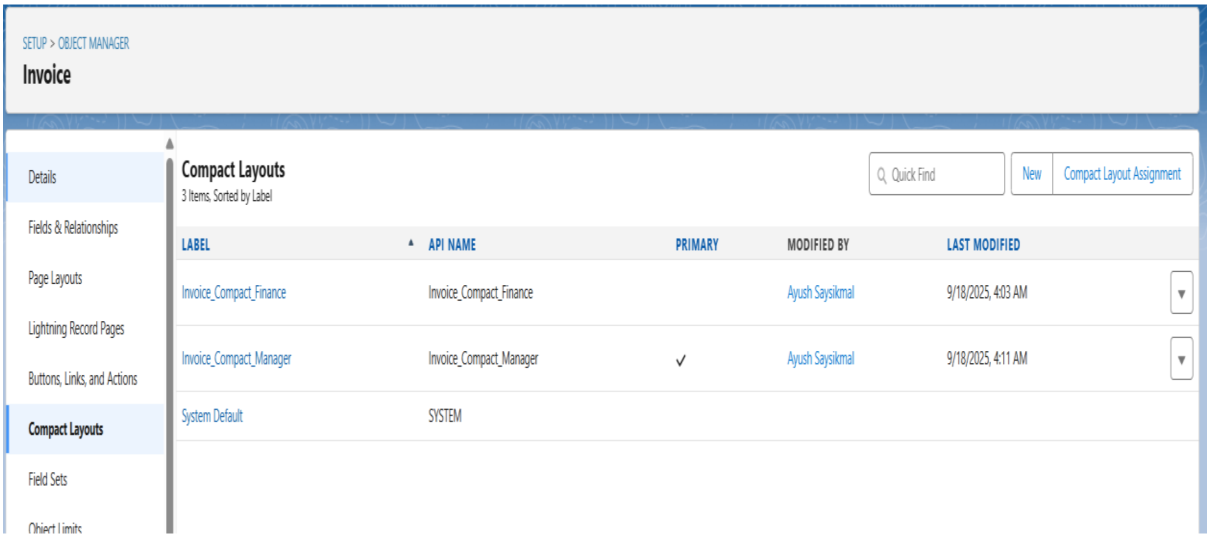


# 5. Page Layouts & Compact Layouts

- **Invoice_Finance_Layout:**
  - Highlight Panel → Invoice Number, Status__c, Amount__c, Due_Date__c
  - Sections → Invoice Details & Notes
  - Related Lists → Payments, Reminders, Activity History, Notes
  - Compact Layout → Invoice_Compact_Finance
  - Assign → Finance Profile, all record types

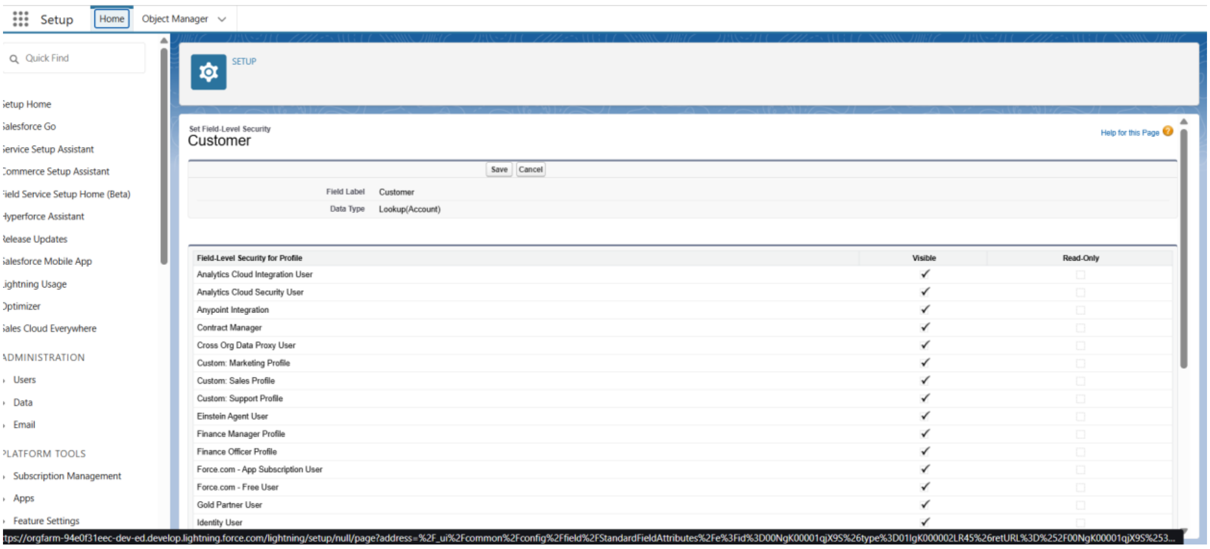
- **Invoice_Manager_Layout:**
  - Highlight Panel → Invoice Number, Status__c, Amount__c, Customer__c
  - Sections → Invoice Details, Finance Notes / Escalation
  - Related Lists → Payments, Reminders, Activity History
  - Compact Layout → Invoice_Compact_Manager
  - Assign → Manager Profile, all record types





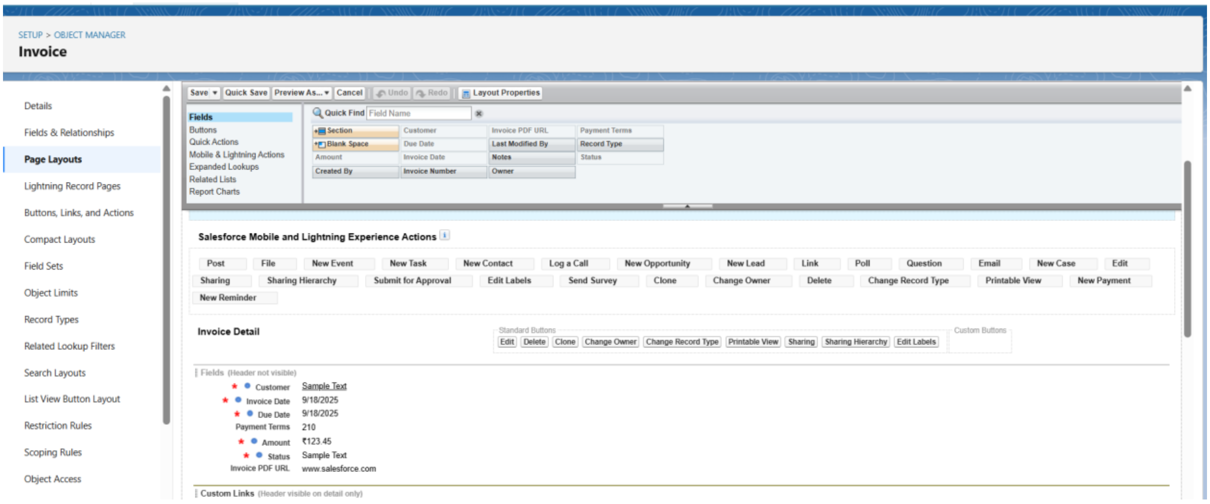

## 6. Field-Level Security

- **Setup → Object Manager → Invoice → Fields & Relationships → [Select Field] → Set Field-Level Security**
  - Finance → All fields visible/editable
  - Manager → Fields visible, some read-only
  - Sales → Status__c, Amount__c visible (Read-only), other fields hidden



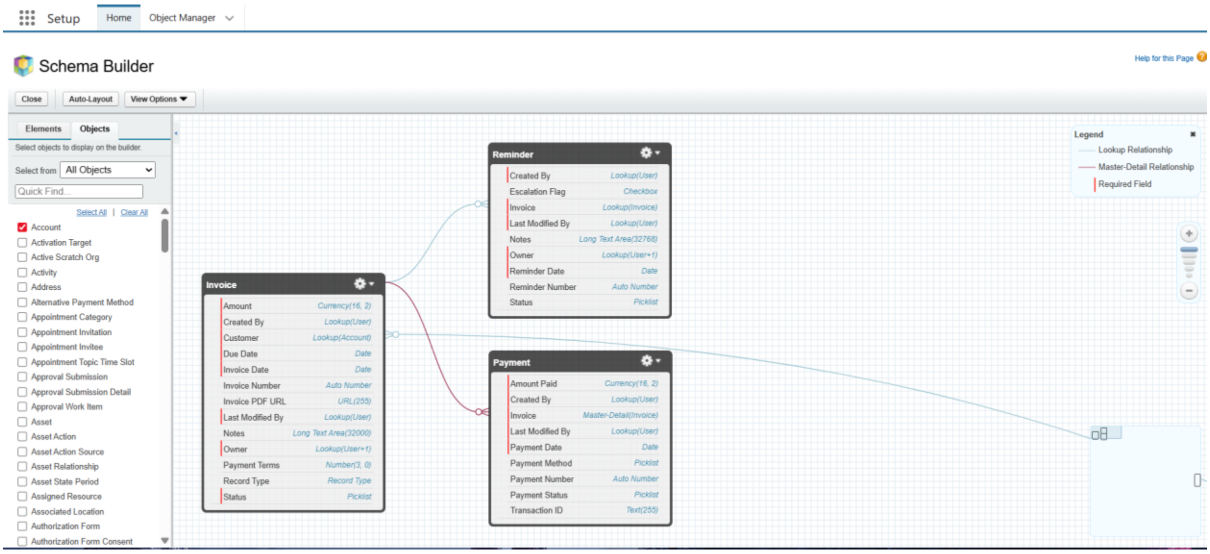
## 7. Related Lists & Buttons

- **Setup → Object Manager → Invoice → Page Layouts → Edit Layout**
    - Payments → Payment Number, Payment Date, Amount Paid, Payment Method, Status
    - Reminders → Reminder Date, Status, Escalation Flag
    - Quick Actions → New Payment / New Reminder (requires tabs)



## 8. Schema Builder Verification

- **Setup → Schema Builder → Add Invoice, Payment, Reminder, Account**
    - Confirm relationships: Payment → Master-Detail → Invoice; Reminder → Lookup → Invoice; Invoice → Lookup → Account
    - Rearrange & save/export visual

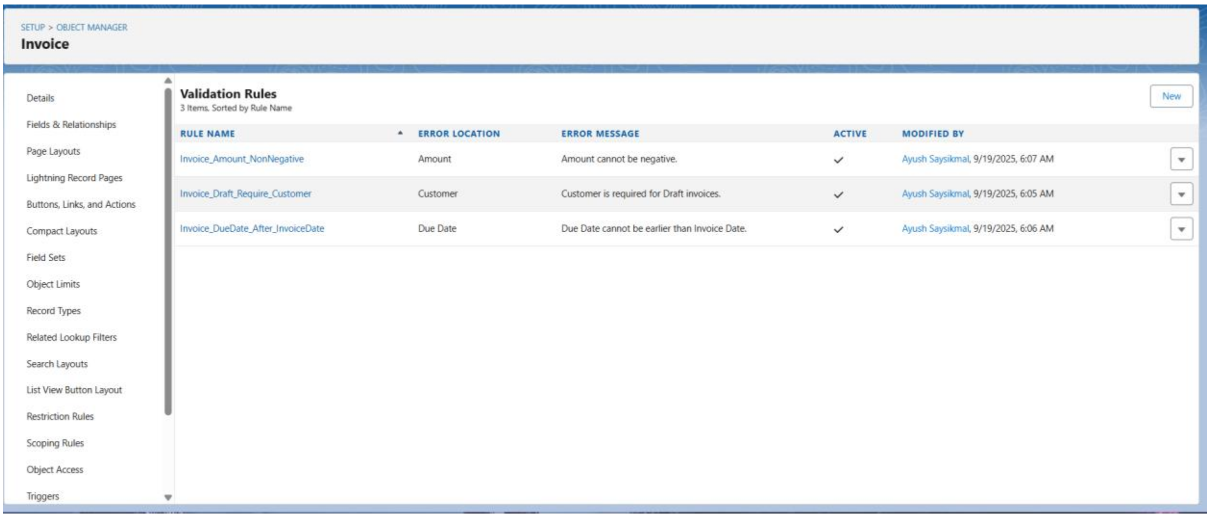

Setup
Home
Object Manager
Schema Builder
Help for this Page
Close
Auto-Layout
View Options
Elements
Objects
Select objects to display on the builder.
Select from
All Objects
Quick Find...
Select All | Clear All
Account
Activation Target
Active Scratch Org
Activity
Address
Alternative Payment Method
Appointment Category
Appointment Invitation
Appointment Invitee
Appointment Topic Time Slot
Approval Submission
Approval Submission Detail
Approval Work Item
Asset
Asset Action
Asset Action Source
Asset Relationship
Asset State Period
Assigned Resource
Associated Location
Authorization Form
Authorization Form Consent
Invoice
Amount Currency(16, 2)
Created By Lookup(User)
Customer Lookup(Account)
Due Date Date
Invoice Date Date
Invoice Number Auto Number
Invoice PDF URL URL(255)
Last Modified By Lookup(User)
Notes Long Text Area(32000)
Owner Lookup(User+1)
Payment Terms Number(3, 0)
Record Type Record Type
Status Picklist
Reminder
Created By Lookup(User)
Escalation Flag Checkbox
Invoice Lookup(Invoice)
Last Modified By Lookup(User)
Notes Long Text Area(32768)
Owner Lookup(User+1)
Reminder Date Date
Reminder Number Auto Number
Status Picklist
Payment
Amount Paid Currency(16, 2)
Created By Lookup(User)
Invoice Master-Detail(Invoice)
Last Modified By Lookup(User)
Payment Date Date
Payment Method Picklist
Payment Number Auto Number
Payment Status Picklist
Transaction ID Text(255)
Legend
Lookup Relationship
Master-Detail Relationship
Required Field

# Phase 4 — Process Automation

## 1. Validation Rules

### Setup → Object Manager → Invoice → Validation Rules → New

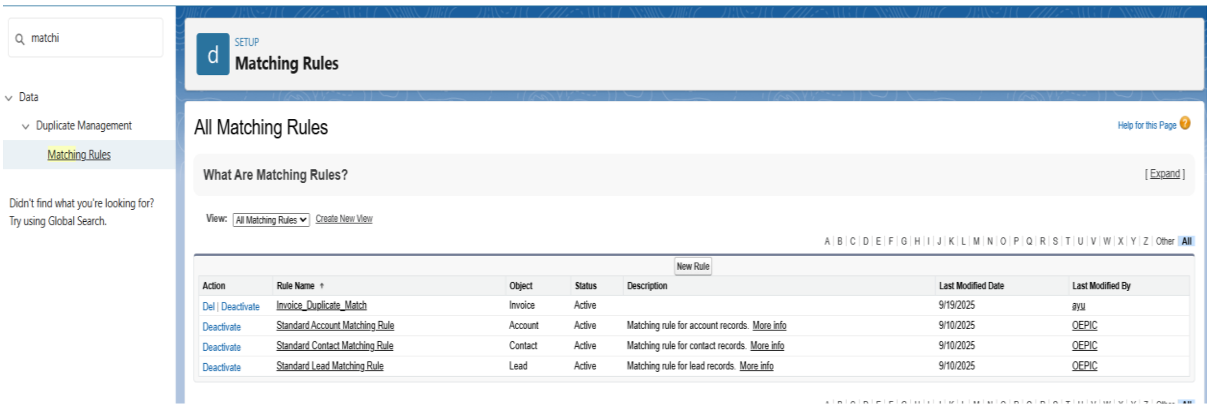
- Invoice_Draft_Require_Customer
- Invoice_DueDate_After_InvoiceDate
- Invoice_Amount_NonNegative




## 2. Duplicate Prevention

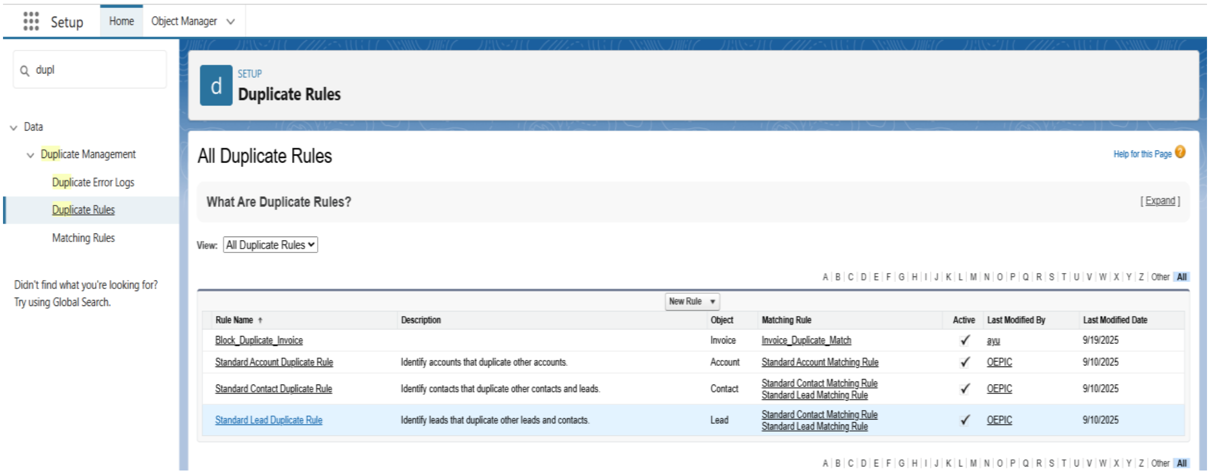
### Setup → Duplicate Management → Matching Rules → New

- Invoice_Duplicate_Match



## Setup → Duplicate Management → Duplicate Rules → New

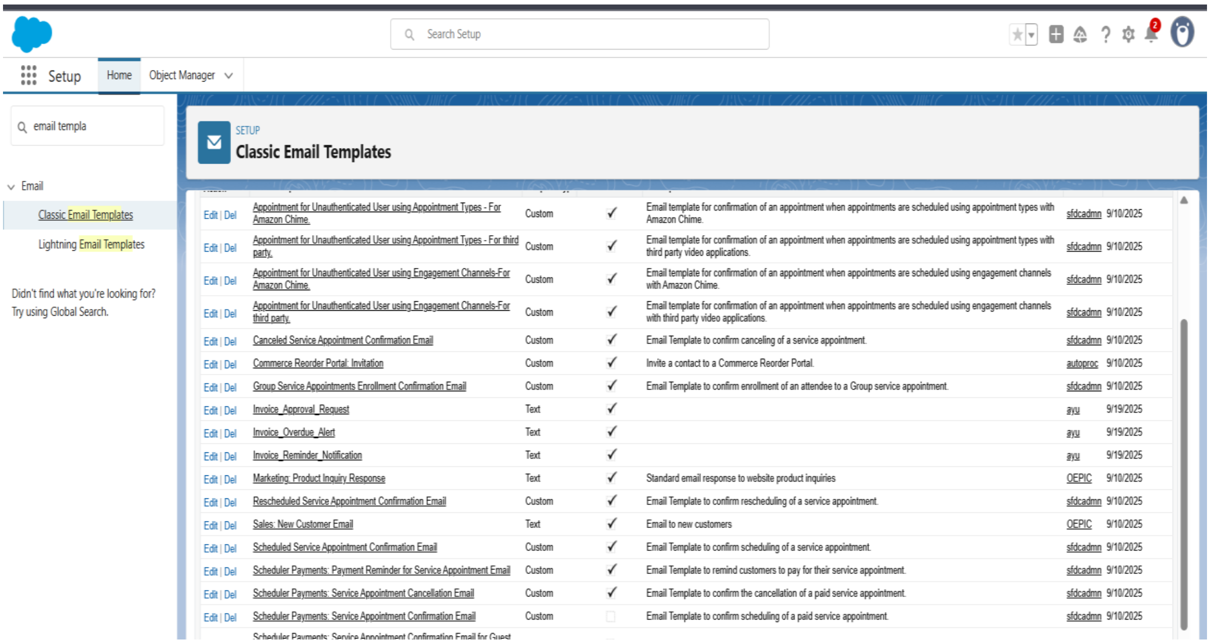
- Block_Duplicate_Invoice




## 3. Email Templates & Alerts

## Setup → Email Templates → New → Email Template

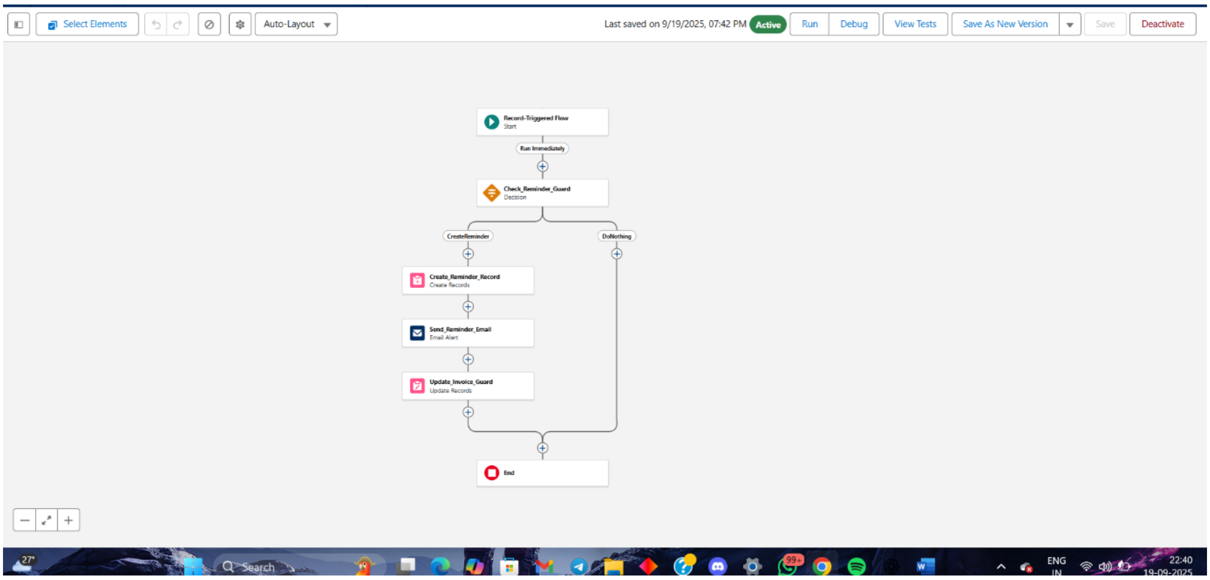
- **Invoice_Overdue_Alert**
- **Invoice_Reminder_Notification**



## 4.Flows

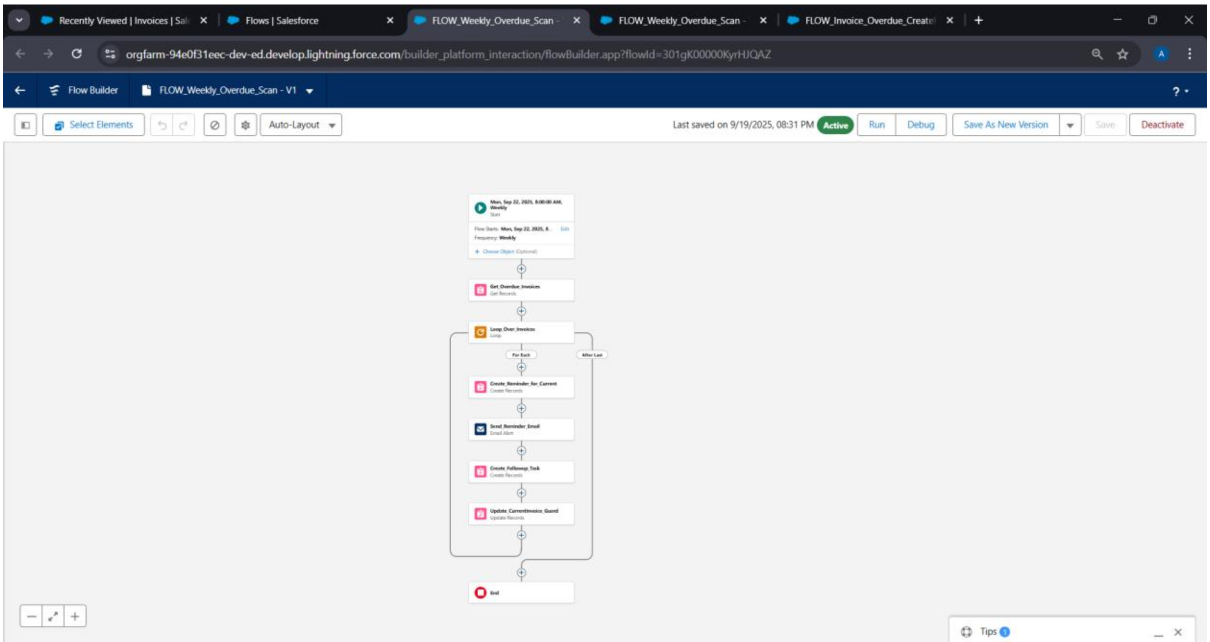
### Setup → Flows → Record-Triggered Flow

- **Flow invoice overdue create reminder**




### Setup → Flows → Schedule-Triggered Flow

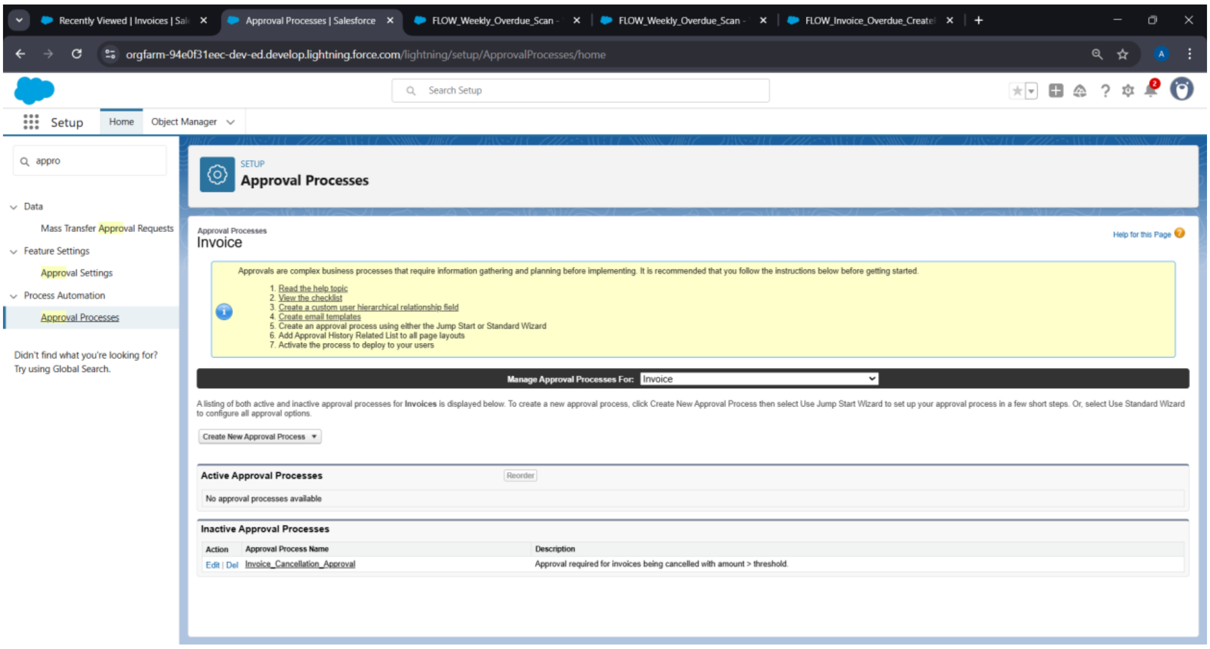
- **Flow weekly overdue scan**



# 5. Approval Process

## Setup → Approval Processes → Invoice → Use Standard Wizard

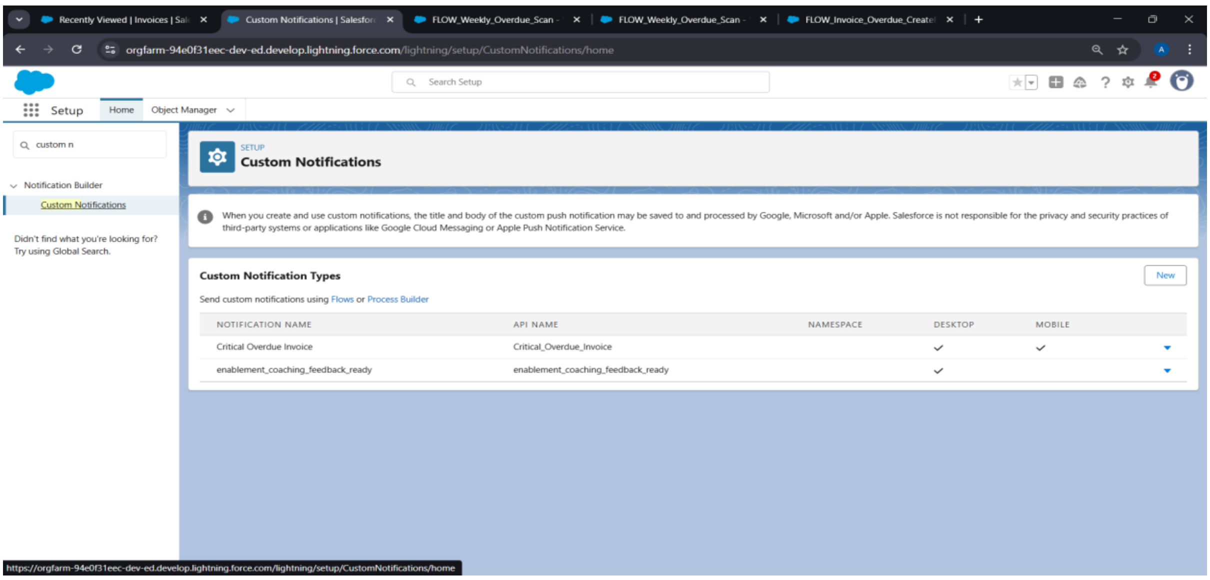
- **Invoice cancellation approval**



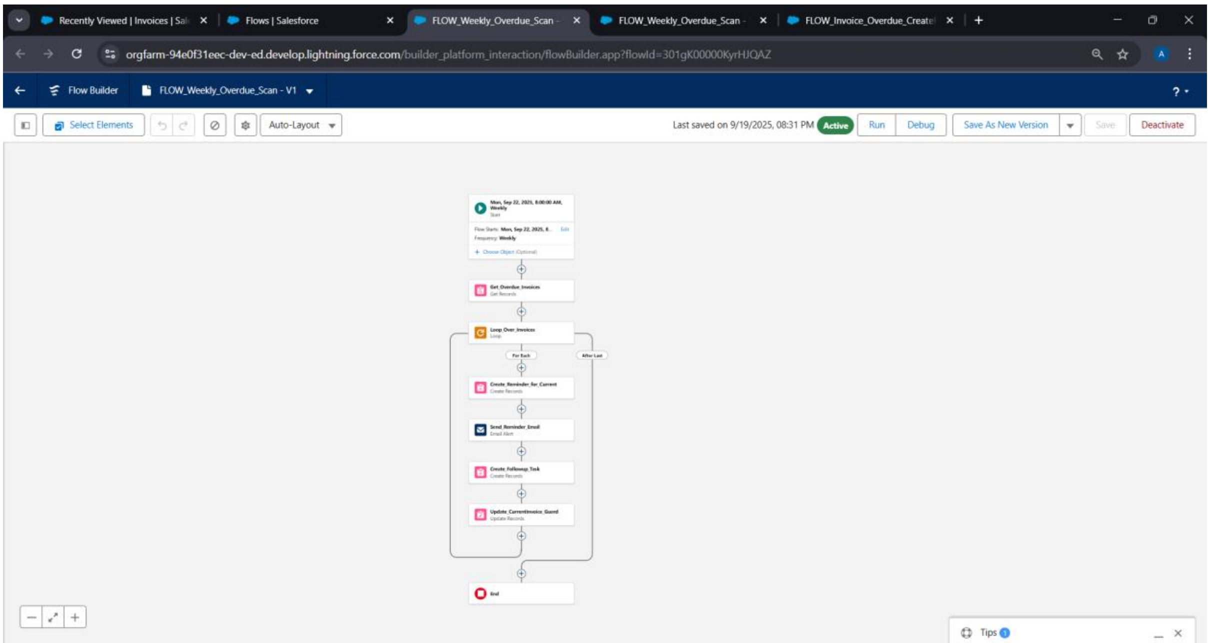
# 6. Custom Notification

## Setup → Notification Builder → Notification Types → New

- **Critical overdue invoice**



# 7. Tasks

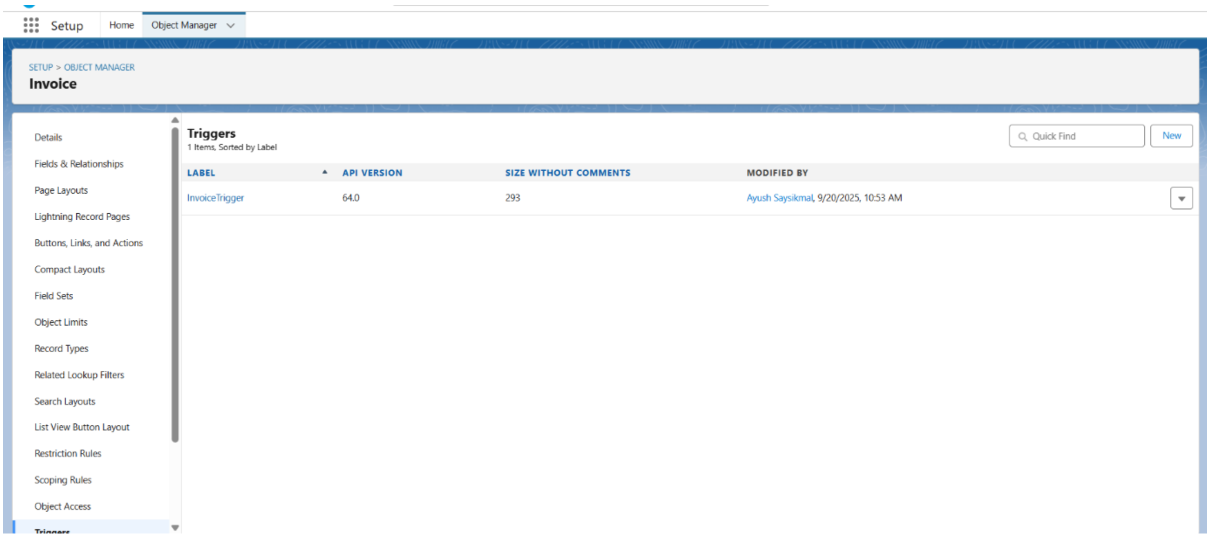


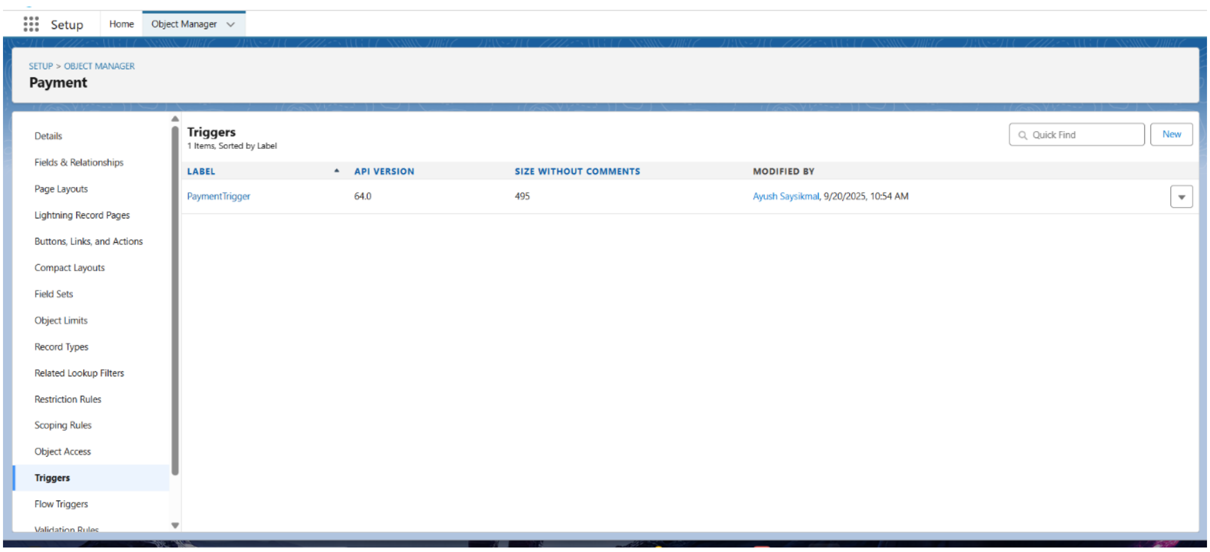

## Phase 4 completed with all process and ready to go for phase 5.

# Phase 5: Apex Programming

## 1. Apex Trigger

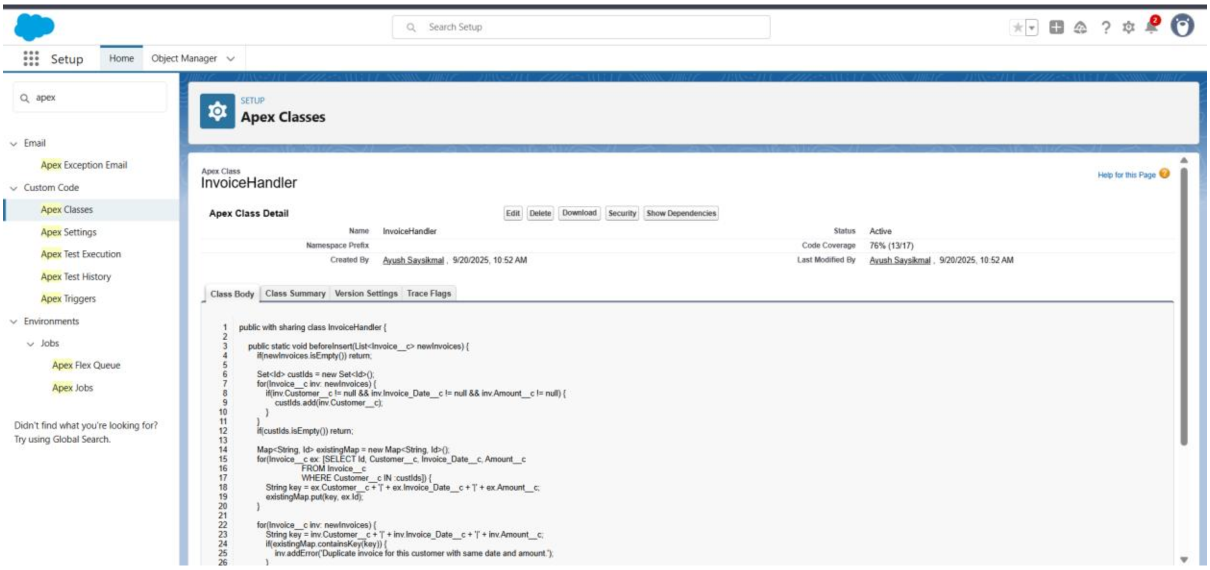
- **Setup->Object Manager->Invoice/Payment->Trigger**
  - **Invoice Trigger**
  - **Payment Trigger**

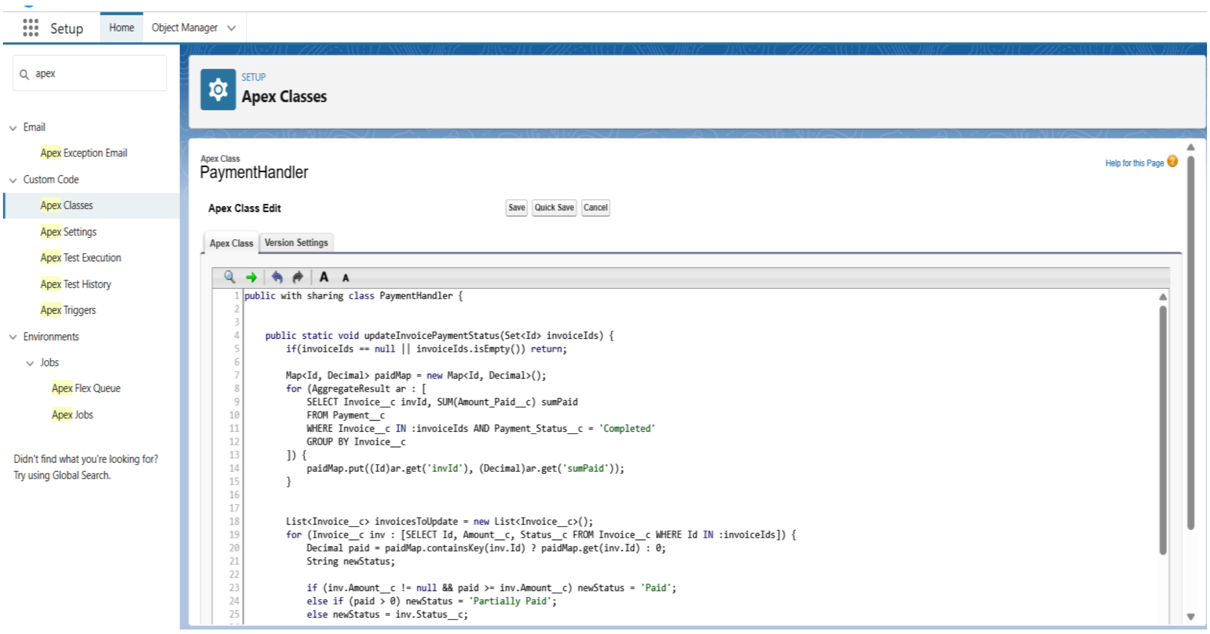


## 2.Apex Class

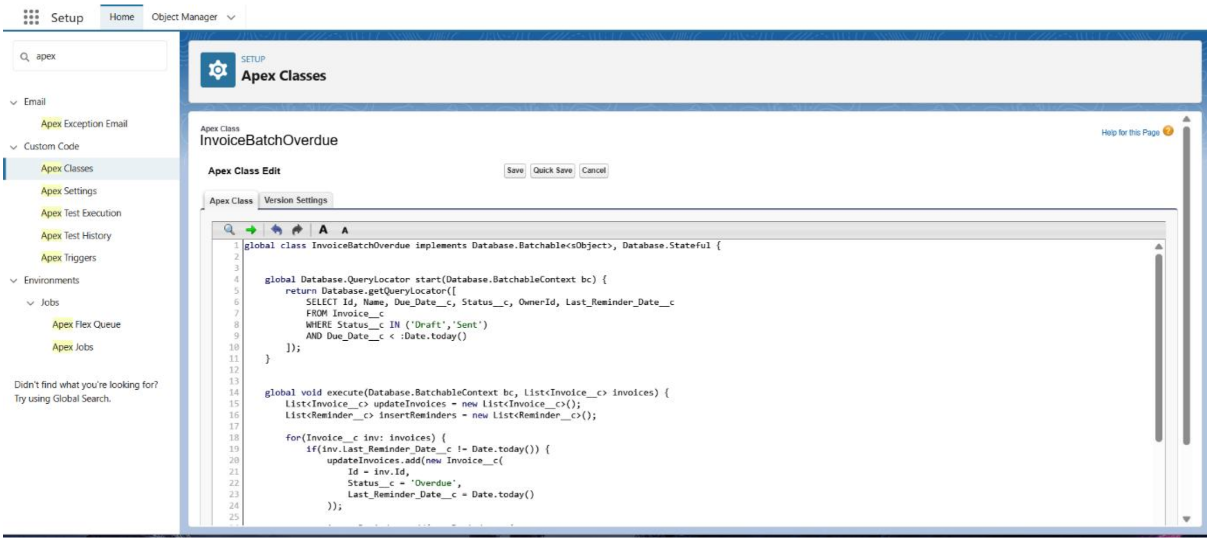
- **Setup->Apex Class->New Apex Class**
  - **Invoice Handler**
  - **Payment Handler**

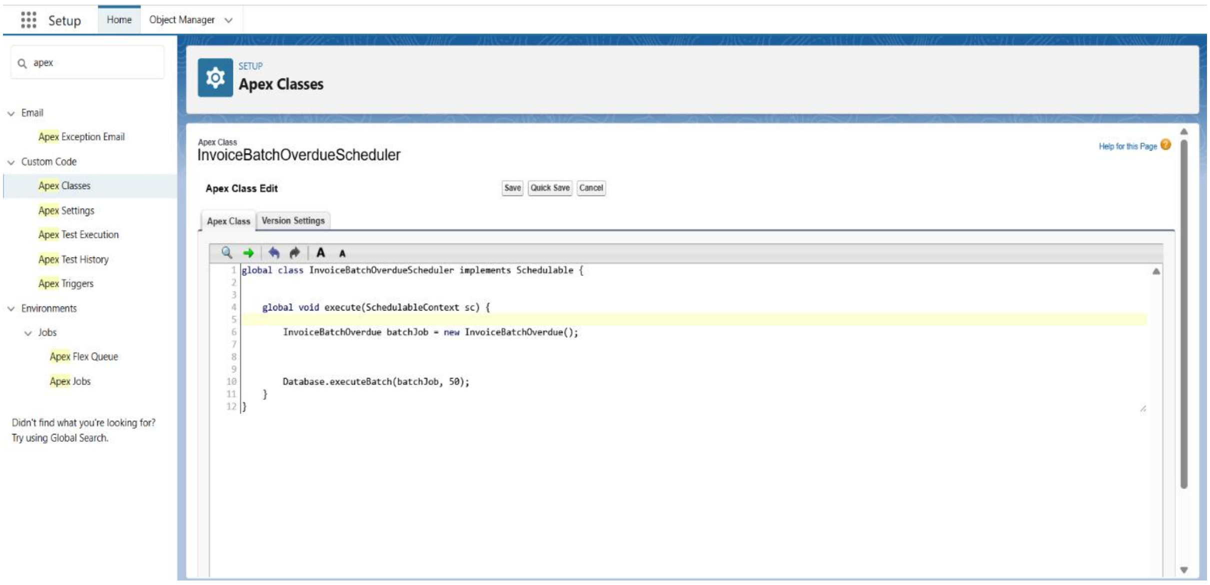




## 3. Batch Apex

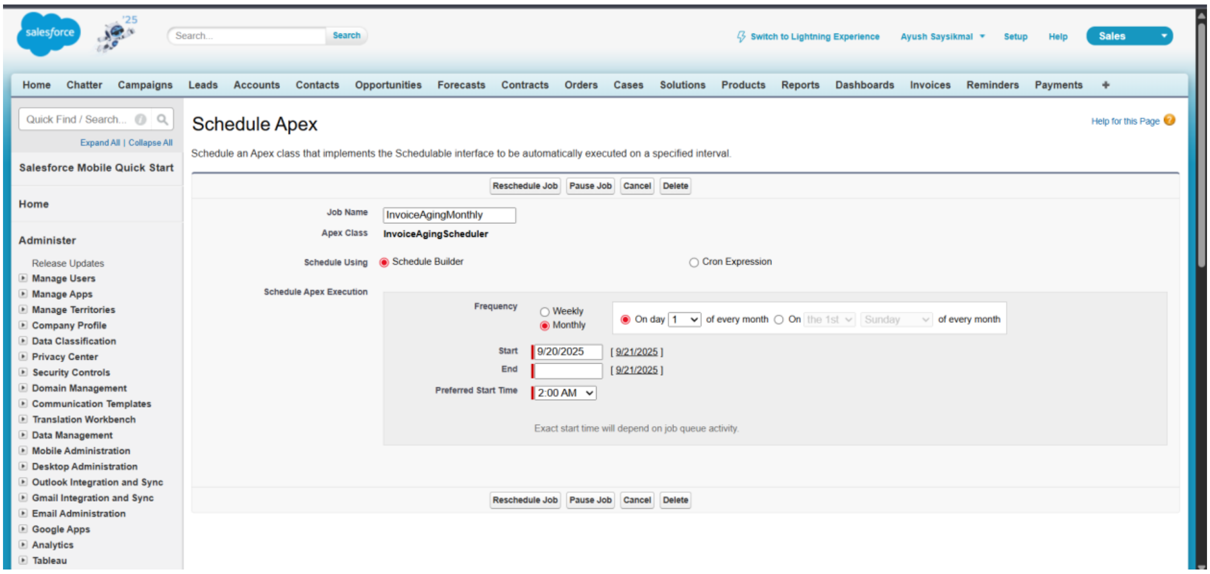
- **Setup->Apex Classes->New Class**
  - **Invoice Batch Overdue**
  - **Invoice Batch Overdue Scheduler**

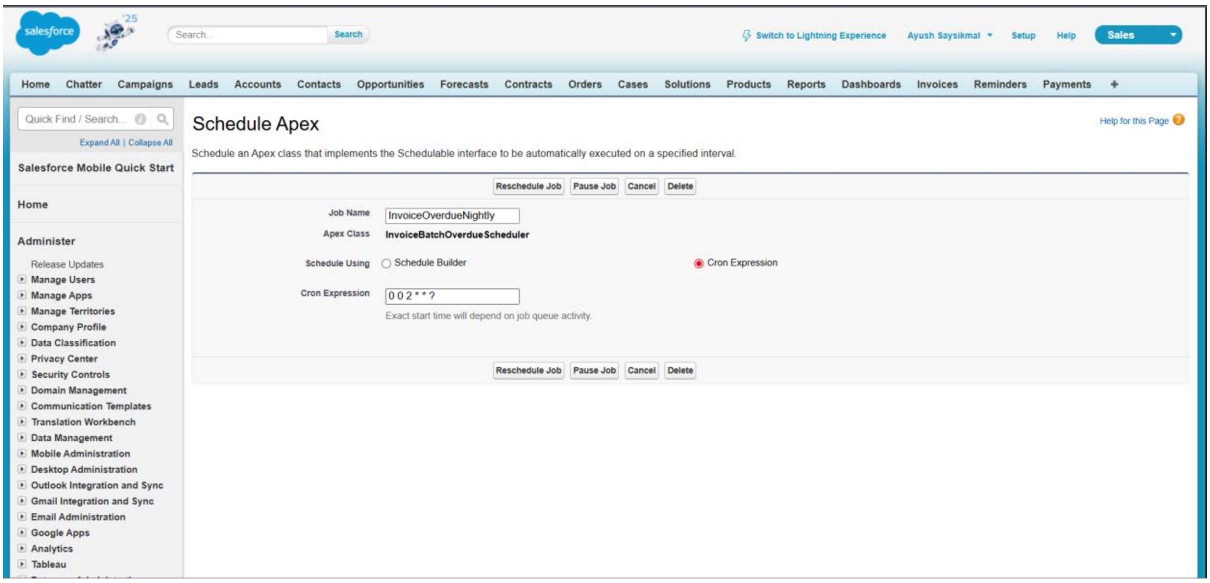


## 4. Scheduled Apex

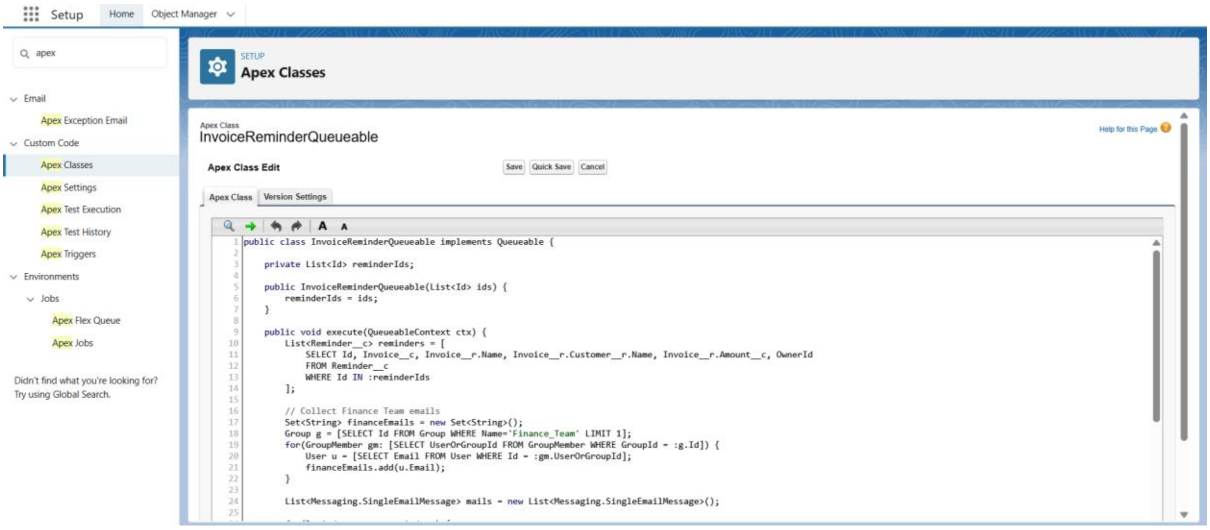
- **Setup->Scheduled Jobs->New Job**
  - **Invoice Age Monthly**
  - **Invoice Overdue Nightly**



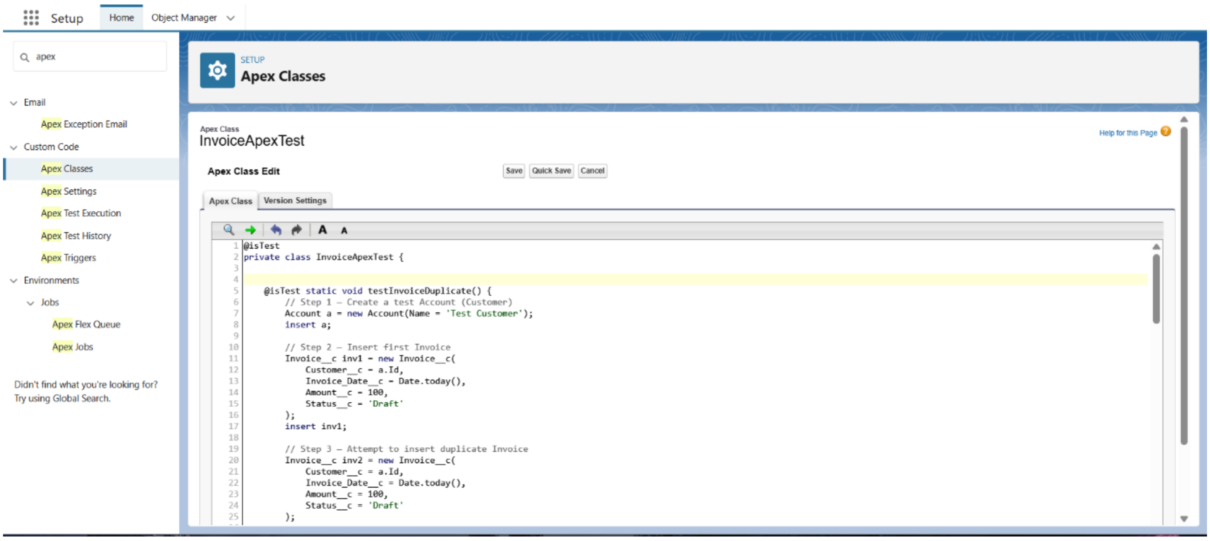
# 5. Queueable Apex

- **Setup->Apex classes->New Classes**
  - **Invoice Reminder Queuable**




# 6. Test Classes

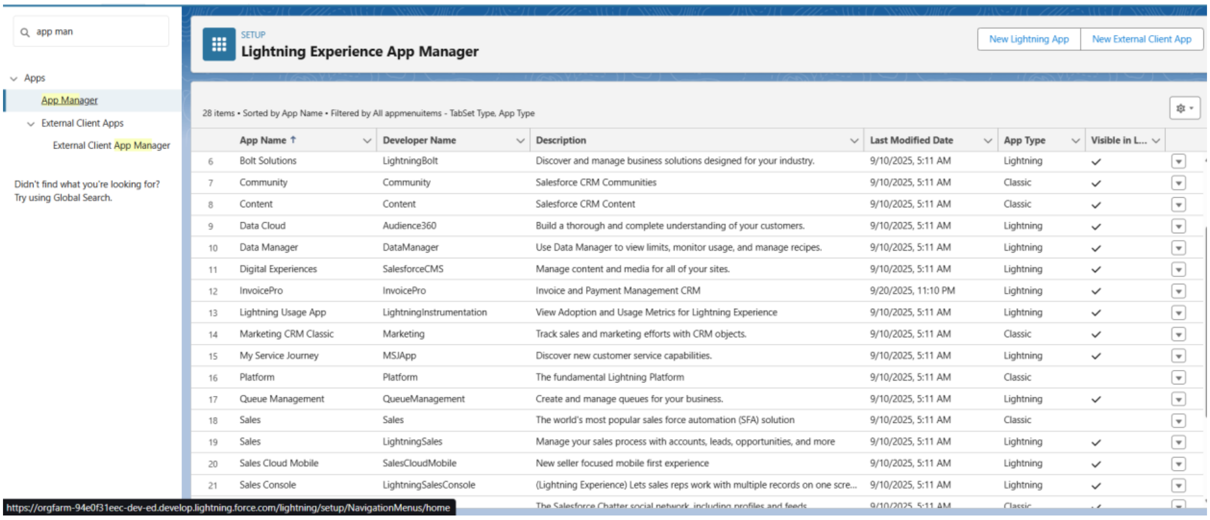
- **Setup->Apex Classes->New Classes**
  - **Invoice Test Class**



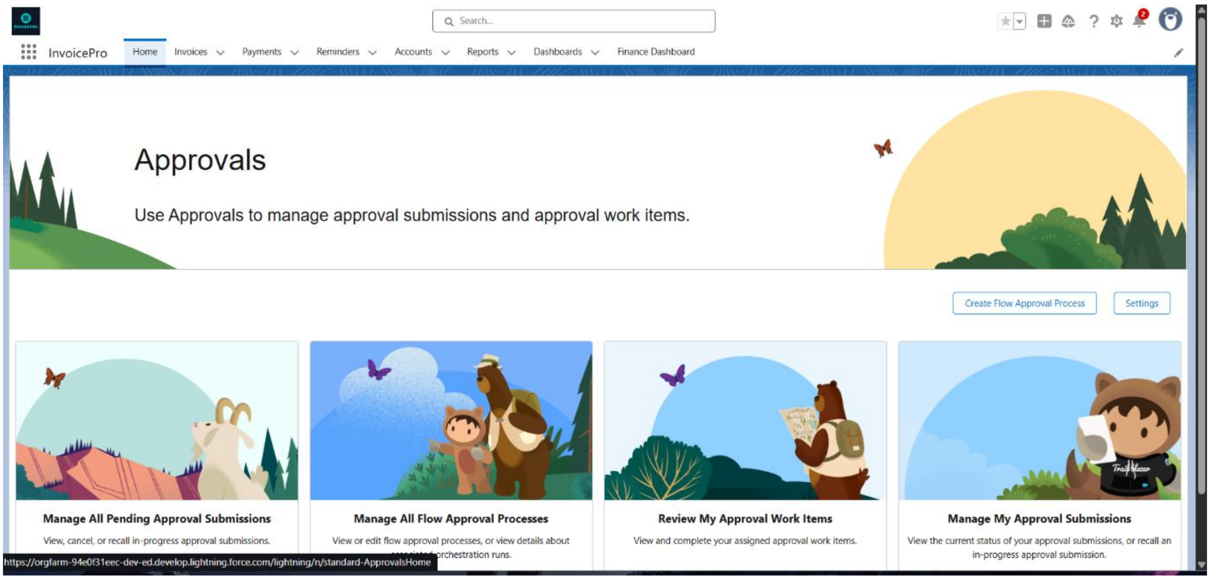
# Phase 6: User Interface Development

## 1. Lightning App Builder

- Setup → App Manager→ New

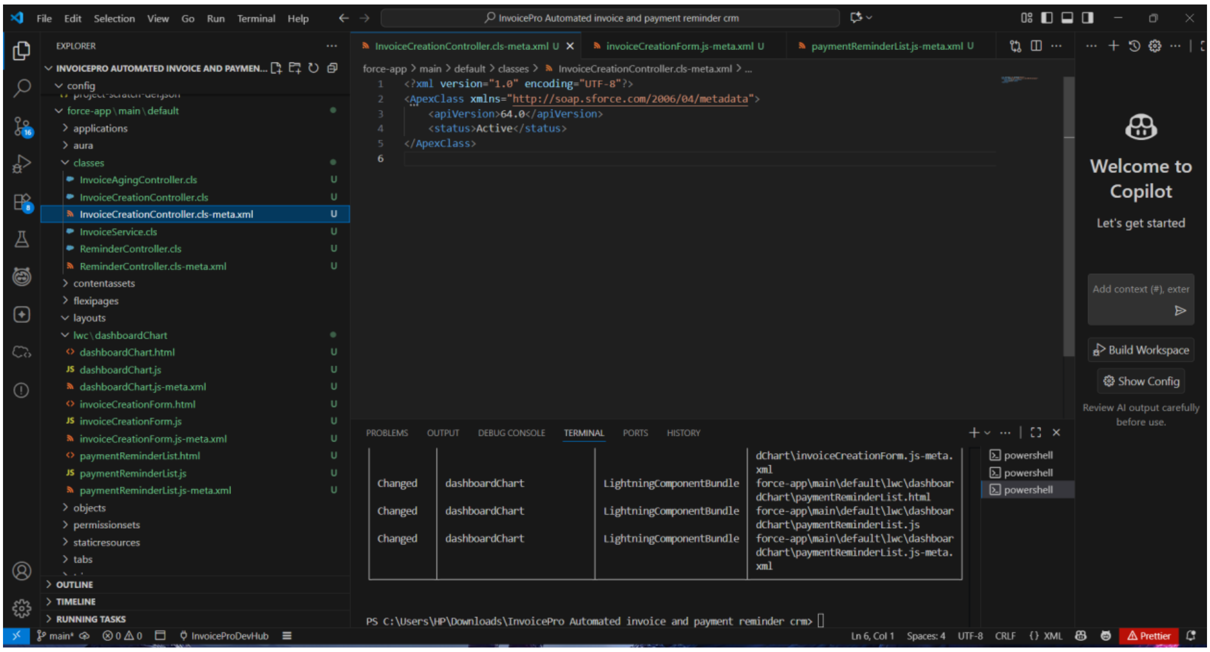



- Setup → App Manager → InvoicePro → Edit → Add tabs (Invoice, Payment, Reminders).



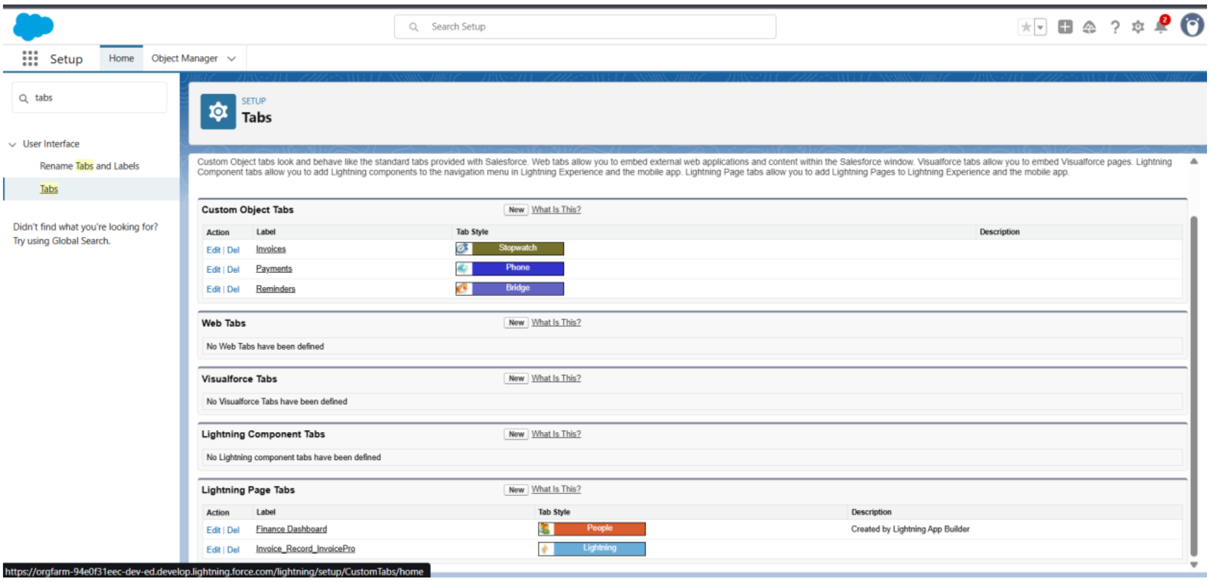
## 2.Apex With LWC

- Vscode



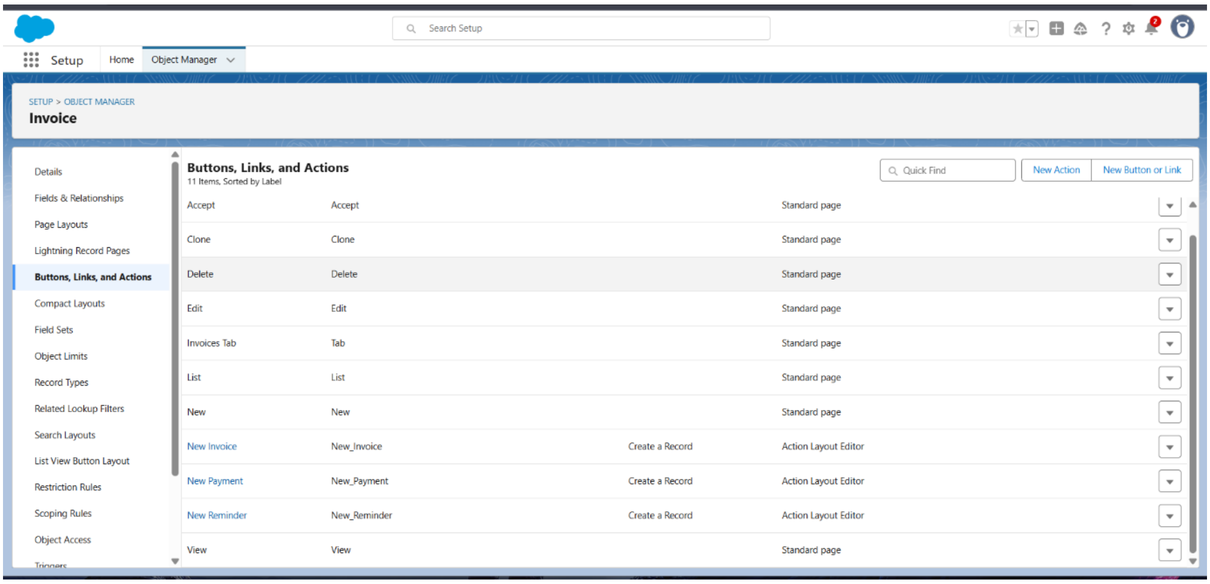
## 3.Tabs

- Setup→ Quick find →Tabs



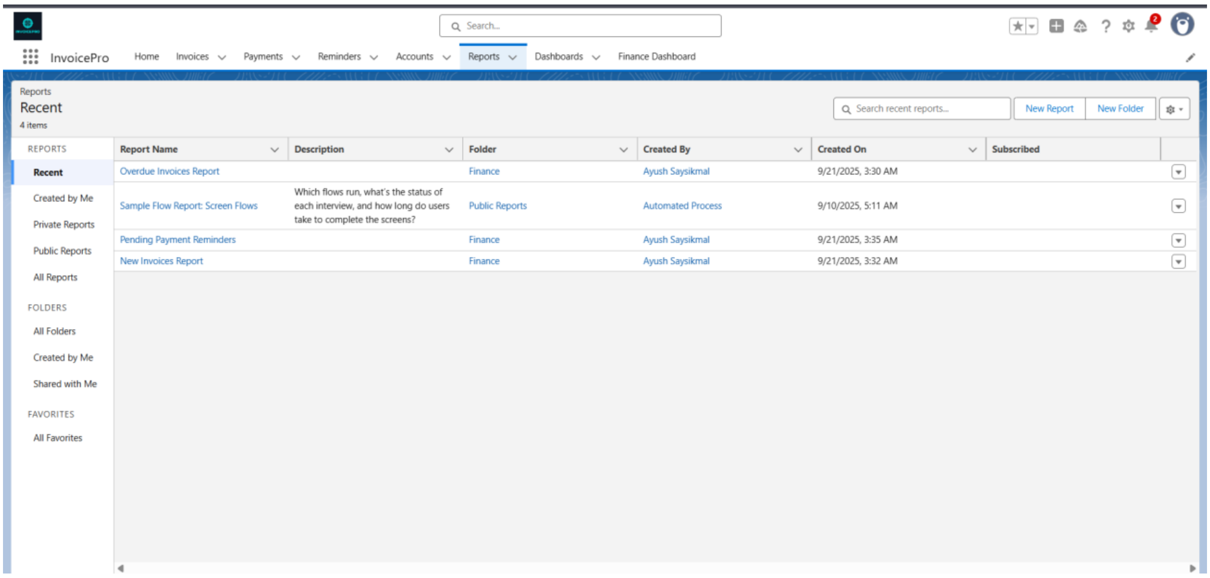
## 4.Quick Actions

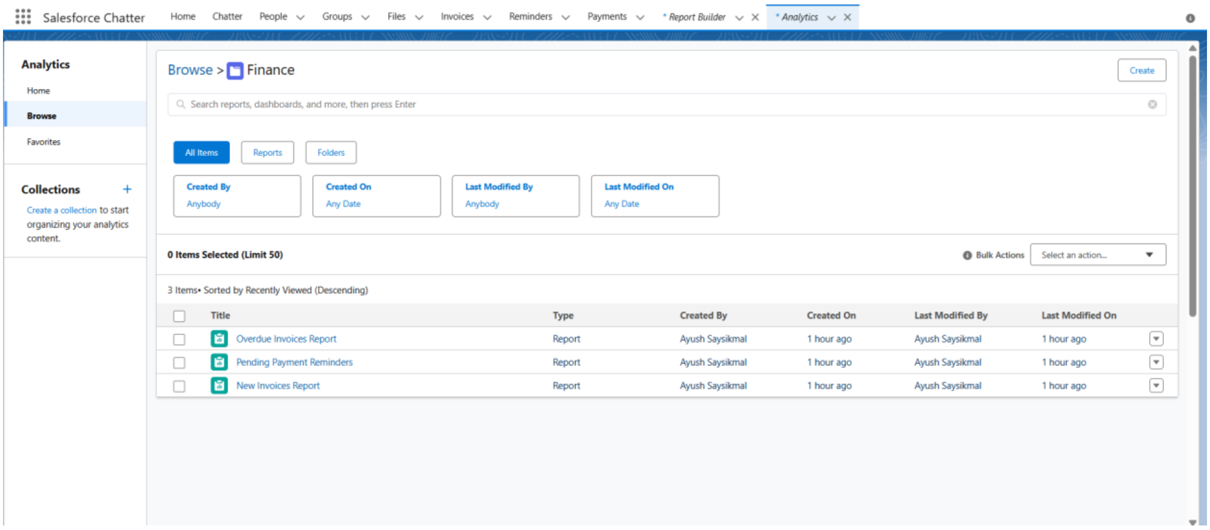
- Setup → Object Manager → Invoice__c → Buttons, Links, and Actions → New Action
    - New Invoice




## 5.Reports

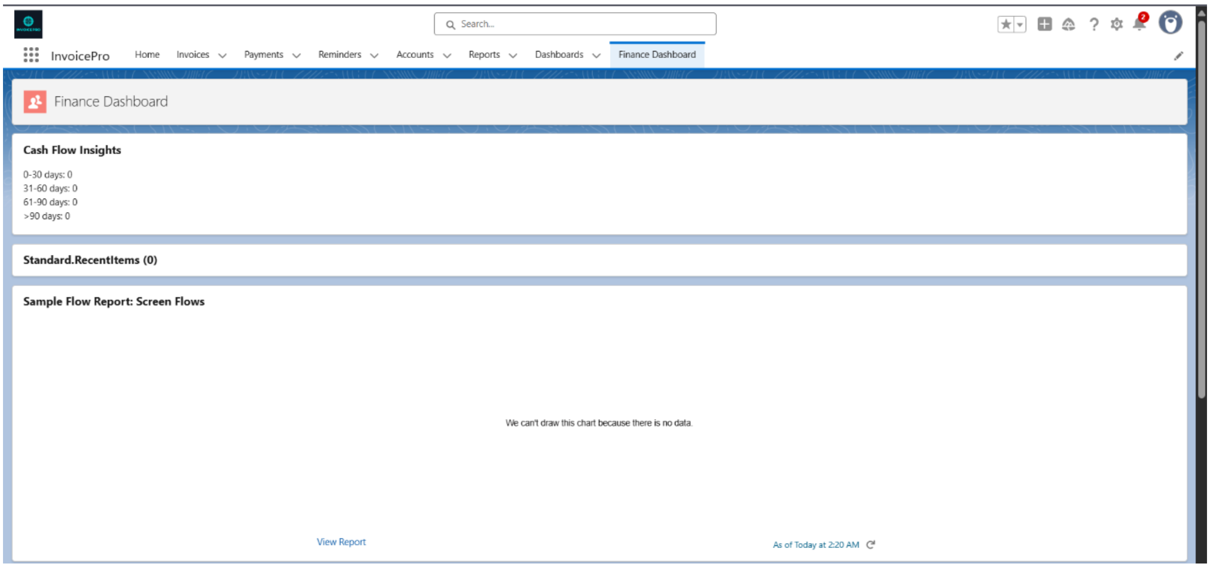
- Setup → Reports → Create report

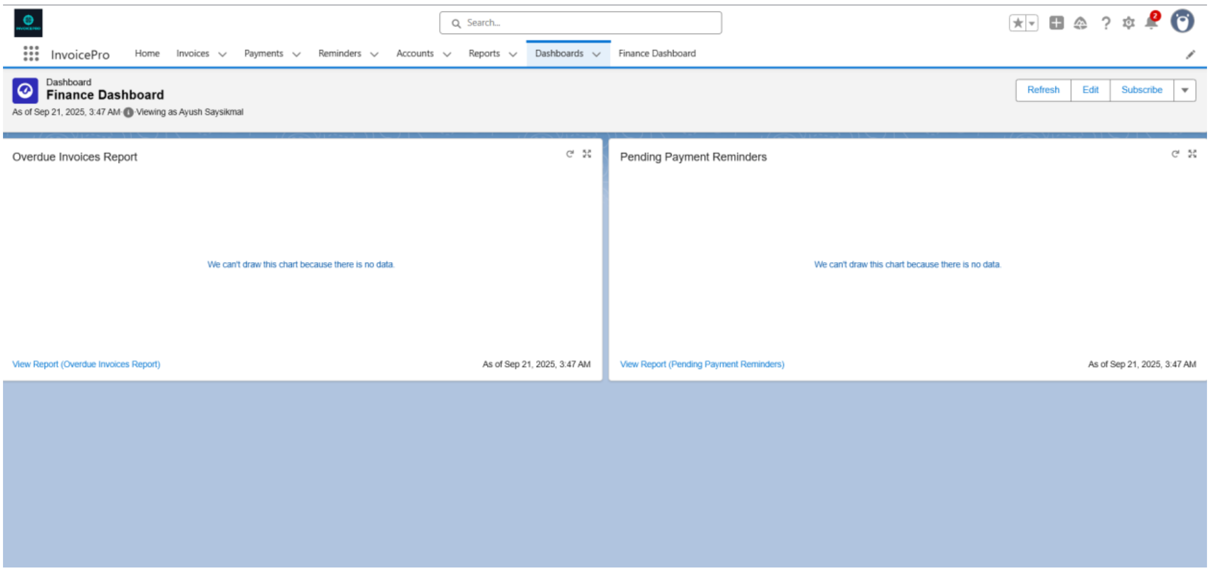




## 6. Dashboard

- Setup → Dashboards → New Dashboard

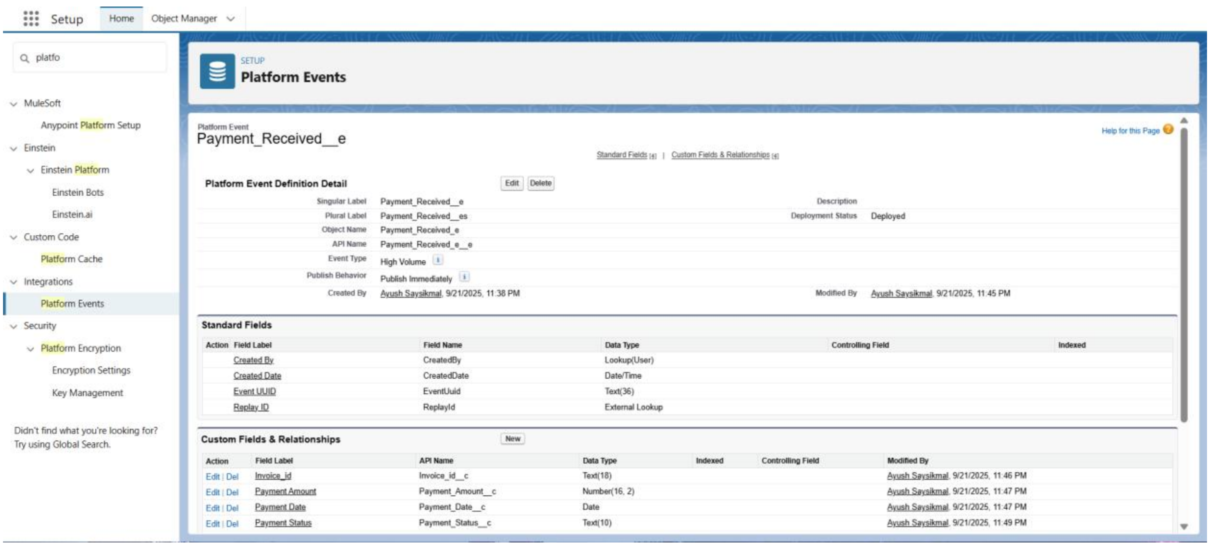



Search...
InvoicePro
Home
Invoices
Payments
Reminders
Accounts
Reports
Dashboards
Finance Dashboard
Dashboard
Finance Dashboard
As of Sep 21, 2025, 3:47 AM · Viewing as Ayush Saysikmal
Refresh
Edit
Subscribe
Overdue Invoices Report
We can't draw this chart because there is no data.
View Report (Overdue Invoices Report)
As of Sep 21, 2025, 3:47 AM
Pending Payment Reminders
We can't draw this chart because there is no data.
View Report (Pending Payment Reminders)
As of Sep 21, 2025, 3:47 AM

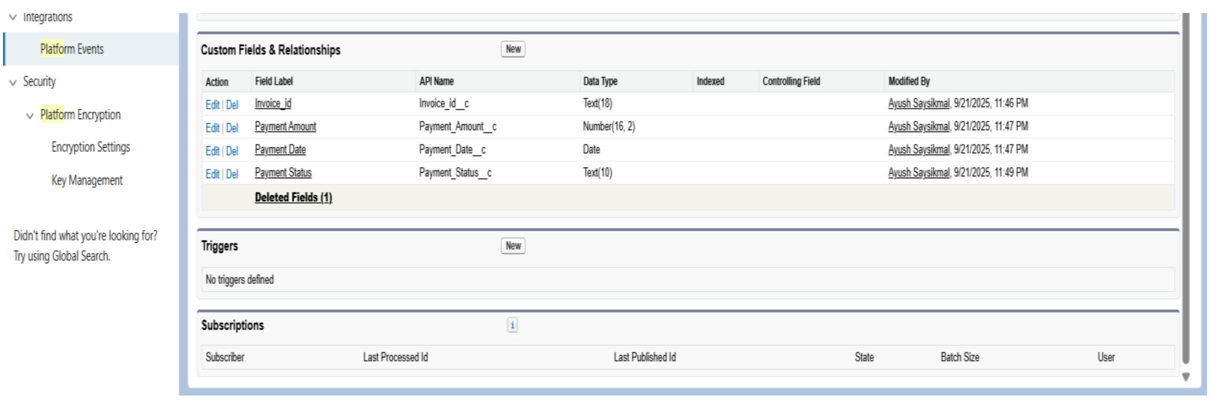
# Phase 7: Integration & Internal Access

## 1.Platform Events

- **Setup-> Platform Events-> New Platform Events**
  - **Payment_Received_e**

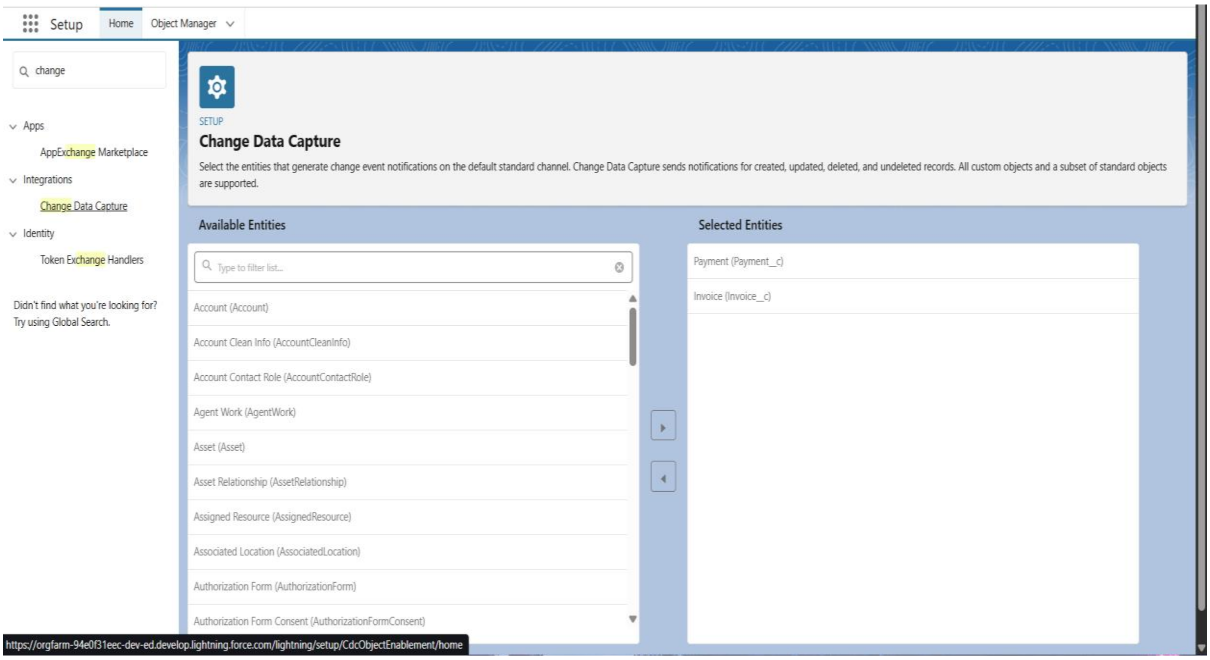



- **Custom Objects**



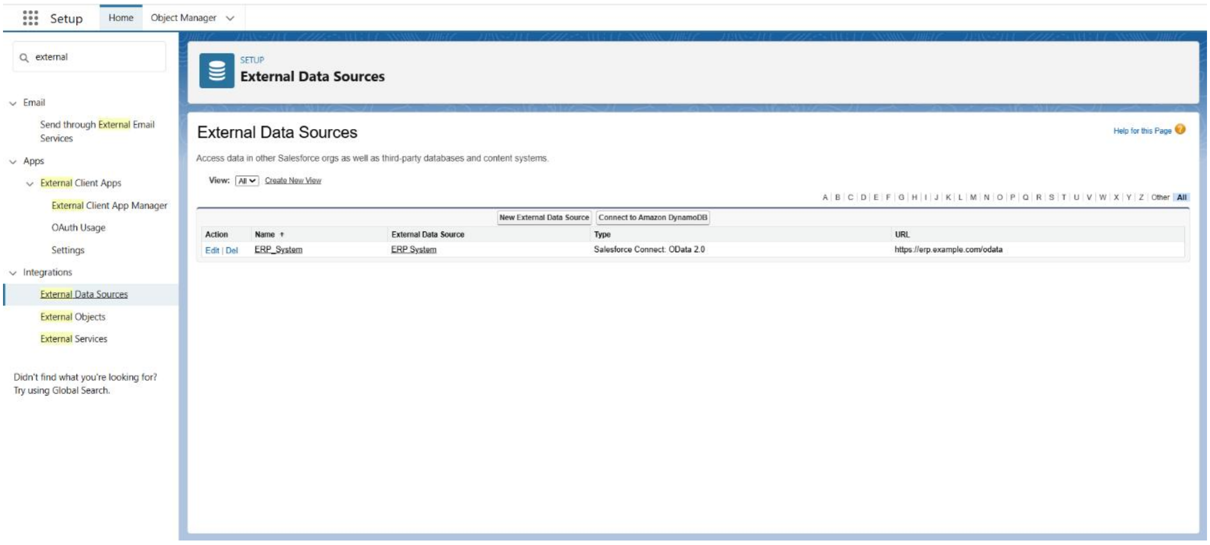

## 2.Change Data Capture

- **Setup->Change Data Capture->Available Entity>Selected Entity**

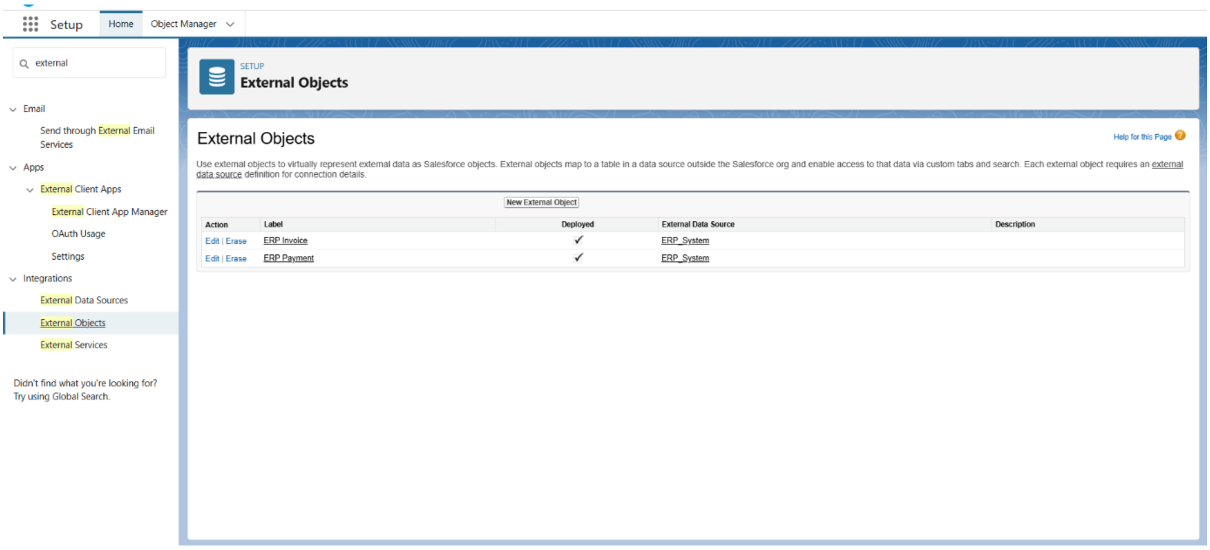


## 3. External Services/Salesforce Connect

- **Setup-> External Data Sources->New External Data Source**
    - **ERP System**

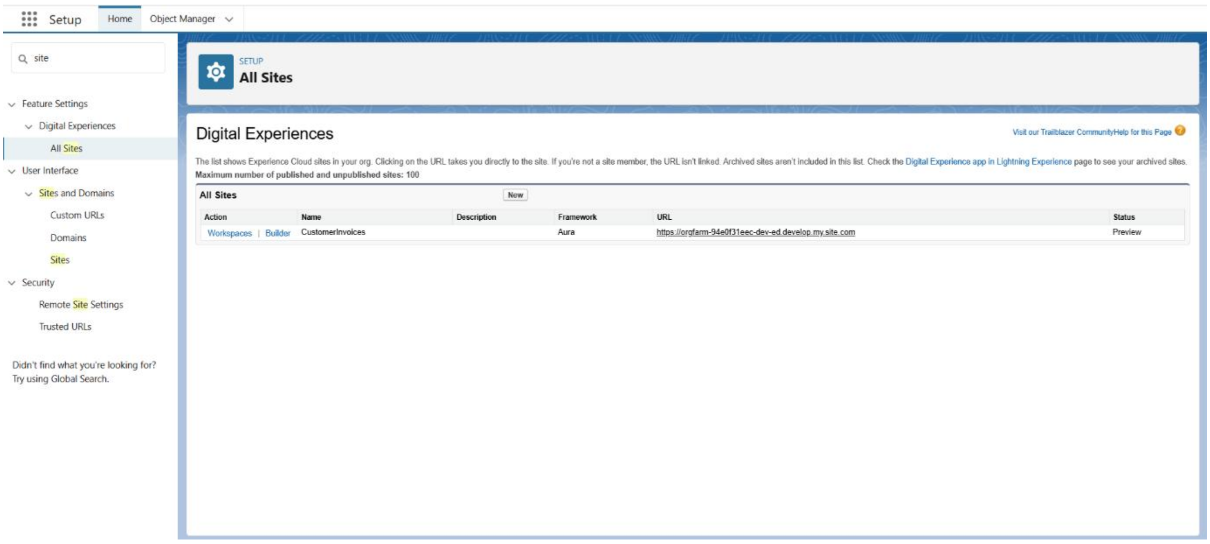


- **Setup-> External Objects->New External Objects**
    - **ERP Invoice**
    - **ERP Payment**




## 4. All Sites Settings

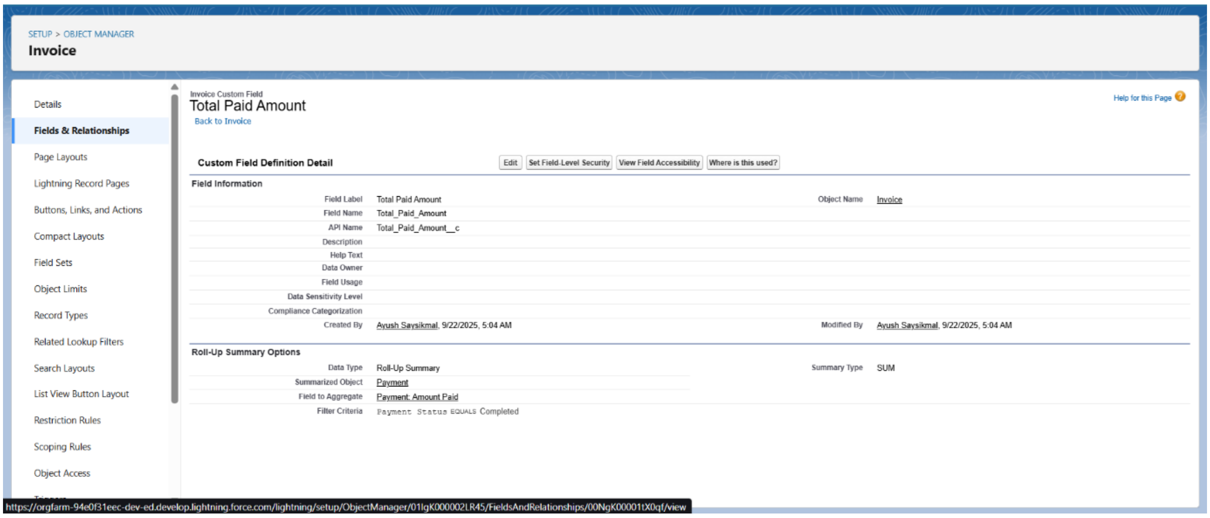
- **Setup->All Sites**



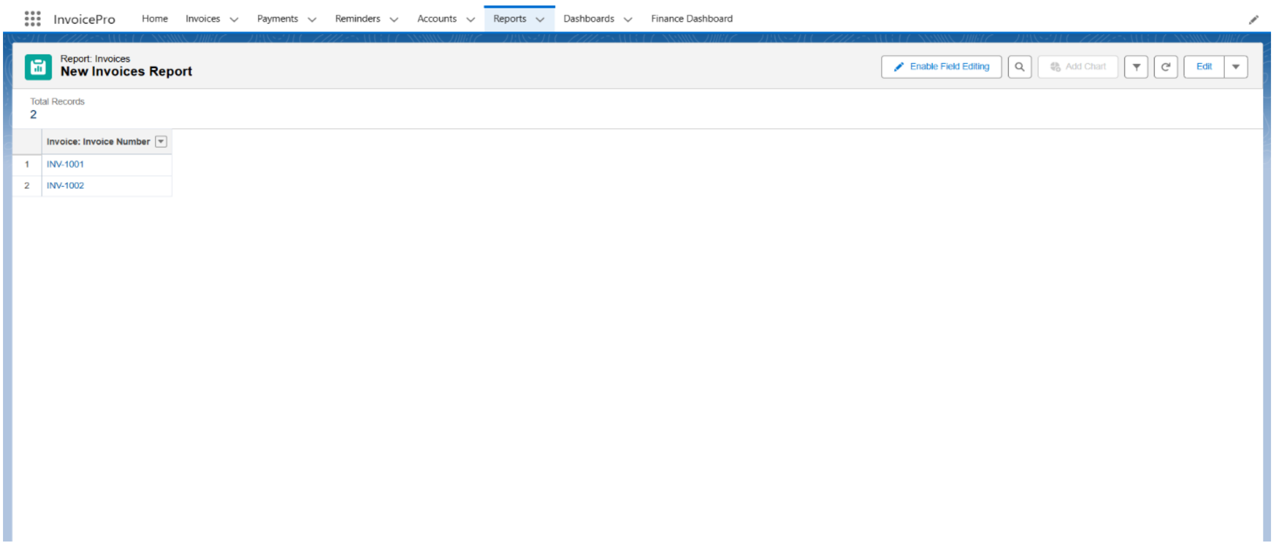
# 5.Process Builder To Skip Flows

## 1. Total Paid Amount

- **Setup->Object Manager->invoice->Field and Relationship**



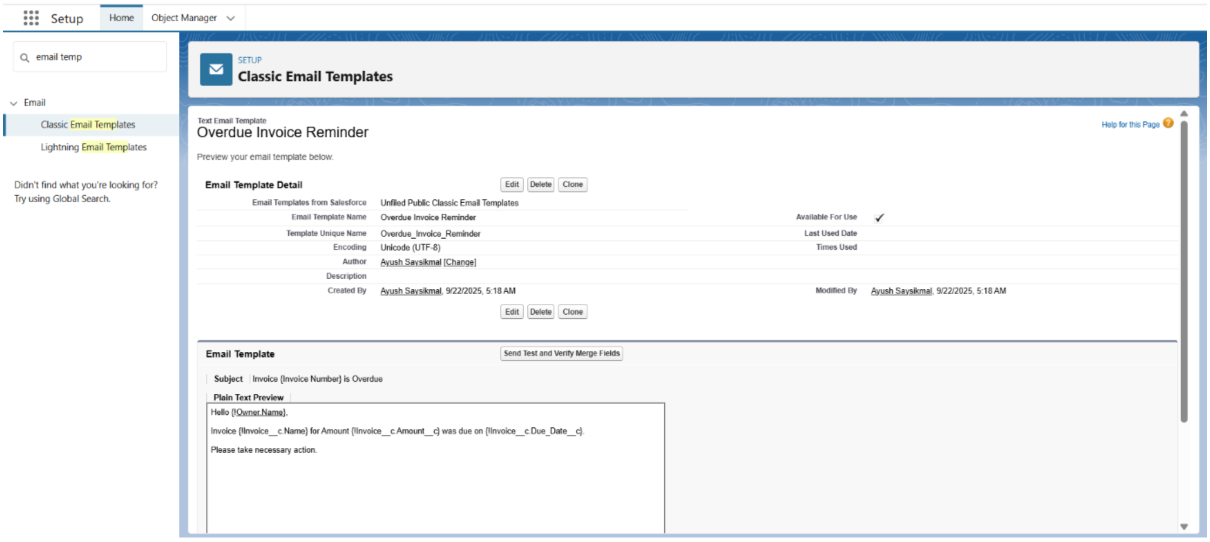

- **Report Subscriptions**



# 2.Overdue Invoice Reminder

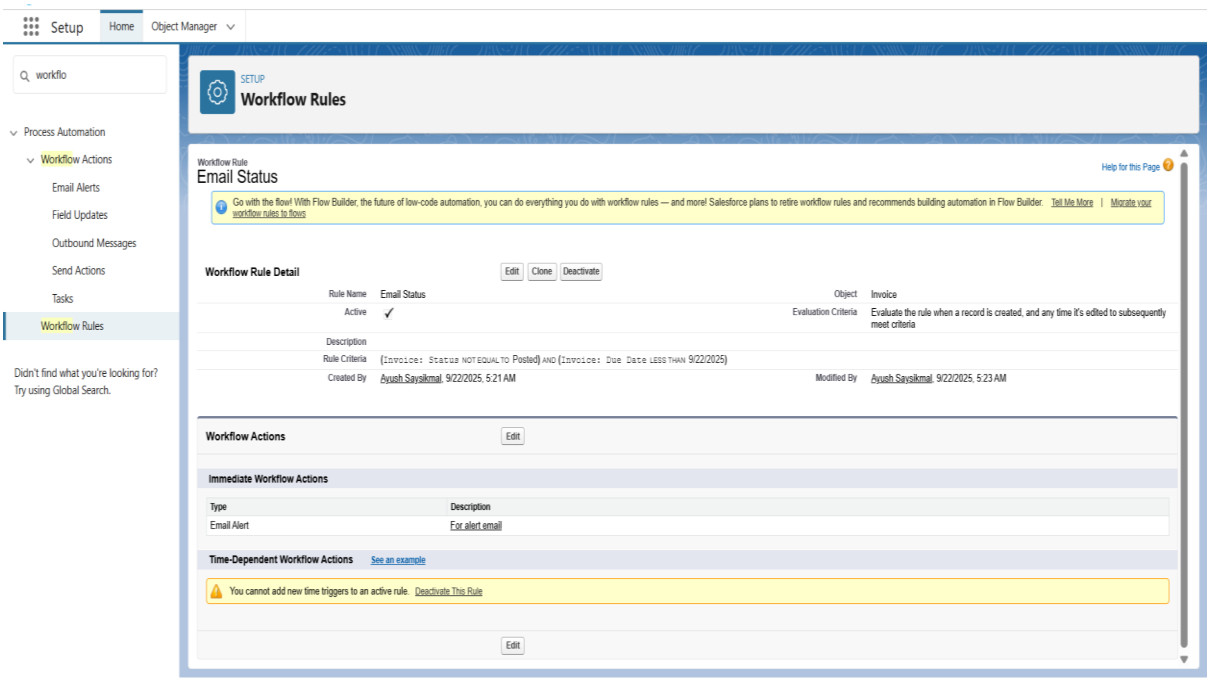
## 1.Create an Email Template

- **Setup → Email → Classic Email Templates**

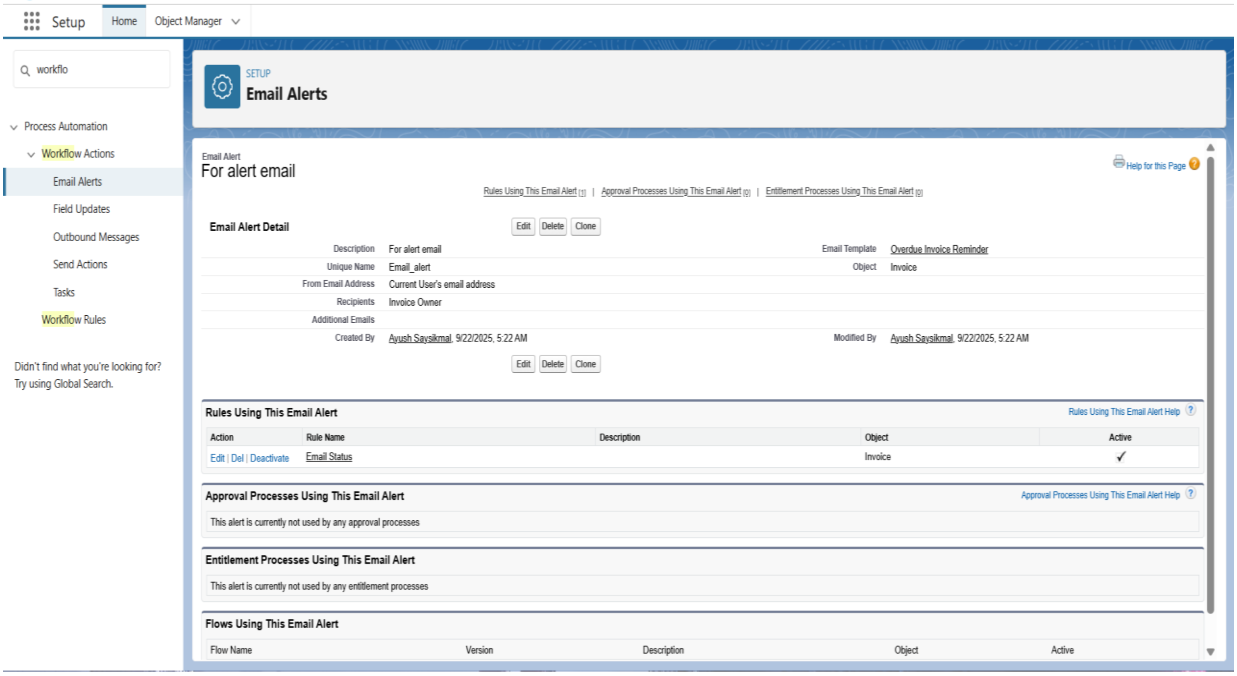



## 2 . Create a Workflow Rule

- **Setup → Workflow Rules → New Rule**



# 3. Add Workflow Action – Email Alert

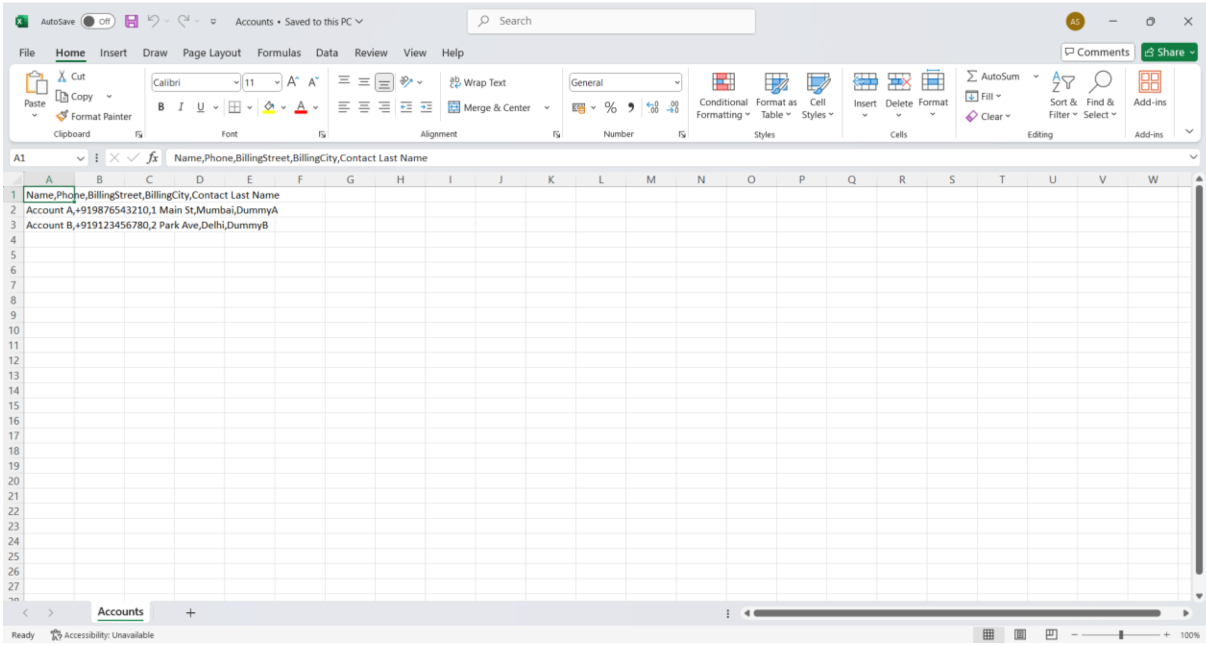


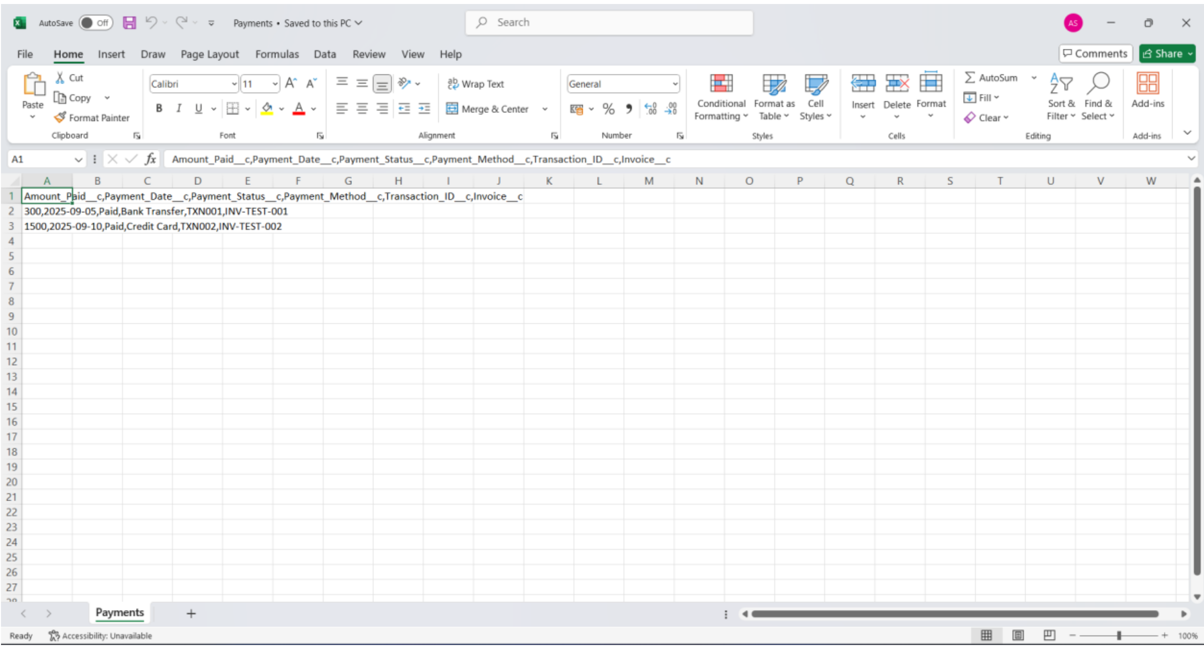

## So This is for phase 7 now ready to go phase 8....

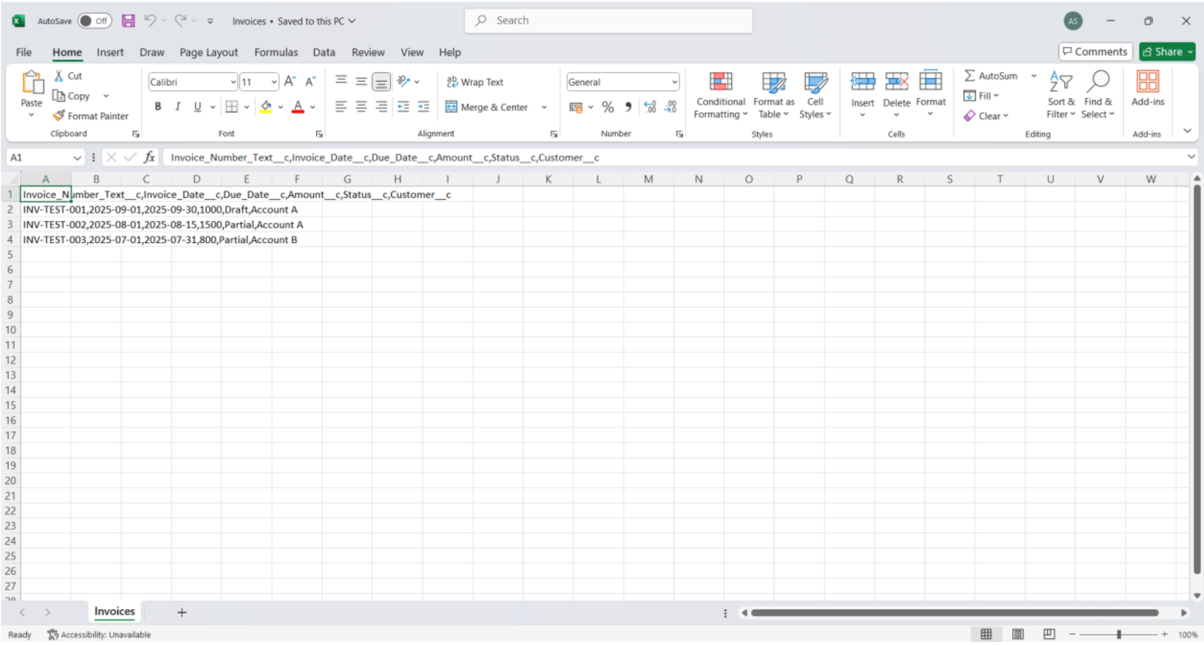
# Phase 8: Data Management & Deployment

## 1. Sample Data (CSV Files)

- **Accounts.csv**
- **Invoices.csv**
- **Payments.csv**

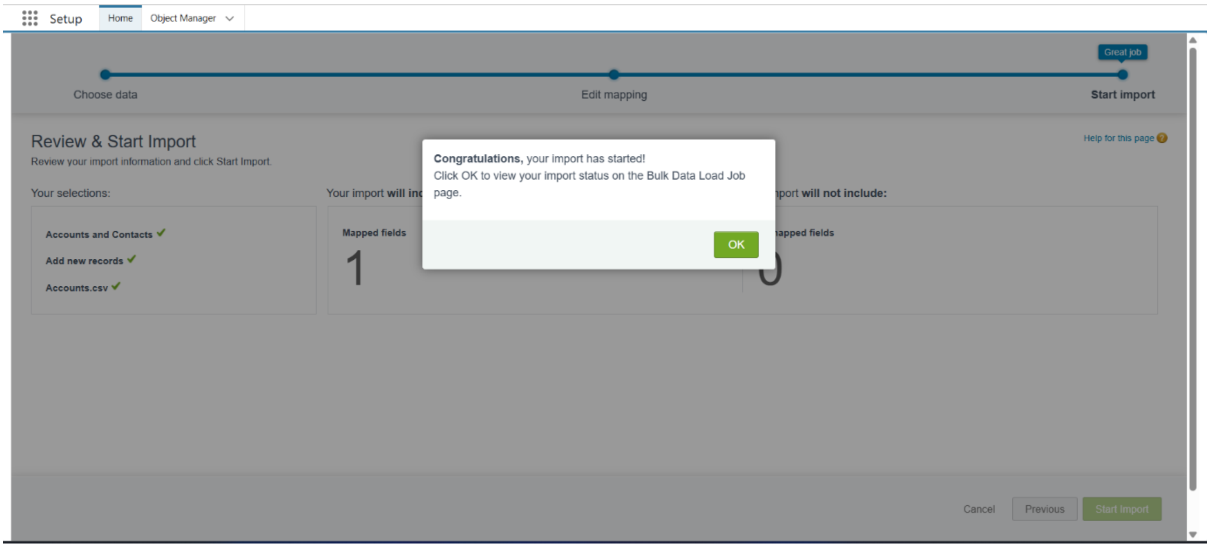


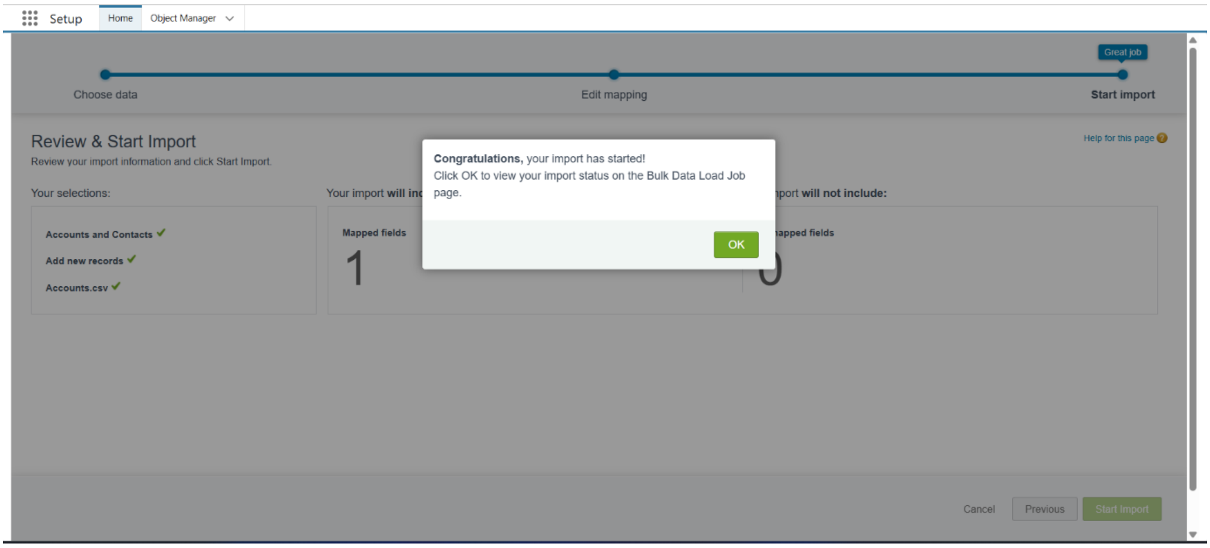



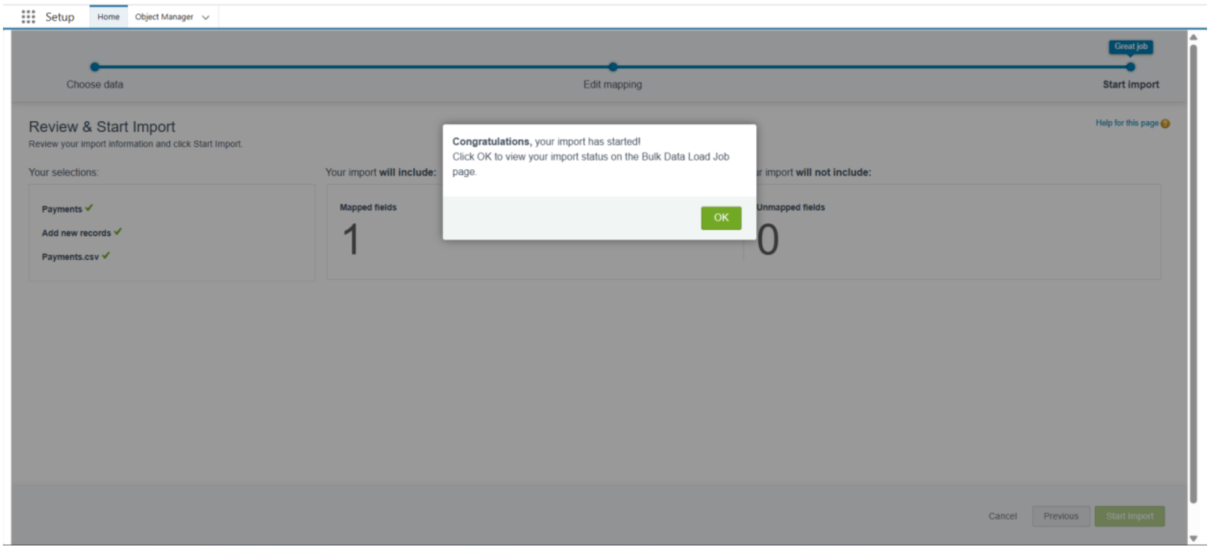



## 2. Data Import Wizard

- **Setup: Setup → Data → Data Import Wizard → Launch Wizard**
  - **Accounts** → Choose Accounts → Upload `Accounts.csv` → Map fields → Start Import.
  - **Invoices** → Custom Object → Invoice__c → Upload `Invoices.csv` → Map Customer__c by Account Name → Start Import.
  - **Payments** → Custom Object → Payment__c → Upload `Payments.csv` → Map Invoice__c by Invoice Number → Start Import.

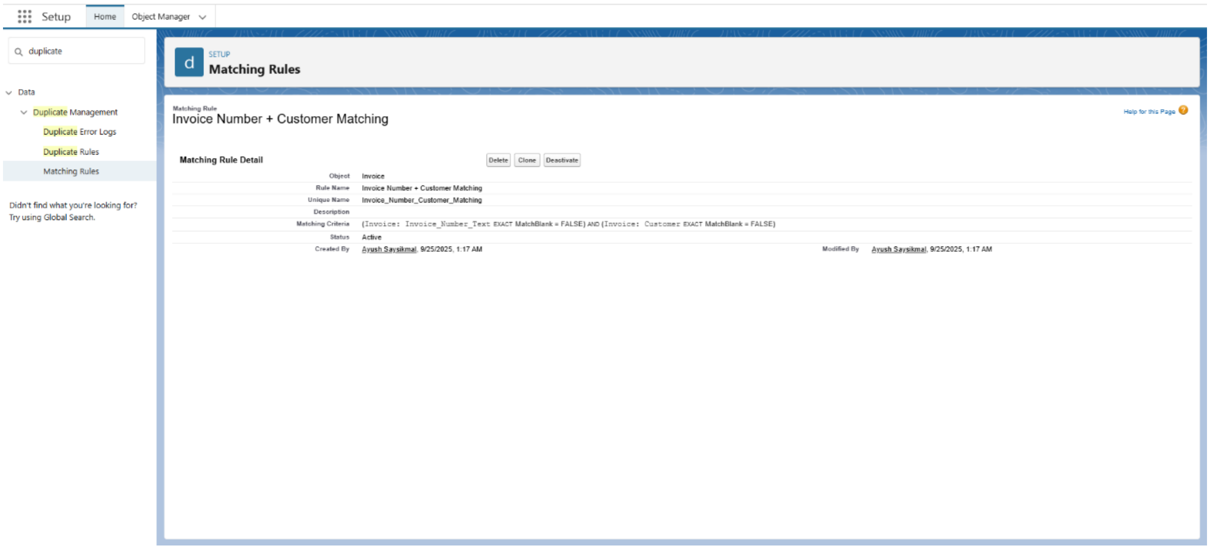


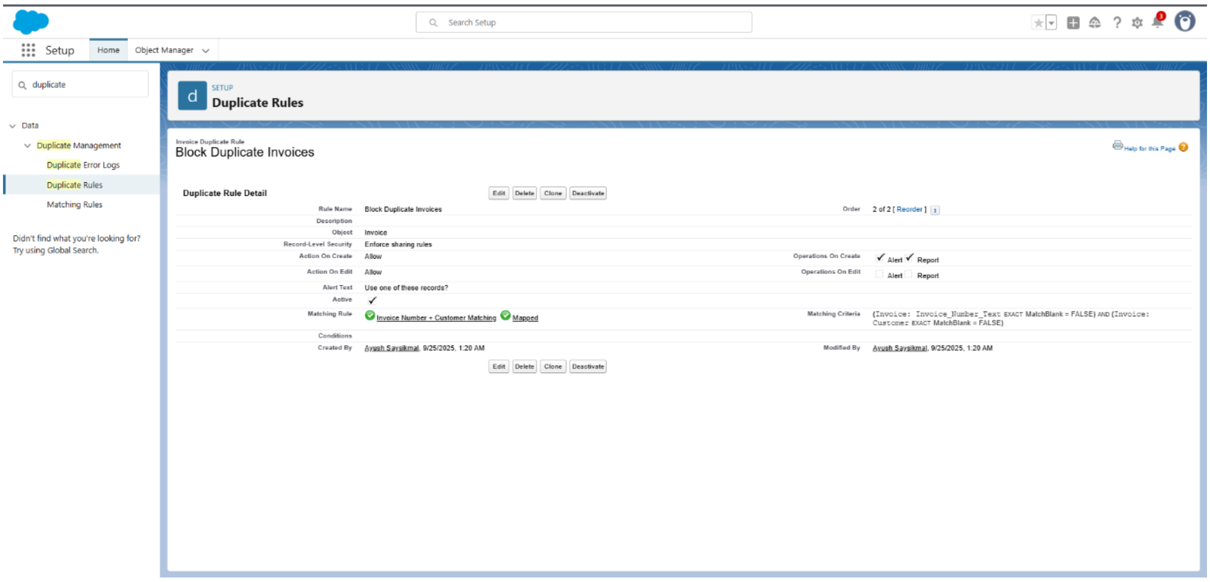



## 3. Duplicate Rules

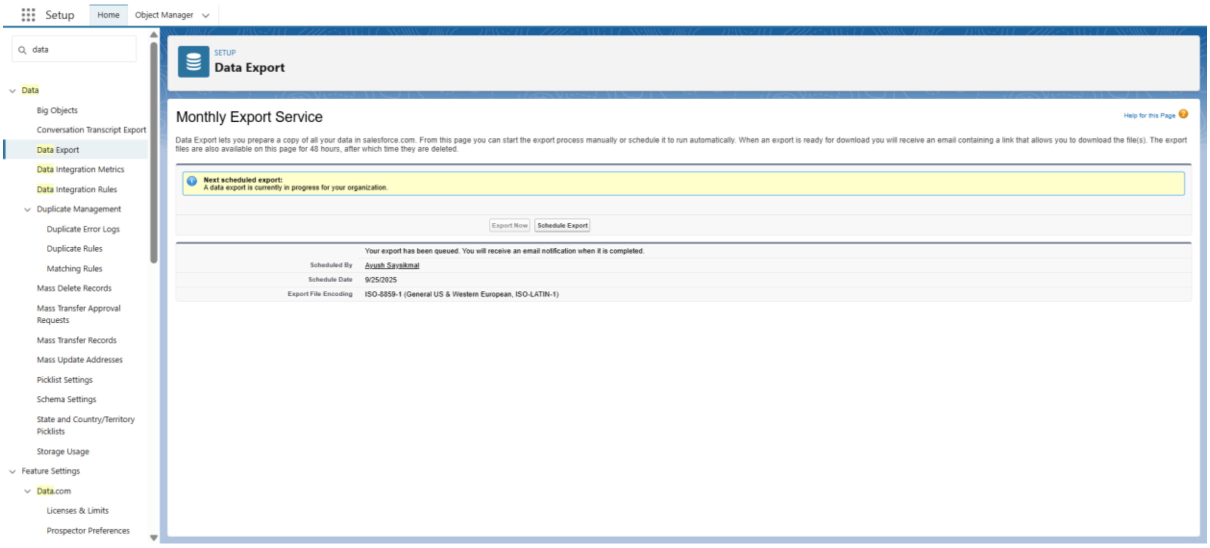
- **Setup: Setup → Duplicate Management → Matching Rules / Duplicate Rules**
  - **Matching Rule**
  - **Duplicate Rule**

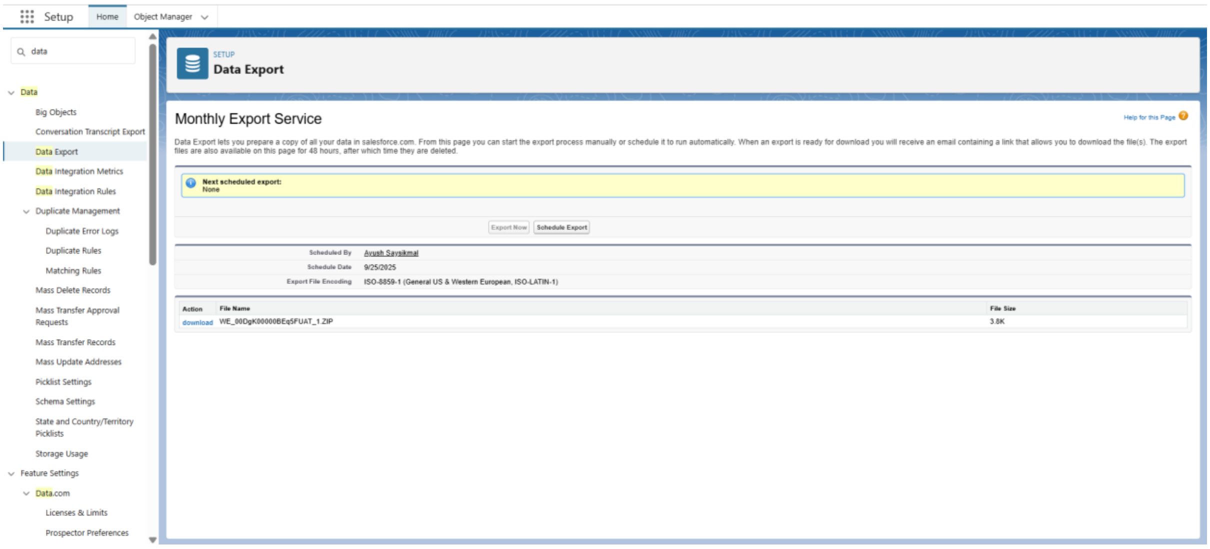




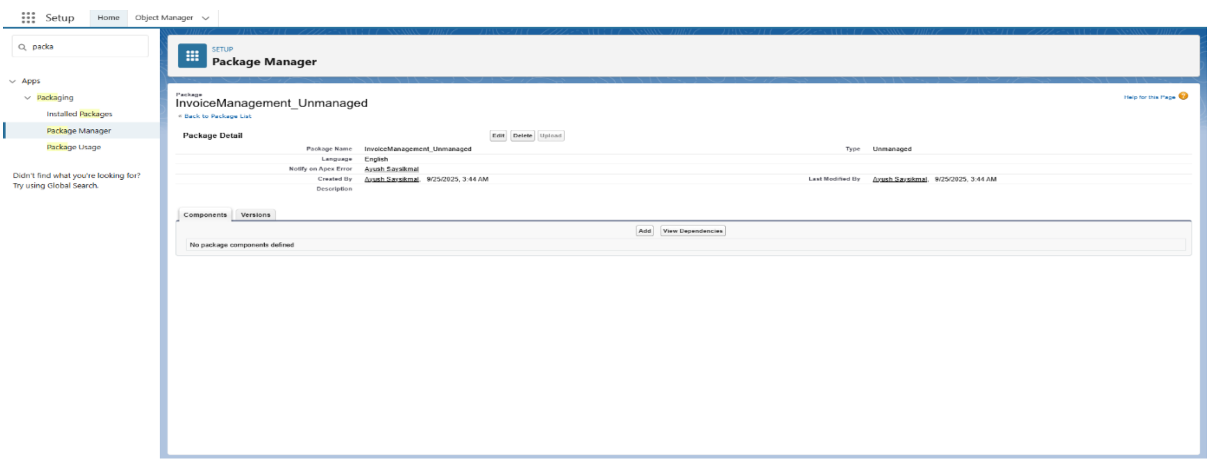
## 4. Data Export

- **Setup: Setup → Data → Data Export**

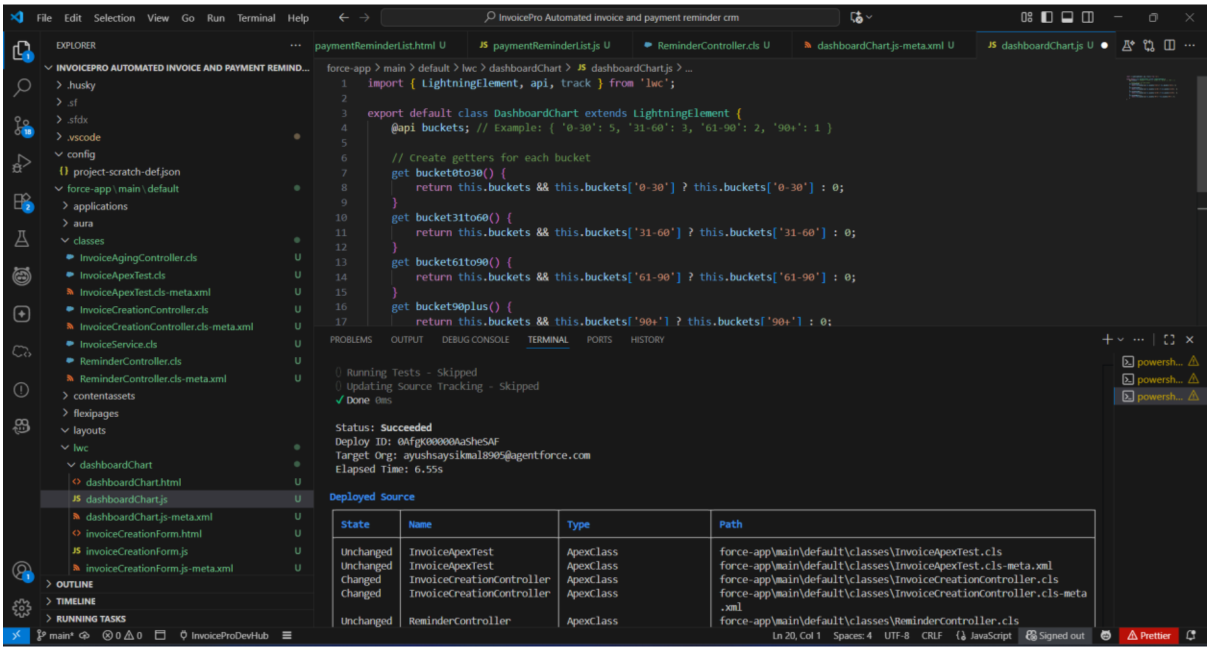




# 5.Unmanaged Packages



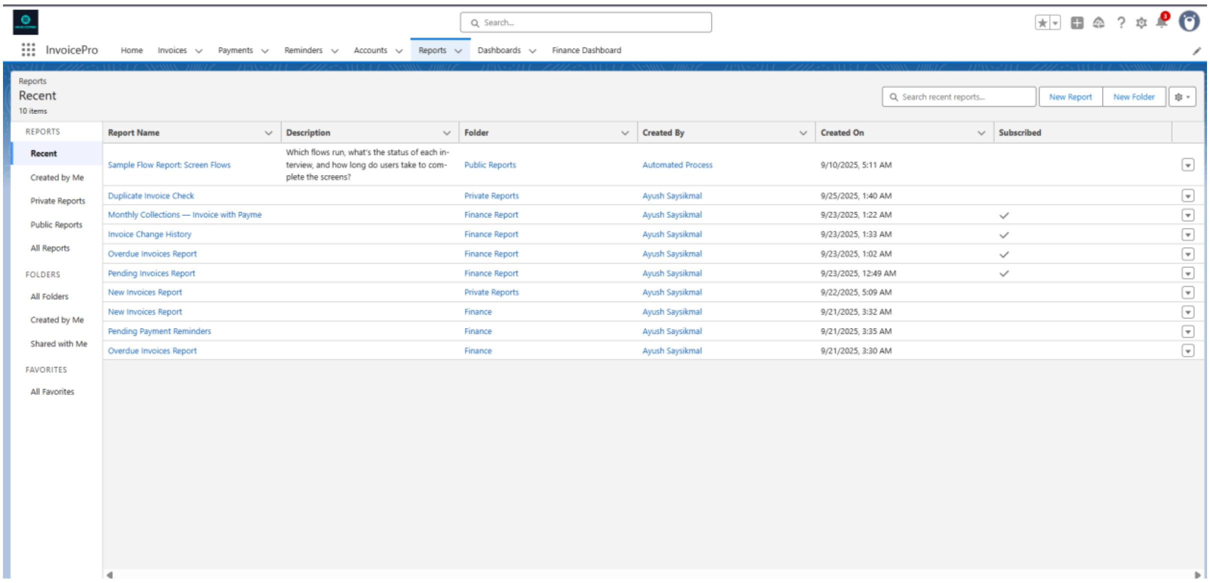
# 6. Vscode & SFDX



# Phase 9: Reporting, Dashboards & Security Review

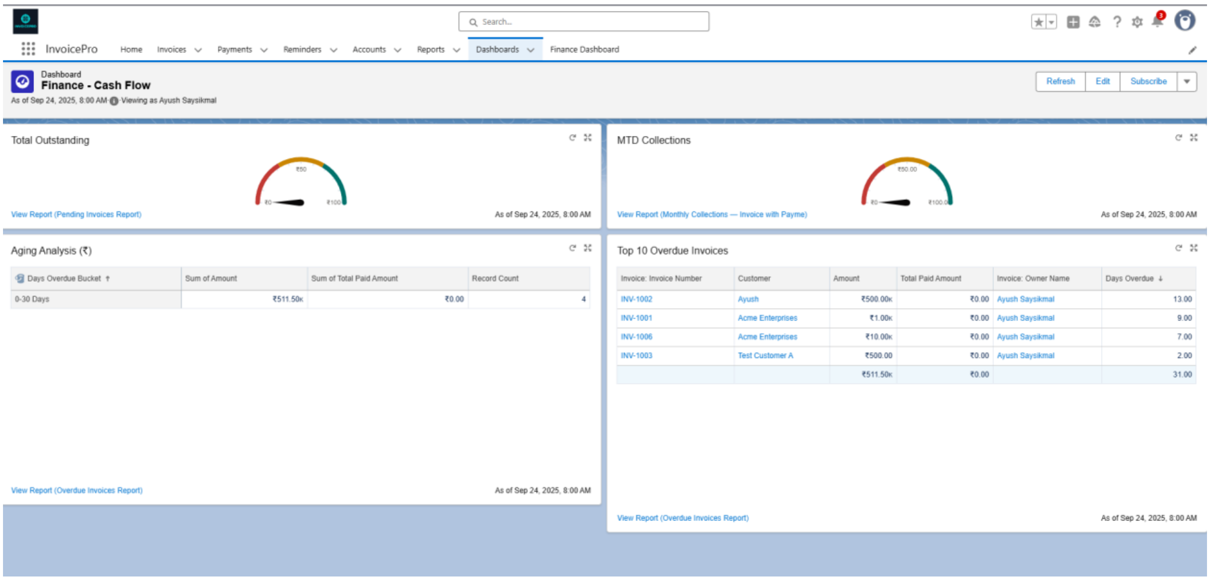
## 1.Reports And Report Types

- **Setup→ Reports → New Report**
  - **Pending Invoices Report**
  - **Overdue Invoices Report**
  - **Monthly Collections Report**
  - **Invoice Change History**



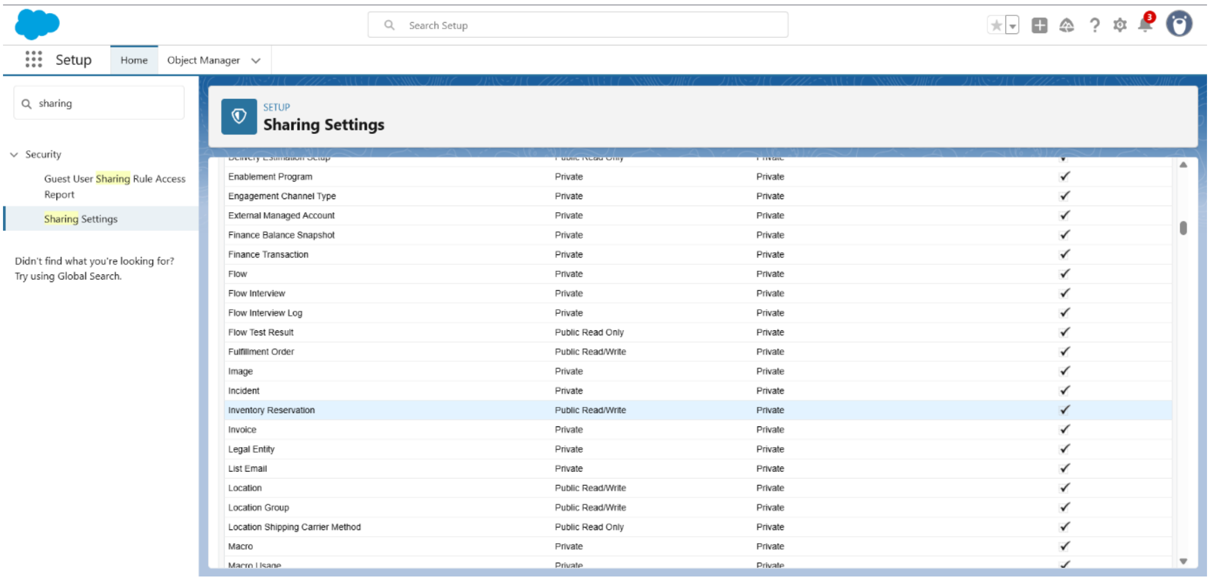

## 2.Dashboards

- **Dashboards → New Dashboard → Name Finance - Cash Flow → Folder Finance Dashboards**
  - **Finance - Cash Flow**
    - **Total Outstanding**
    - **MTD Collections**
    - **Top 10 Overdue Invoices**
    - **Aging Analysis**



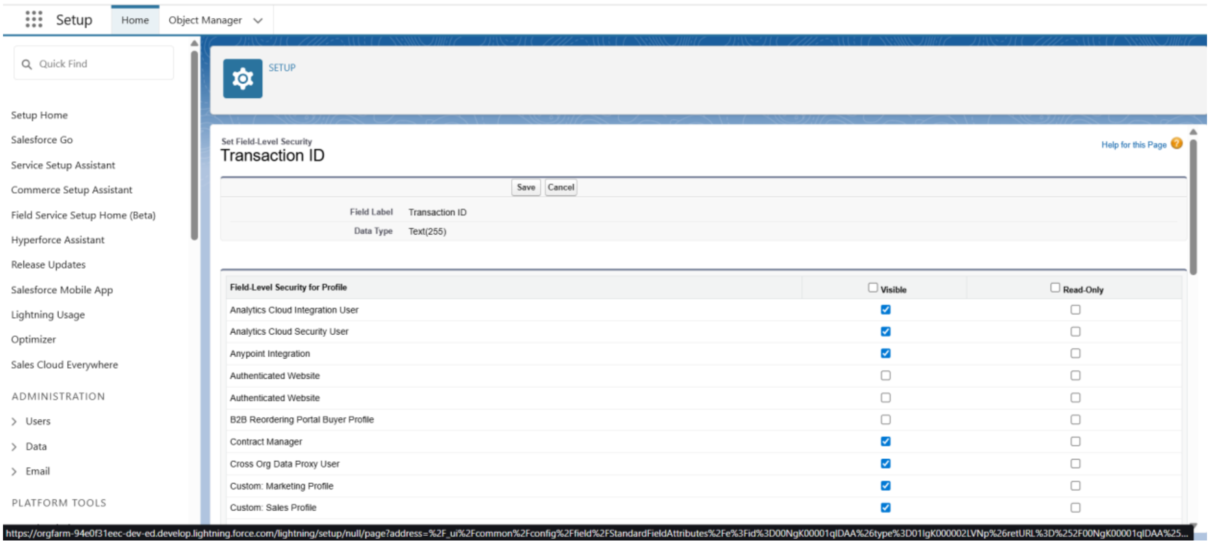
## 3. Sharing Settings

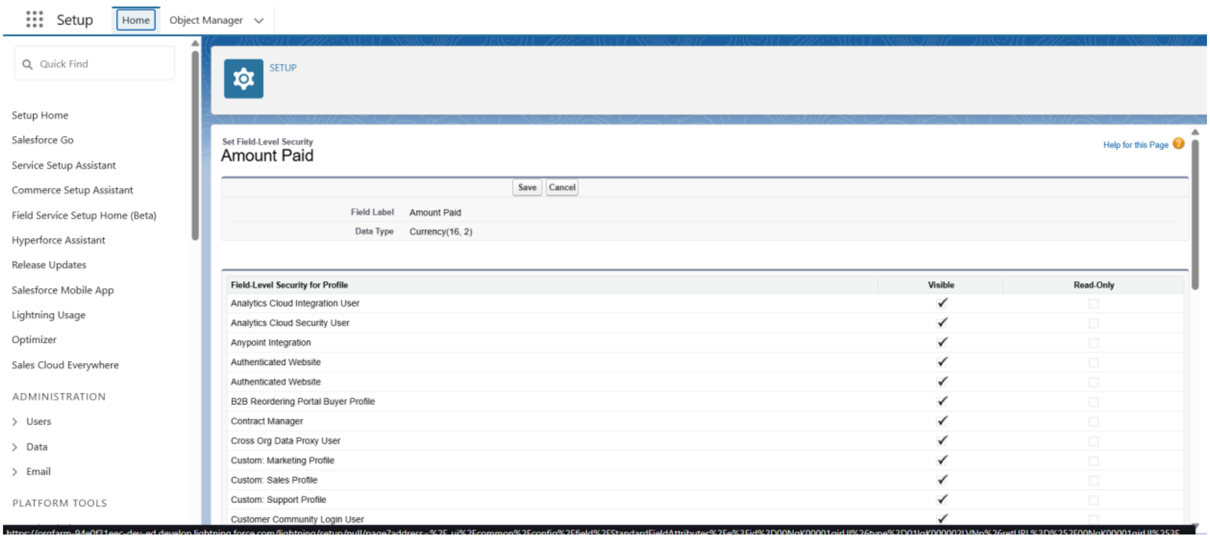
- **Setup→ Sharing Settings**



# 4. Field Level Security

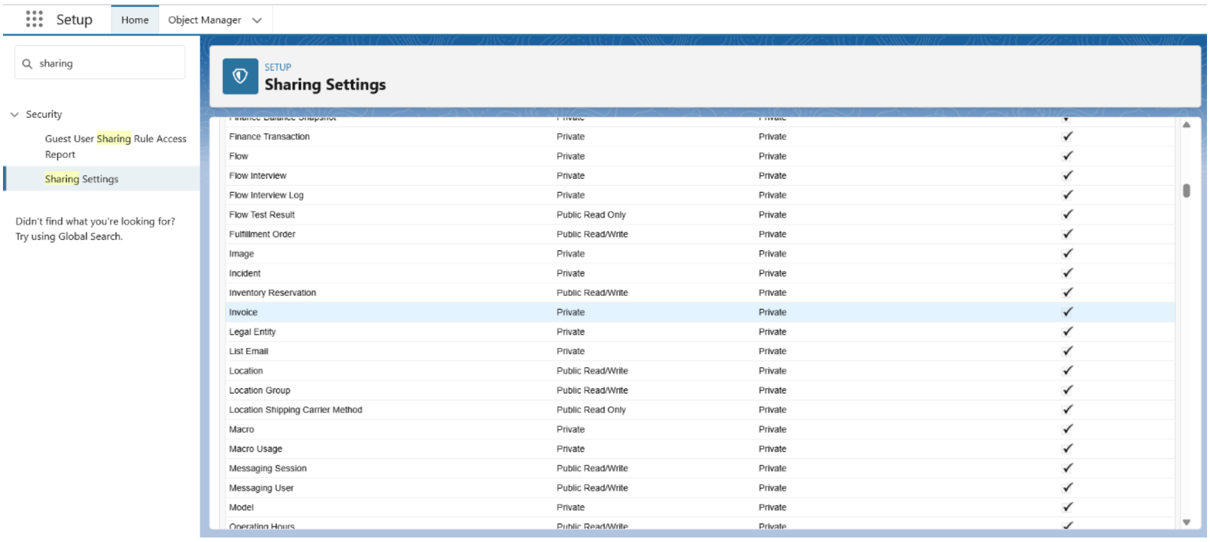
- **Setup → Object Manager → Payment/Invoice→ Fields & Relationships →Set Field Level Security**





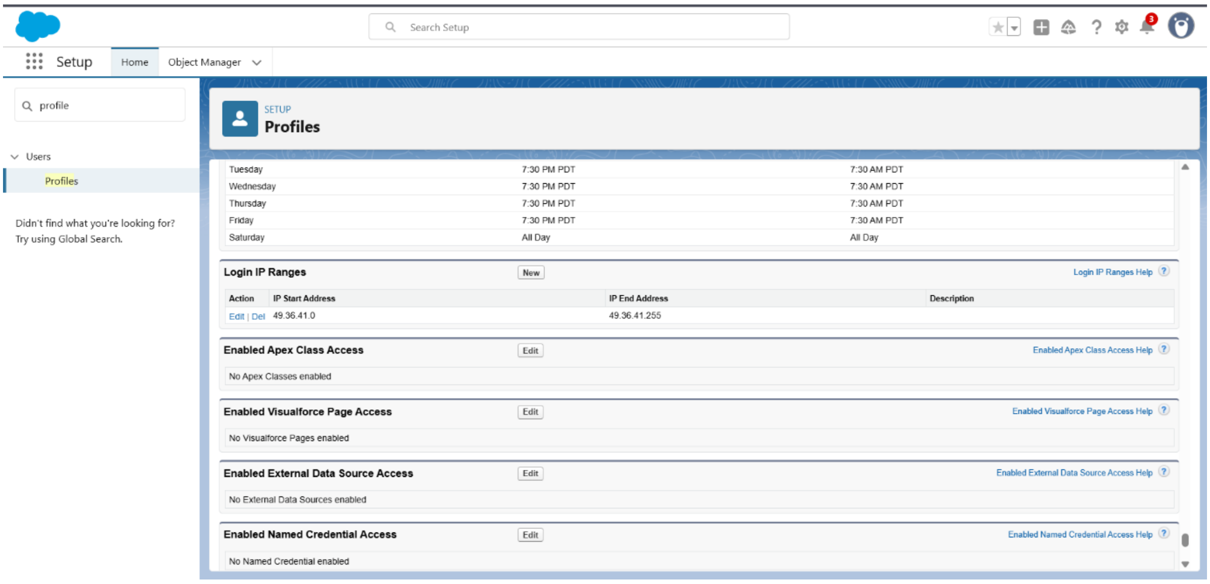
## 5. OWD/Sharing Settings

- **Setup → Sharing Settings → set Invoice__c OWD = Private**




## 6. Login IP Ranges

- **Setup→ Profiles → Officer Profile**



# 7. Audit Trail

- **Setup→ View Setup Audit Trail**