LegalAid Connect CRM – Free & Affordable Legal Assistance Management

Project Title: LegalAid Connect CRM – Free & Affordable Legal Assistance Management
Phase: (1-10) – Final Documentation
Date:30 September 2025
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Phase 1: Problem Understanding & Industry Analysis — LegalAid Connect CRM

Goal:

LegalAid Connect CRM is a Salesforce-based platform designed to streamline legal aid services, connecting clients, lawyers, and NGOs into one unified ecosystem.
The goals are to:

- Provide structured management for underprivileged clients.
- Streamline lawyer onboarding and case allocation.
- Ensure transparent tracking of legal aid impact.
- Deliver holistic insights into cases resolved, client support, and lawyer performance through Salesforce dashboards and reports.

1.Requirement Gathering

Engaged Stakeholders:

- Clients (individuals seeking legal help)
- Lawyers/Volunteers (pro bono or low-cost service providers)
- NGOs/Legal Aid Clinics
- Government Legal Aid Departments

Example Requirements:

- Client profile & case registration with issue details.
- Client profile & case registration with issue details.
- Case assignment system based on expertise and workload.
- Case progress tracking (hearings, documents, outcomes).
- Notifications for hearing dates, pending documents, and case updates.
- NGO/Government dashboards showing resolved vs. active cases.
- Reports on lawyer contribution and social impact (people benefited).
- Community portal for clients and lawyers to log in and view updates.

2.Stakeholder Analysis

- Platform Administrator: Manages data, user roles, and platform settings.
- Client: Registers cases, checks updates, receives notifications.
- Lawyer/Volunteer: Accepts cases, tracks progress, updates outcomes.
- NGO/Legal Clinic: Reviews cases, assigns lawyers, monitors progress.
- Government/Donor Agency: Reviews reports on legal aid reach and impact.

3.Business Process Mapping

Case Management Flow:

- Client submits legal issue.
- System matches lawyer based on expertise & availability.
- Lawyer accepts → hearing scheduled.
- Lawyer records updates & outcomes.
- NGO/Clinic monitors case progress.

Impact Tracking Flow:

- Case resolution status updated.
- Reports generated for NGOs/government.
- Dashboards show number of clients served, resolved cases, and lawyer performance.

Integrated View:

- Admin dashboard combines client support + case resolutions → holistic view of legal aid impact.

4.Industry-Specific Use Case Analysis

- Challenge: Legal aid is fragmented, especially for rural/low-income communities.
- Client-centric approach: Must be simple, mobile-friendly, and transparent.
- Diverse stakeholders: Clients, lawyers, NGOs, and government need role-based access.
- Transparency demand: Donors and agencies need visibility into legal aid outcomes → dashboards essential.

5.AppExchange Exploration

Existing Solutions:

- LegalServer, Clio, LawGro.

Limitations:

- Built mainly for law firms, not NGOs or government programs.
- Expensive and limited customization for social sector needs.

LegalAid Connect CRM Opportunity:

- End-to-end NGO-focused platform integrating clients, lawyers, NGOs, and donors.
- Built-in transparency with case tracking & reporting.
- Affordable, scalable, and community-focused design.

6.Gap Analysis (Existing vs Proposed)

Existing Systems:

- Disjointed, manual/semi-digital workflows.
- Case tracking scattered across documents/spreadsheets.
- Limited analytics for NGOs/government.

LegalAid Connect CRM:

- Unified client-lawyer-NGO ecosystem.
- Automated workflows & alerts.
- Real-time dashboards measuring legal aid impact.

7.Technology Landscape & Tools

- Platform: Salesforce
- Service Cloud → client support, case management.
- Experience Cloud → client/lawyer portals.
- Tableau CRM → dashboards & insights.
- Flows & Automation → case assignment, hearing alerts, SLA tracking.
- Optional: Apex for advanced lawyer-case matching.

8.Risks & Mitigation

- Low lawyer participation → Incentives, reminders, recognition programs.
- Case delays → Automated notifications, SLA monitoring.
- Data errors → Validation rules, structured forms.
- Transparency issues → Role-based dashboards for NGOs/government.

9.Success Metrics

- Client adoption % per quarter
- Case resolution time reduction
- Lawyer participation %
- Transparency coverage
- Beneficiary satisfaction score

10.Future Vision

- AI-driven case-lawyer matching based on specialization.
- Predictive analytics for case outcomes and timelines.
- Blockchain-based documentation for tamper-proof records.
- Scalable adoption across NGOs, legal aid clinics, and government agencies.

Phase 2: Org Setup & Configuration Report

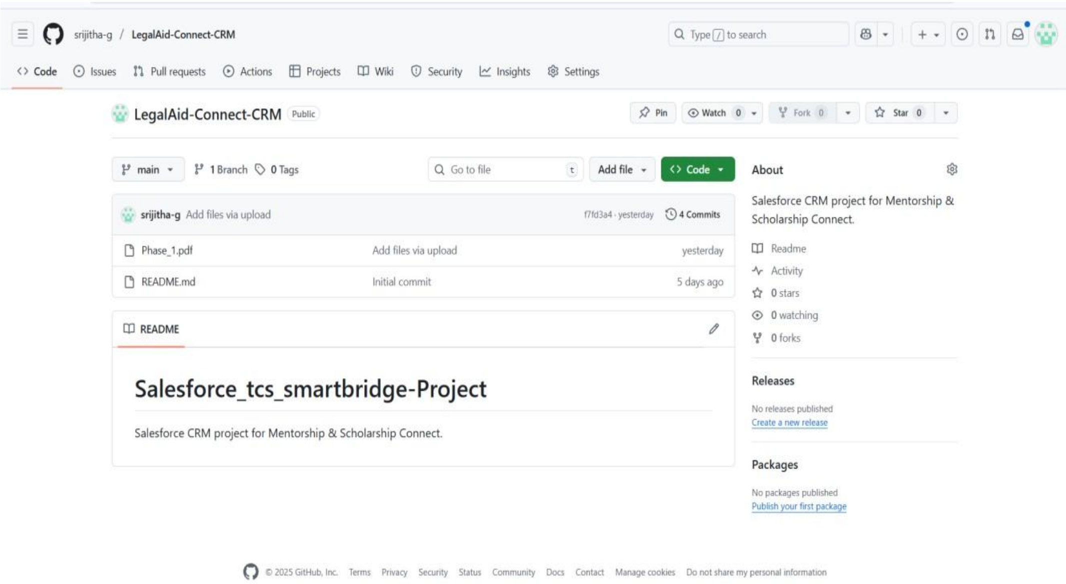
1. Introduction

Phase 2 of the LegalAid Connect project focuses on setting up the Salesforce Developer Org, configuring the company profile, defining business hours and holidays, fiscal year, users, roles, profiles, and implementing basic security and access controls.

The purpose of this phase is to establish the technical foundation for the system, ensuring that all stakeholders (clients, lawyers, NGO coordinators, and government officers) have the appropriate access, permissions, and configurations before moving into Phase 3: Data Modeling & Relationships.

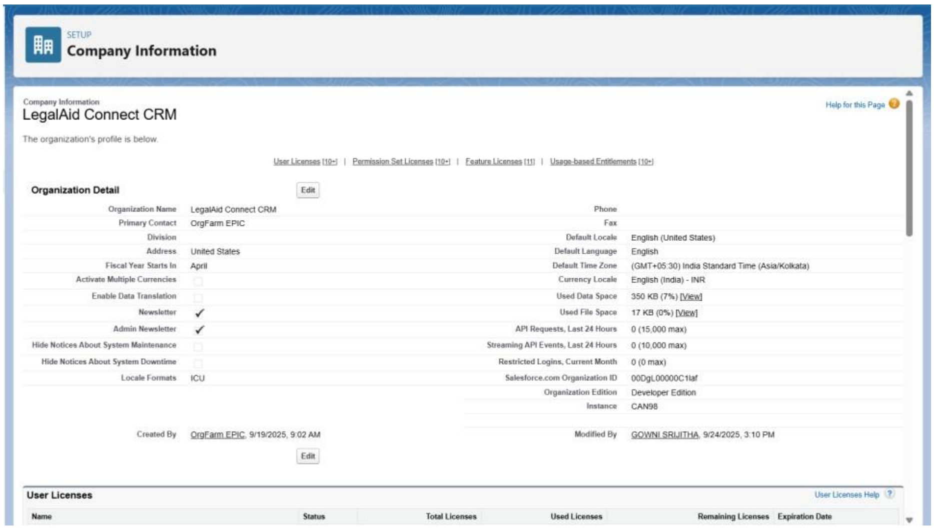
2. Developer Org & DevOps Setup

- Salesforce Developer Edition Org created (free, Enterprise features enabled)
- Tools installed/configured:
  - VS code with SalesforceExtensions
- GitHub repository created and connected for version control
- Initial DevOps workflow established using SFDX commands and GitHub integration



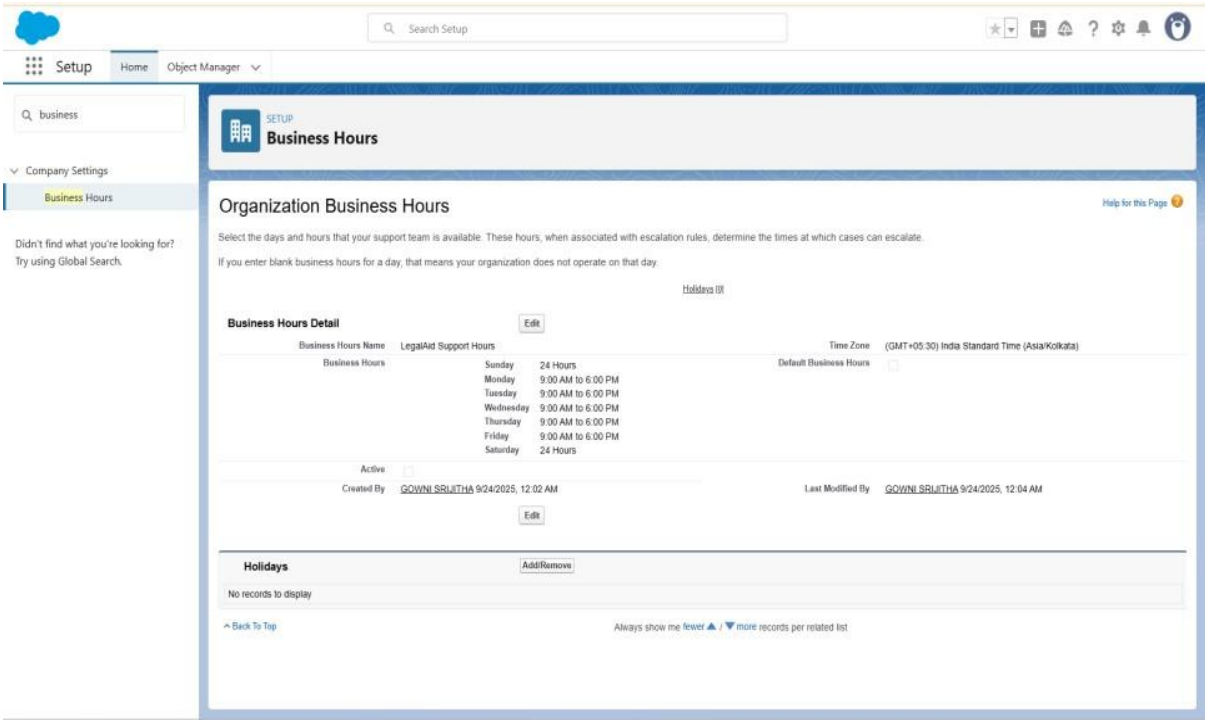
3.Company Profile & Global Settings

- Company Name: LegalAid Connect CRM
- Primary Contact: SRIJITHA G-8074789691
- Locale: English (India)
- Time Zone: IST (GMT+05:30)
- Currency: INR



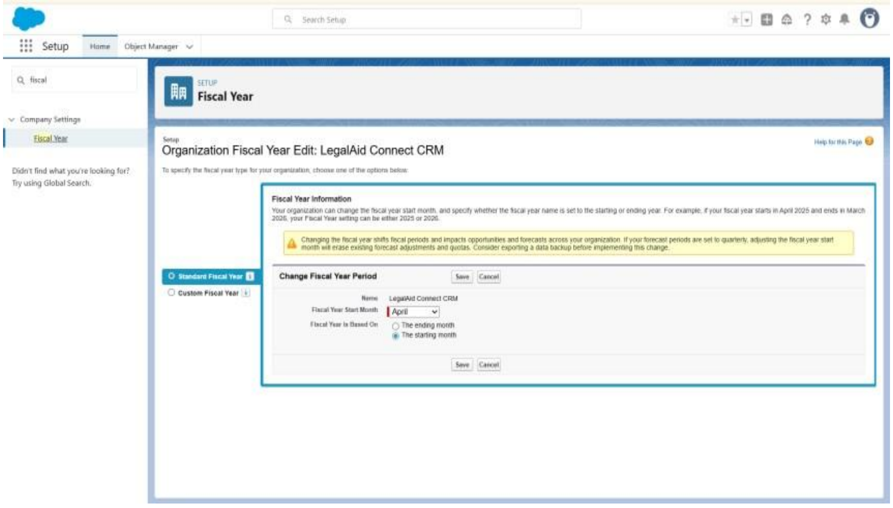
Business Hours & Holidays:

- Monday –Friday, 9:00 AM – 6:00 PM
- Holidays configured: Independence Day, Republic Day, Dussehra



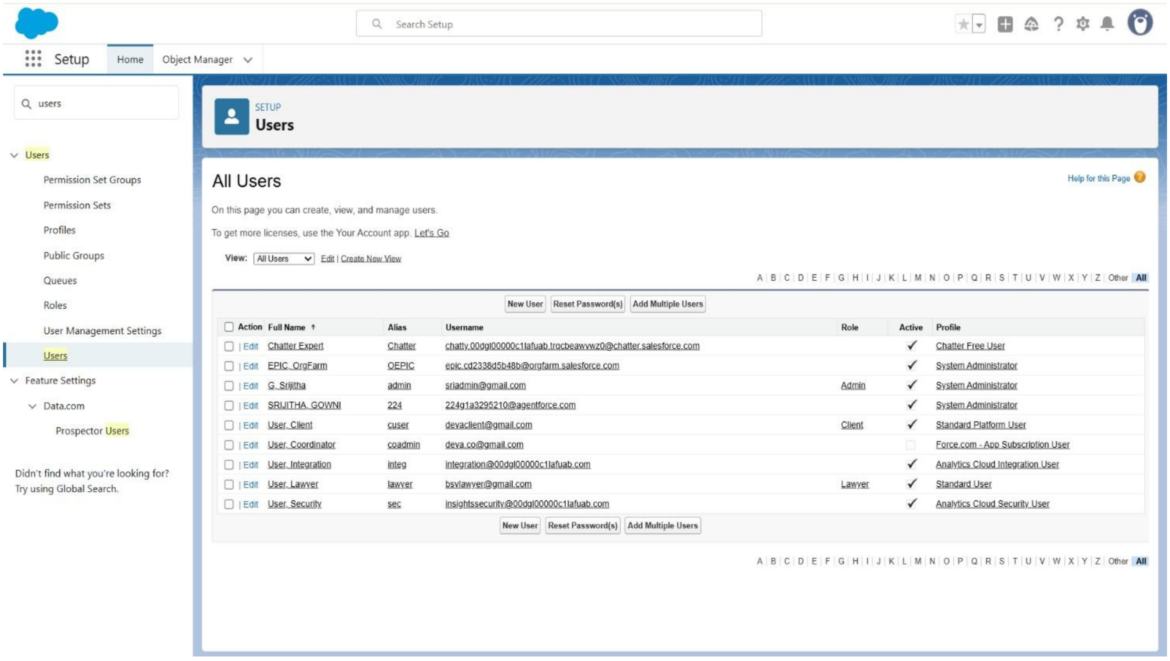
Fiscal Year:

- Standard Fiscal Year, starting April



4. User Setup & Licenses

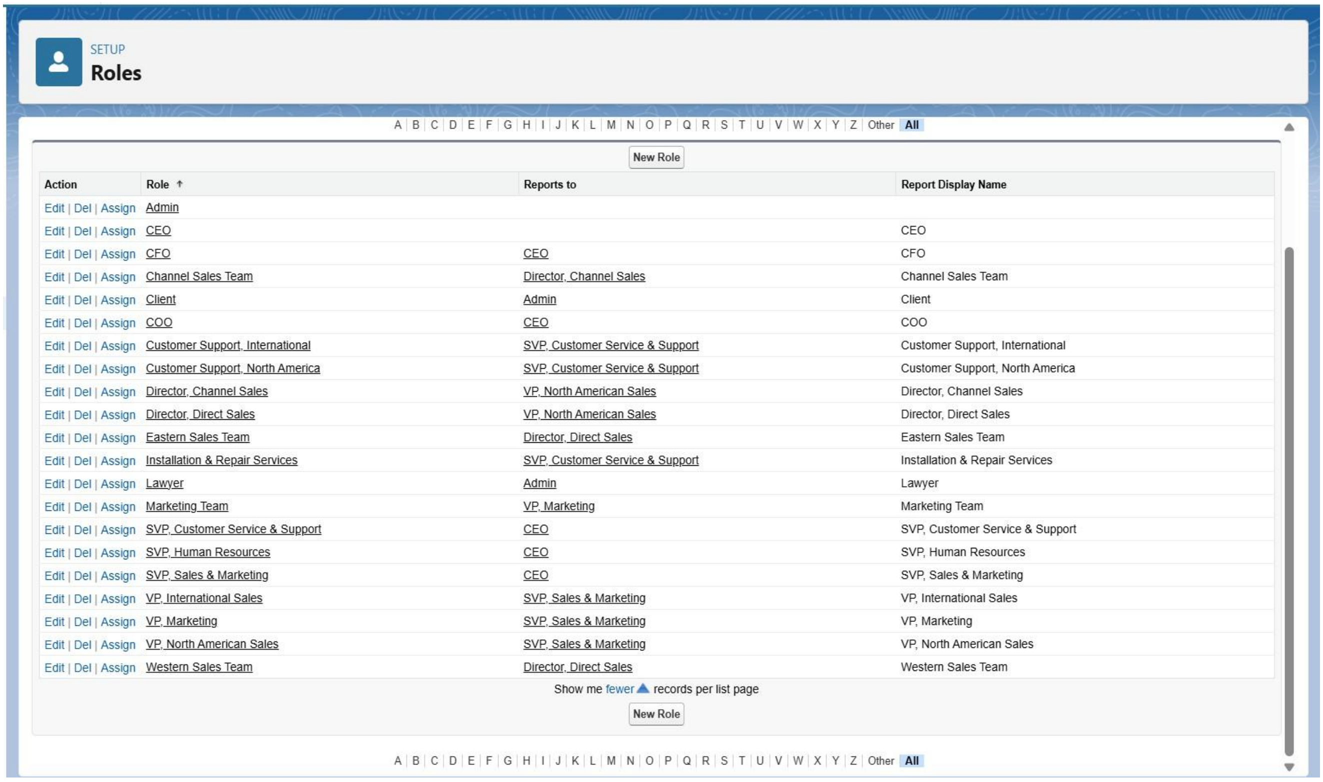
- Admin User: Full access (System Administrator)
- Lawyer/Volunteer User: Standard User (case updates, notifications)
- NGO Coordinator User: Standard User (monitor cases, assign lawyers)- Client User: Customer Community User (view case status in portal)
- Government Officer / Donor User: Read-only dashboards



5. Roles, Profiles & Permission Sets

Roles Created:

- System Administrator
- Lawyer/Volunteer
- NGO Coordinator
- Client
- Government Officer



SETUP
Roles

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

New Role

Action	Role ↑	Reports to	Report Display Name
Edit | Del | Assign	Admin		
Edit | Del | Assign	CEO		CEO
Edit | Del | Assign	CFO	CEO	CFO
Edit | Del | Assign	Channel Sales Team	Director, Channel Sales	Channel Sales Team
Edit | Del | Assign	Client	Admin	Client
Edit | Del | Assign	COO	CEO	COO
Edit | Del | Assign	Customer Support, International	SVP, Customer Service & Support	Customer Support, International
Edit | Del | Assign	Customer Support, North America	SVP, Customer Service & Support	Customer Support, North America
Edit | Del | Assign	Director, Channel Sales	VP, North American Sales	Director, Channel Sales
Edit | Del | Assign	Director, Direct Sales	VP, North American Sales	Director, Direct Sales
Edit | Del | Assign	Eastern Sales Team	Director, Direct Sales	Eastern Sales Team
Edit | Del | Assign	Installation & Repair Services	SVP, Customer Service & Support	Installation & Repair Services
Edit | Del | Assign	Lawyer	Admin	Lawyer
Edit | Del | Assign	Marketing Team	VP, Marketing	Marketing Team
Edit | Del | Assign	SVP, Customer Service & Support	CEO	SVP, Customer Service & Support
Edit | Del | Assign	SVP, Human Resources	CEO	SVP, Human Resources
Edit | Del | Assign	SVP, Sales & Marketing	CEO	SVP, Sales & Marketing
Edit | Del | Assign	VP, International Sales	SVP, Sales & Marketing	VP, International Sales
Edit | Del | Assign	VP, Marketing	SVP, Sales & Marketing	VP, Marketing
Edit | Del | Assign	VP, North American Sales	SVP, Sales & Marketing	VP, North American Sales
Edit | Del | Assign	Western Sales Team	Director, Direct Sales	Western Sales Team

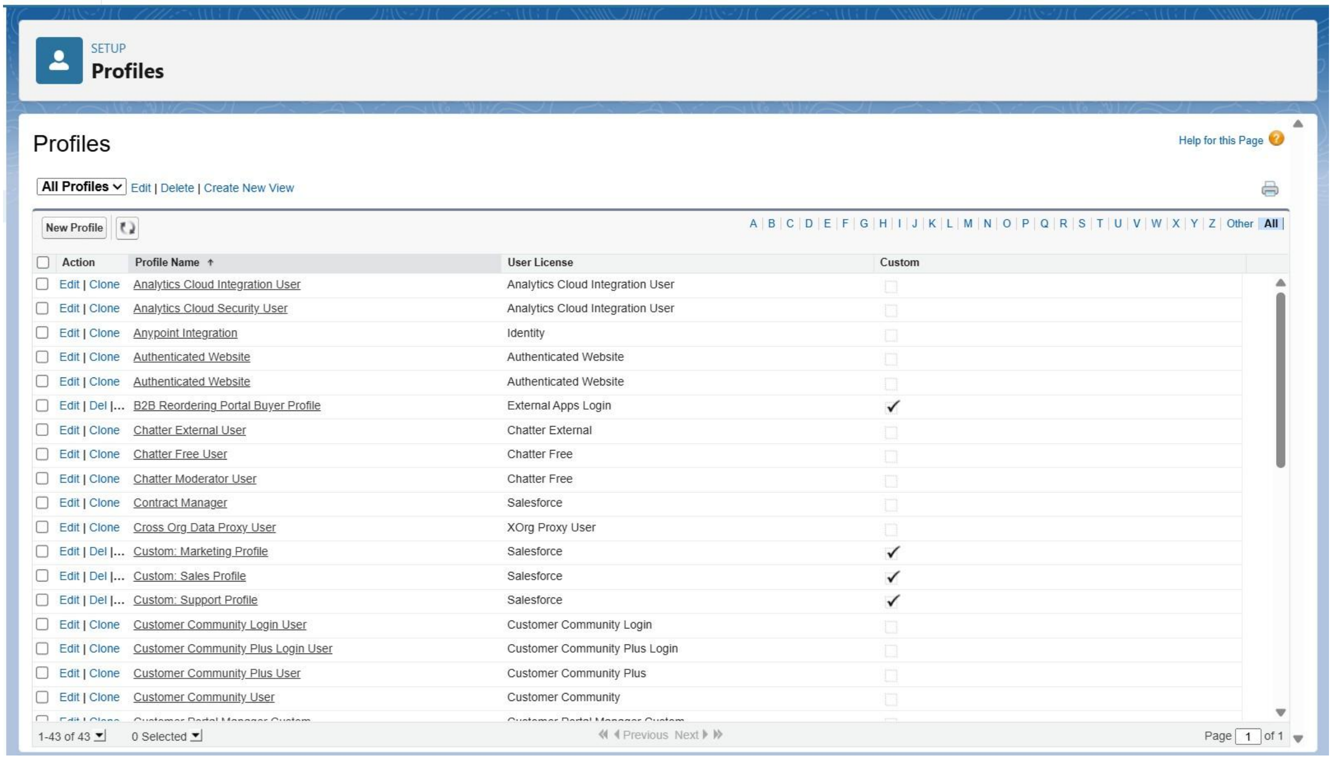
Show me fewer records per list page

New Role

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

Profiles Defined:

- Admin Profile (Full Access)
- Lawyer Profile (Case management access)
- NGO Coordinator Profile (Case monitoring)
- Client Profile (Limited portal access)
- Government Officer Profile (Read-only dashboards)



SETUP
Profiles

Profiles

Help for this Page

All Profiles | Edit | Delete | Create New View

New Profile

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

Action	Profile Name ↑	User License	Custom
Edit | Clone	Analytics Cloud Integration User	Analytics Cloud Integration User	
Edit | Clone	Analytics Cloud Security User	Analytics Cloud Integration User	
Edit | Clone	Anypoint Integration	Identity	
Edit | Clone	Authenticated Website	Authenticated Website	
Edit | Clone	Authenticated Website	Authenticated Website	
Edit | Del |...	B2B Reordering Portal Buyer Profile	External Apps Login	✓
Edit | Clone	Chatter External User	Chatter External	
Edit | Clone	Chatter Free User	Chatter Free	
Edit | Clone	Chatter Moderator User	Chatter Free	
Edit | Clone	Contract Manager	Salesforce	
Edit | Clone	Cross Org Data Proxy User	XOrg Proxy User	
Edit | Del |...	Custom: Marketing Profile	Salesforce	✓
Edit | Del |...	Custom: Sales Profile	Salesforce	✓
Edit | Del |...	Custom: Support Profile	Salesforce	✓
Edit | Clone	Customer Community Login User	Customer Community Login	
Edit | Clone	Customer Community Plus Login User	Customer Community Plus Login	
Edit | Clone	Customer Community Plus User	Customer Community Plus	
Edit | Clone	Customer Community User	Customer Community	

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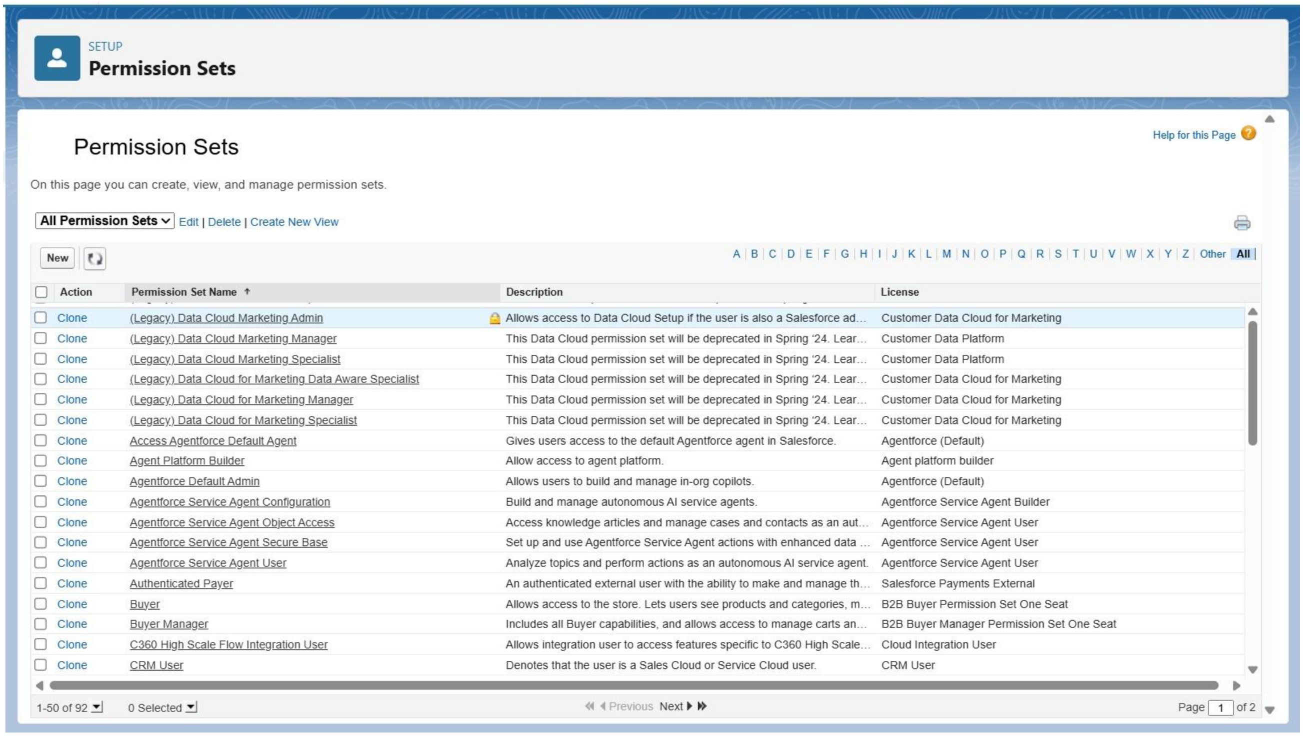
Permission Sets:

-Case Management Access

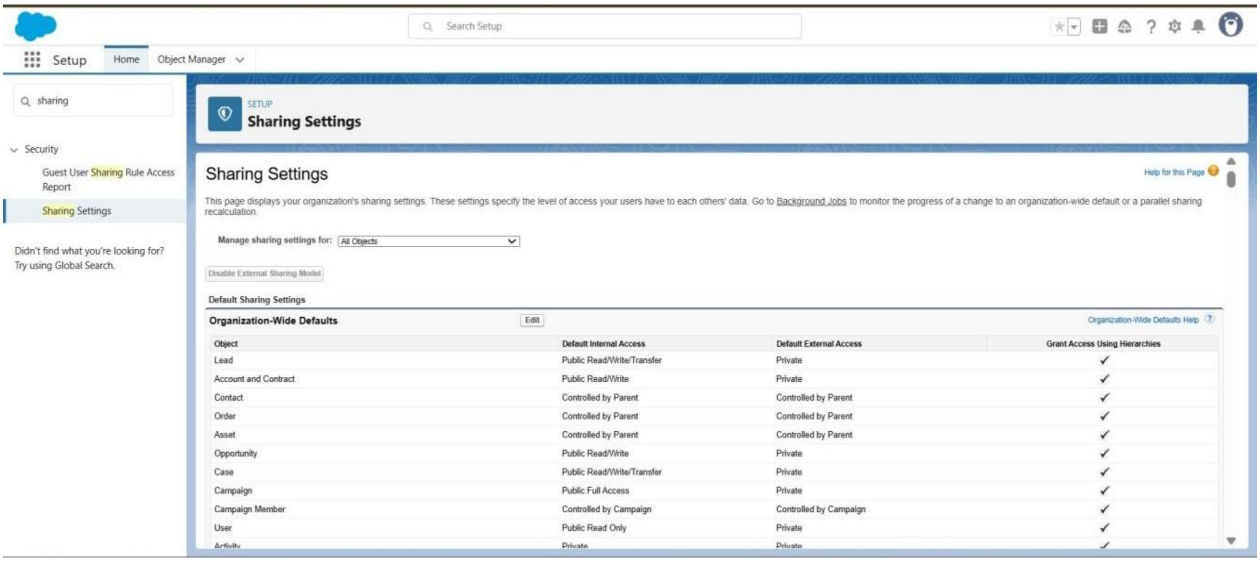
-Dashboard & Reporting Access



6. Org-Wide Defaults (OWD) & Sharing Rules

OWD Settings:

- Client records: Private
- Case records: Controlled by Parent (NGO/Coordinator)
- Lawyer records: Read Only



Sharing Rules:

- NGO Coordinators can view assigned client cases
- Lawyers can access cases assigned to them
- Government Officers can view aggregated reports

7. Security & Login Policies

- Password Policies configured according to standard security
- Login Access: No IP restrictions for development phase
- Field-Level Security: Sensitive fields (e.g., case details, personal info) restricted
- Audit Trail enabled

8. Deployment Workflow

- Development occurs in Salesforce Developer Org
- Version control with GitHub

- Metadata and configurations deployed manually (no Sandbox available)
- Future plan for real org: Use Change Sets or Packages for Sandbox → Production deployment

9. Challenges & Learnings

- Clarified the difference between Profiles vs Permission Sets
- Understood the importance of OWD & Sharing Rules as the foundation of security
- Learned how Company Profile settings impact workflows and reports

10. Next Steps

With Phase 2 completed, the project is now ready for Phase 3: Data Modeling & Relationships.

Next activities:

- Create custom objects Client, LegalAid_Case__c, Lawyer, NGO, Donor
- Define relationships between objects (lookup, master-detail)
- Setup Record Types, Page Layouts, and Schema Builder visualization.
- Configure automation: case assignment, notifications, SLA tracking

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Phase 3: Data Modelling & Relationships Report

1.Introduction

Phase 3 focused on designing the data architecture for LegalAid Connect.
The goal was to create custom objects, fields, and relationships that accurately represent the legal case management ecosystem. This ensures scalability, usability, and the ability to trace client cases, hearings, and legal orders from intake to closure.

2.Object Model Design

Core objects identified and configured:

- **Client (Contact – Standard)**
  Fields: Client ID (Auto Number), Name, Gender (Picklist), Address, Phone, Email
  Relationship: N/A
- **Case (Custom: LA_Case__c)**
  Fields: Case ID (Auto Number), Case Type (Picklist: Criminal, Civil, Family, Labour), Case Status (Picklist: Intake, Open, In Court, Closed), Summary
  Relationships: Lookup → Client (Contact), Lookup → Assigned Lawyer (User)
- **Hearing (Custom: LA_Hearing__c)**
  Fields: Hearing Date/Time, Court Location, Outcome
  Relationship: Master-Detail → Case, Lookup → Lawyer (User)
- **Order (Custom: LA_Order__c)**
  Fields: Order ID (Auto Number), Judge Name, Order Date, Final Status (Picklist: Pending, Approved, Rejected)
  Relationship: Lookup → Case

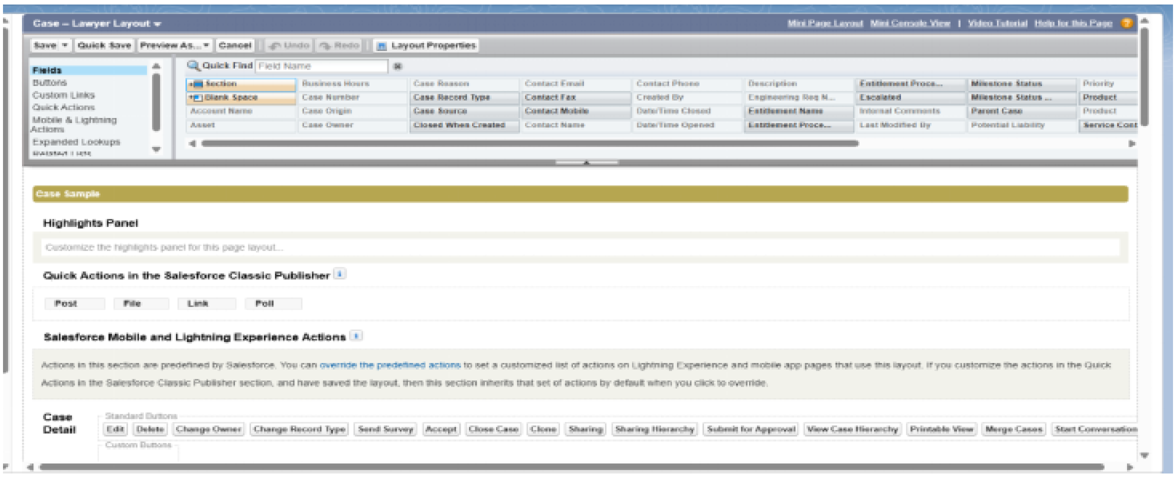
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Court Order	Court_Order__c	Custom Object		9/25/2025	✓
Case Assignment	Case_Assignment__c	Custom Object		9/25/2025	✓
Hearing	Hearing__c	Custom Object		9/25/2025	✓
Legal case	Legal_case__c	Custom Object		9/25/2025	✓
Lawyer Profile	Lawyer_Profile__c	Custom Object		9/25/2025	✓
Client Profile	Client_Profile__c	Custom Object		9/25/2025	✓
Client	Client__c	Custom Object		9/25/2025	✓
LegalAid Case	LegalAid_Case__c	Custom Object		9/25/2025	✓

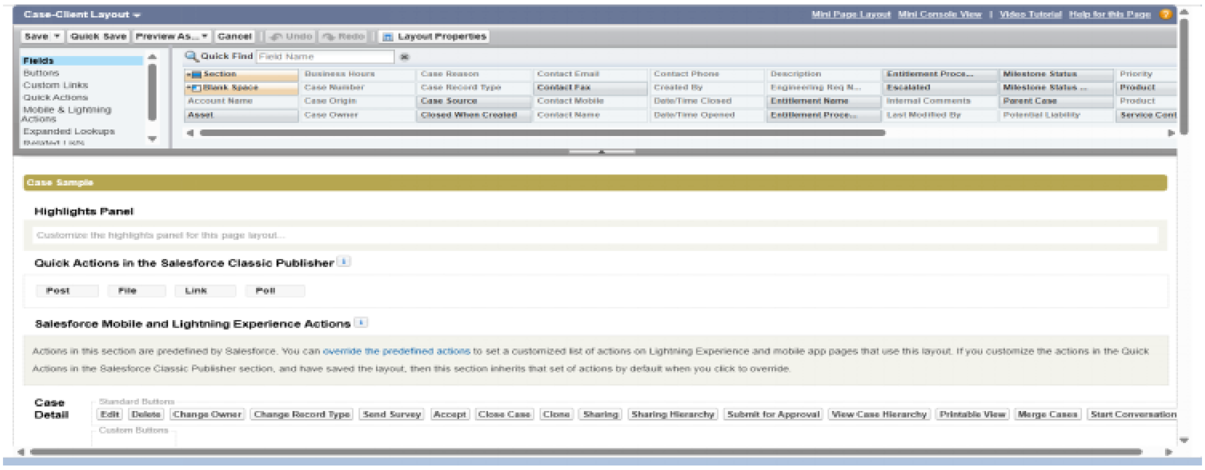
3.Relationships Defined

- Client → Case: One client can have multiple cases (Lookup)
- Case → Hearing: One case can have multiple hearings (Master-Detail)
- Case → Order: One case can have multiple orders (Lookup)
- Lawyer (User) → Case / Hearing: Assigned lawyer linked via Lookup

4.Page Layouts & Record Types

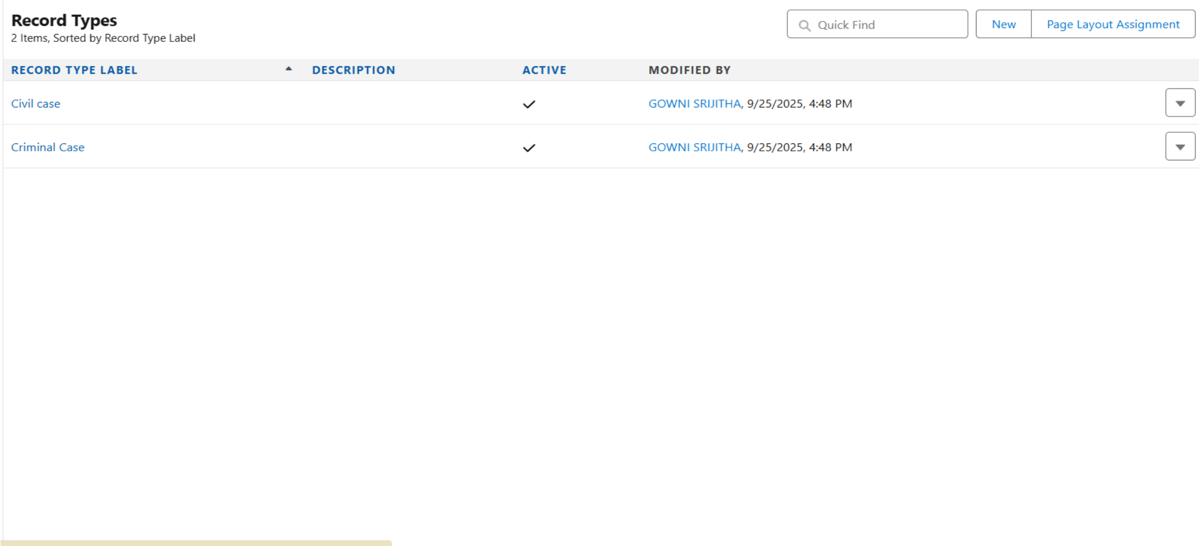
- Client Layout: Basic client information (Name, Contact, Address, Gender)
- Case Layout: Includes case details, client information, related hearings and orders
- Hearing Layout: Displays hearing date, case, assigned lawyer, court location, outcome
- Order Layout: Shows order details, case, judge name and status.





Record Types:

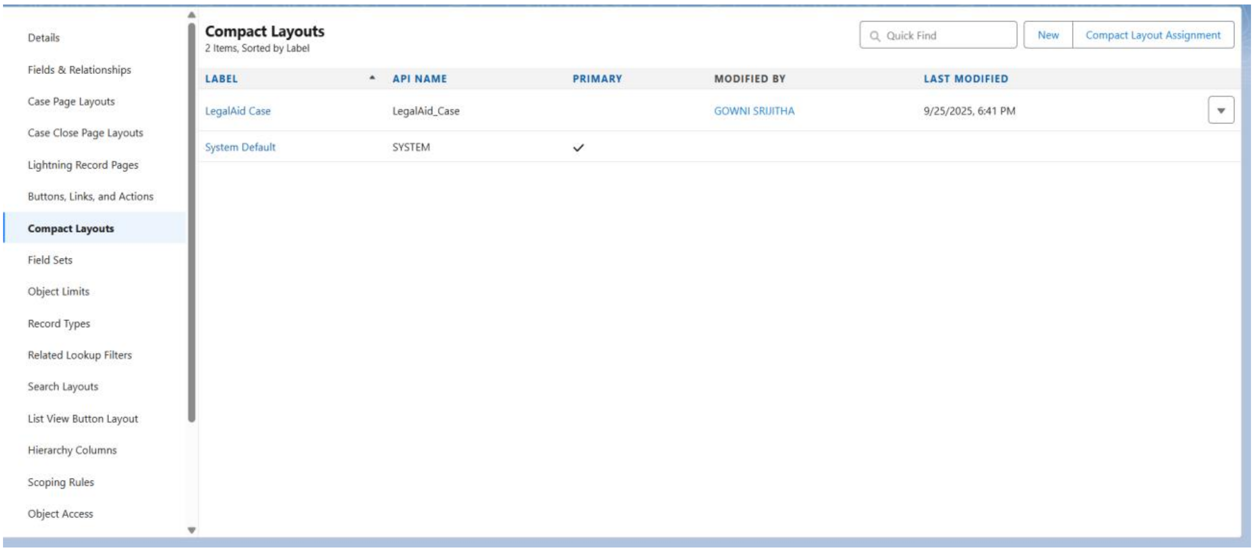
- **Case:** Criminal, Civil, Family, Labour
- **Order:** Standard vs Special Orders (optional for workflow purposes)



5. Compact Layouts

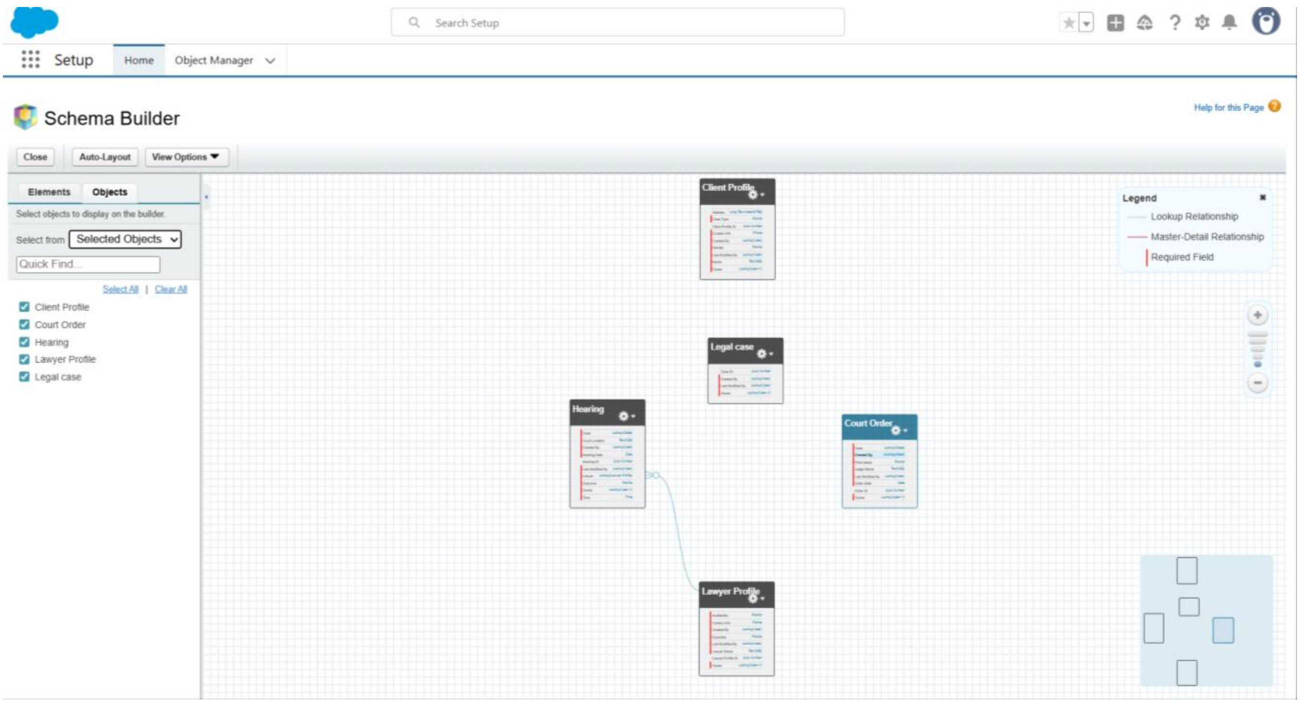
Compact layouts configured for better Salesforce Mobile experience:

- **Client:** Name, Phone, Email
- **Case:** Case ID, Case Type, Status
- **Hearing:** Hearing Date/Time, Lawyer, Case
- **Order:** Order ID, Case, Final Status



6. **Schema Builder Visualization**

All objects and relationships were mapped using Salesforce Schema Builder.
The schema diagram provides a clear, visual understanding of how the legal CRM data model is structured.



7. Challenges & Learnings

- Learned to differentiate Lookup vs Master-Detail relationships and when to apply each
- Understood how related lists improve record traceability
- Hands-on experience with Schema Builder enhanced understanding of data model design
- Designing compact layouts improved awareness of mobile-first considerations

8.Next Steps

With Phase 3 completed, the project is ready to proceed to Phase 4: Process Automation. Next activities:

- Create Validation Rules for data accuracy
- Build Process Builder and Flow automations for intake, case assignment, and reminders
- Setup Approval Processes for legal orders

Phase 4: Process Automation (Admin) Report

1. Introduction

- Phase 4 focused on automating business processes to reduce manual effort, enforce rules, and ensure data accuracy.

- Automation tools used: Validation Rules, Workflow Rules, Process Builder, Approval Processes, Flows, Escalation Rules, and Scheduled Flows

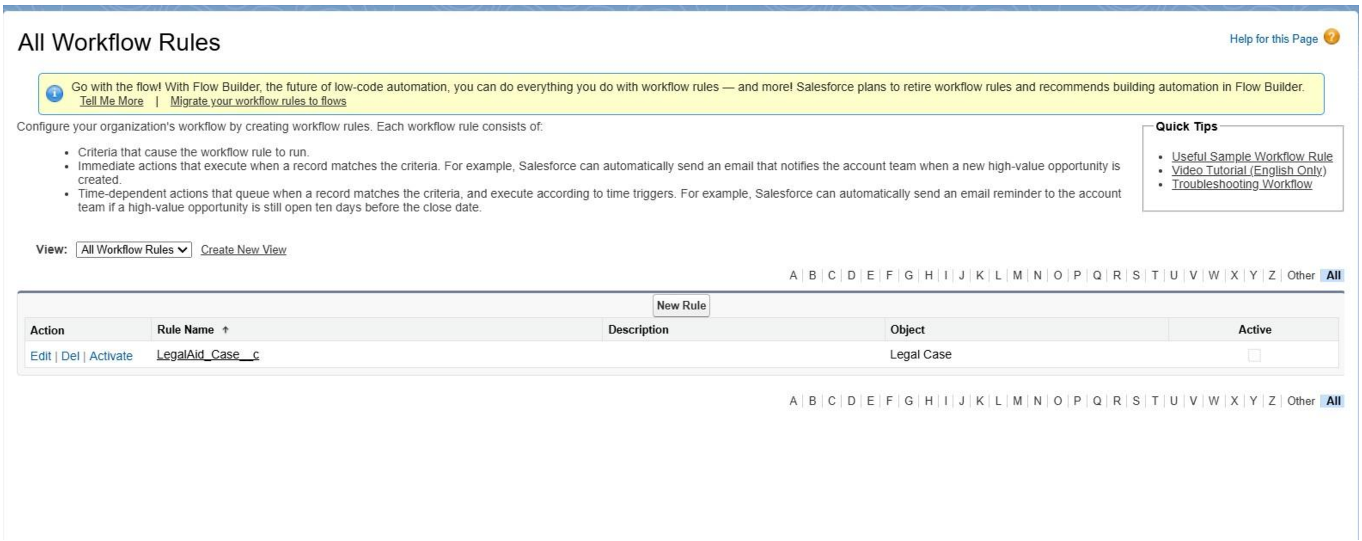
2. Validation Rules

Ensure data integrity and prevent invalid entries across the system:

- Case Dates: Prevent End_Date__c from being before Start_Date__c in Legal_Case__c.
- Mandatory Client Name: Prevent blank Client__c field in Legal_Case__c.
- Case Priority: Ensure Priority__c is set to High, Medium, or Low.
- Fee Amount: Ensure Fee__c is greater than zero in Billing__c.
- Lawyer Assignment: Prevent saving a case without an assigned lawyer.

3. Workflow Rule

- **Object:** Legal_Case__c
- **Rule Name:** Notify_Client_On_Case_Update
- **Purpose:** Automatically notify clients when their case status is updated.
- **Evaluation Criteria:** Created and every time it's edited to meet criteria
- **Rule Criteria:** All records or specific status changes (e.g., "Filed," "Hearing Scheduled")
- **Action:** Email Alert to Related_Client__c
  - Email Template Example:
  - Hello {!$Record.Related_Client__c.Name},
  - Your case {!$Record.Case_Name__c} has been updated.
  - Current Status: {!$Record.Status__c}
  - Please review any instructions or documents shared by your lawyer.



4. Process Builder

Object: Legal_Case__c

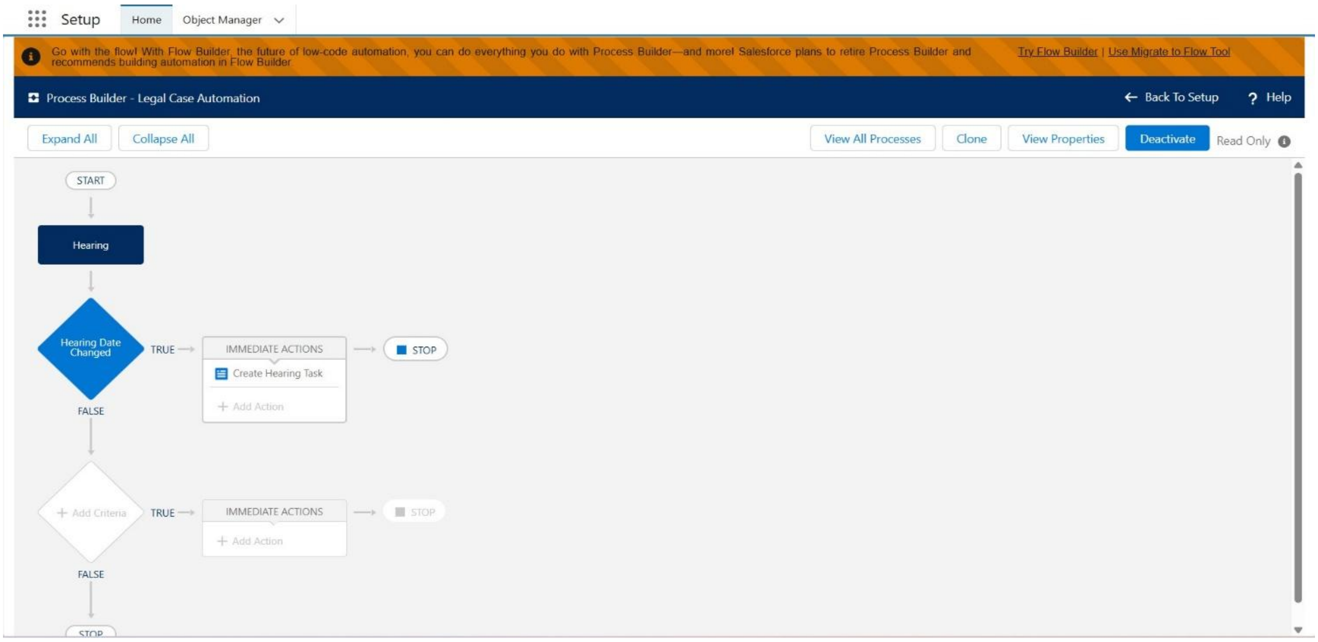
Process Name: Create_Task_On_Case_Update

Purpose: Automatically create a Task whenever a case is updated with important information.

Criteria: Status__c is changed AND is not null

Immediate Action: Create Task

- Subject: "Follow-up on Case Update"
- Assigned To: Case Owner or Assigned Lawyer
- Due Date: Today or based on Status
- Related To: Legal_Case__c record



5. Approval Process

Object: Billing__c

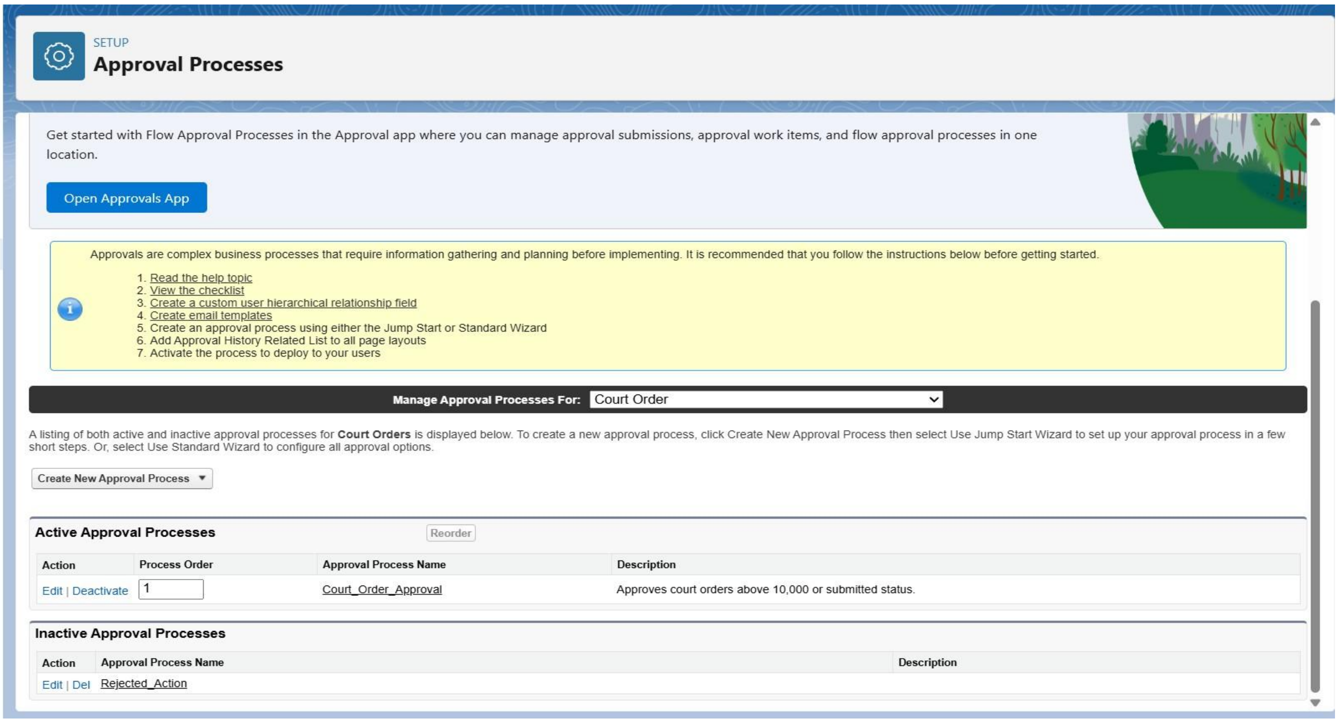
Approval Process Name: Client_Bill_Approval

Purpose: Ensure all client bills are approved by a Senior Lawyer before sending.

Entry Criteria: Status__c = "Submitted"

Steps:

- Submission → Approver: Assigned Lawyer or Senior Lawyer
- Approved → Update record / notify client
- Rejected → Update record / notify client



6. Flow 1 — Procurement → Traceability Ledger

Object: Legal_Case__c

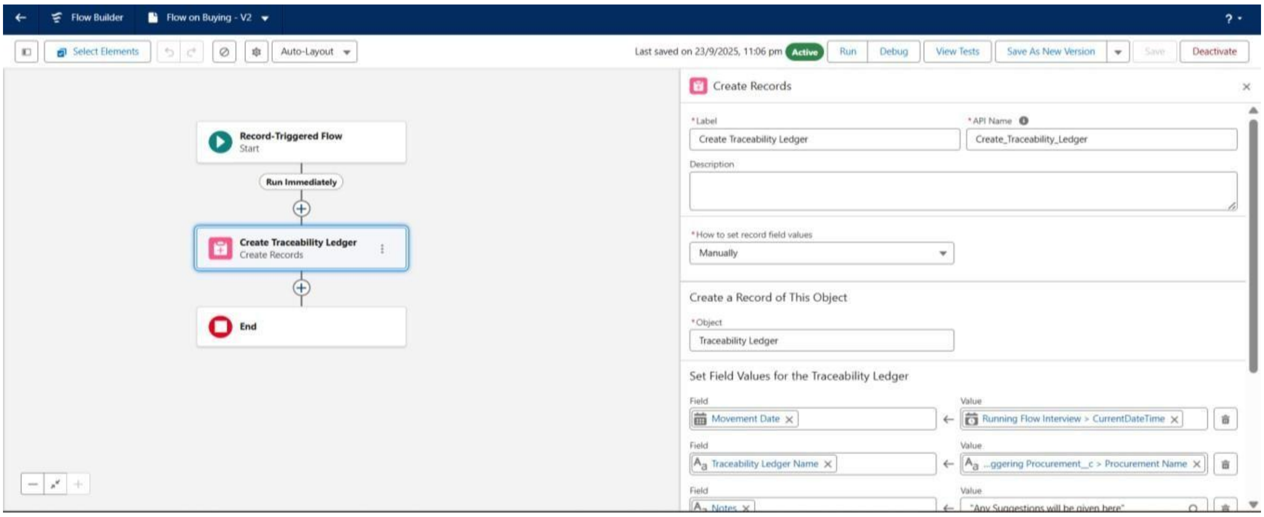
Trigger: Record-created

Action: Automatically create a Case_Ledger__c record

Field Mapping:

- Related Case → {!$Record.Id}
- Stage → "Created"
- Record Date → {!$Flow.CurrentDateTime}

Purpose: Logs case entries automatically for auditing and traceability.

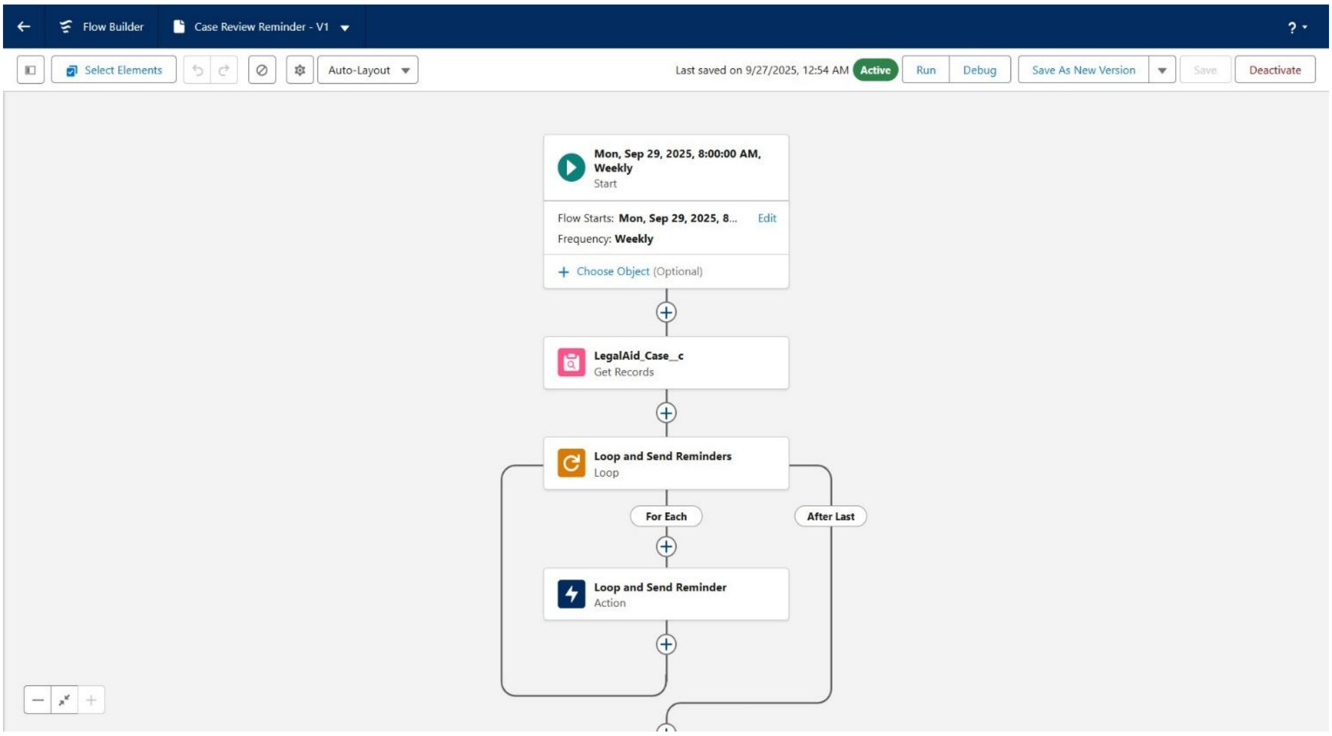


7. Flow 2 — Crop_Cycle → Advisory

Object: Legal_Case__cTrigger: Record-created
Decision: Case Type = "Civil"
Action: Create Advisory__c record
Field Mapping:

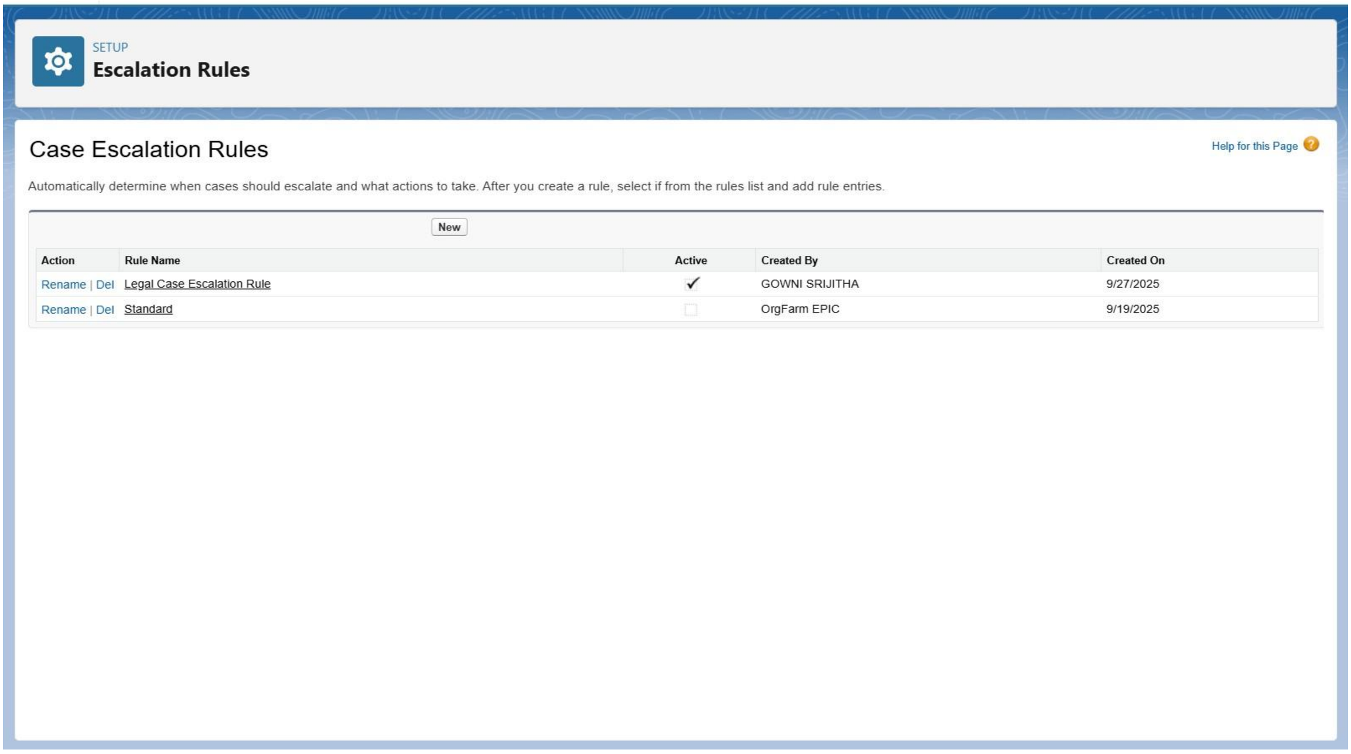
- **Advisory Name** → "Advisory for Case " & {!$Record.Case_Name__c}
- **Advisory Date** → {!$Flow.CurrentDate}
- **Advisory Text** → "Please follow instructions regarding your case type."
- **Related Client** → {!$Record.Related_Client__c}
- **Owner** → Assigned Lawyer

Purpose: Automates advisory suggestions for clients upon case registration.



8.Escalation Rules

- **Escalation Rule 1 – Advisory Not Acknowledged:**
  - Object: Case (linked to Advisory)
  - Condition: Advisory not acknowledged within 48 hours
  - Escalation: Assign to Senior Lawyer or Case Manager
- **Escalation Rule 2 – Billing Approval Pending:**
  - Object: Billing__c
  - Condition: Status = Submitted for more than 72 hours
  - Escalation: Escalate to Senior Lawyer.



9.Scheduled Flows

- **Scheduled Flow 1 – Advisory Reminder:** If an advisory is not marked "Completed" within 3 days, send a reminder email to the client.
- **Scheduled Flow 2 – Court Hearing Alert:** Send notifications 7 days before the scheduled court hearing.
- **Scheduled Flow 3 – Billing Reminder:** Send a reminder to clients 5 days before bill due date.

10. Phase 4 Outcome

- Data integrity is enforced with **Validation Rules**
- Farmers are automatically notified via **Workflow Rule**
- Tasks for harvest follow-ups are auto-created via **Process Builder**
- Procurement requests are approved systematically via **Approval Process**
- Traceability Ledger and advisories are auto-generated via **Flows**

Phase 5: Apex Programming (Developer) Report

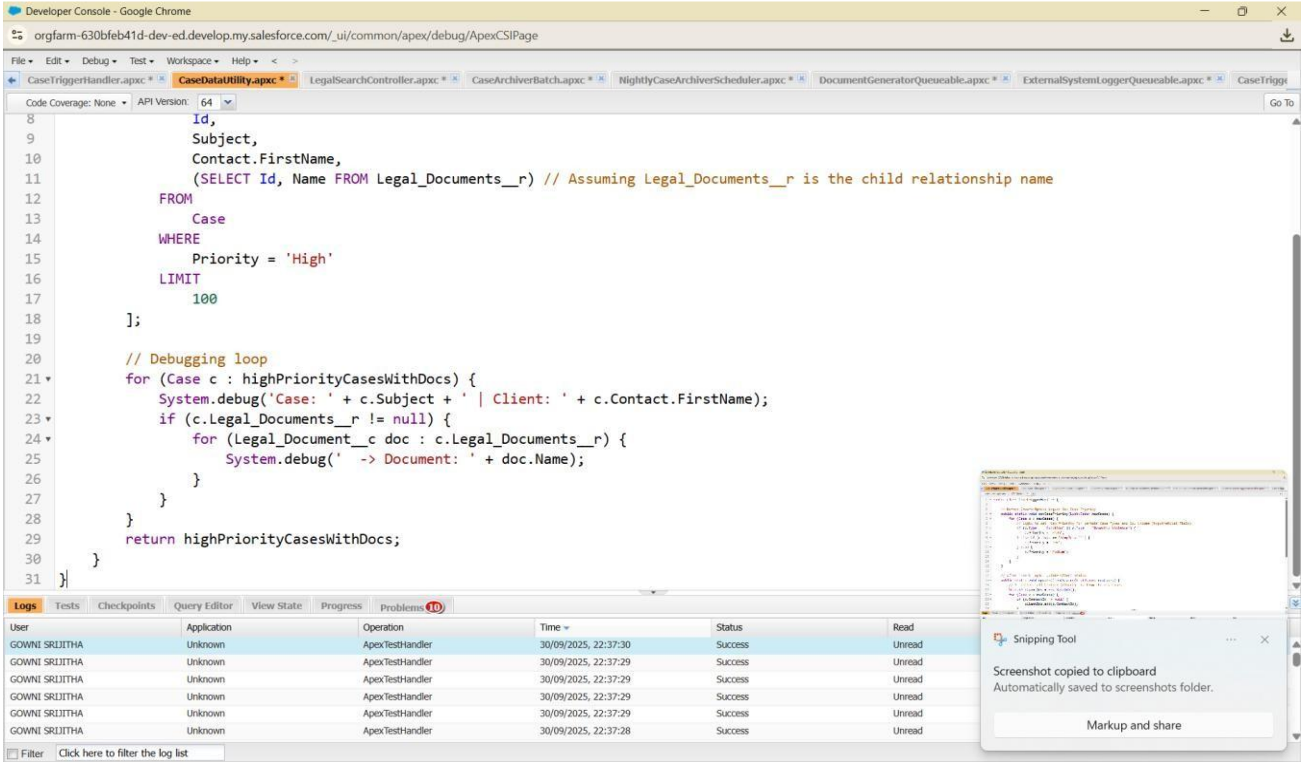
1. Introduction

Phase 5 focused on implementing developer-level functionality in LegalAid Connect using **Apex Classes, Triggers, and Asynchronous Processing**.
The goal was to extend automation beyond declarative tools, ensuring **scalability, reusability, and advanced business logic handling**.
Apex development followed Salesforce best practices including **Trigger-Handler Pattern, Separation of Concerns, and Unit Test Coverage >75%**.

2. Apex Classes

Purpose: Encapsulate business logic for modularity, maintainability, and reuse.

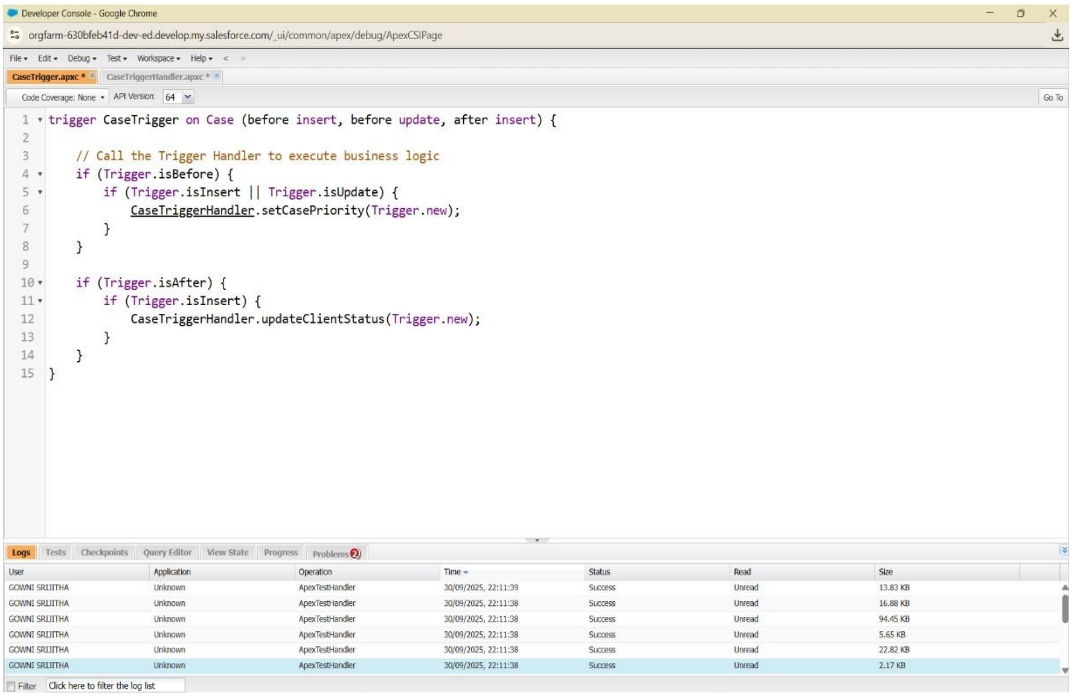
- **CaseManagementHandler:** Performs validations and calculations related to legal cases.
- **ClientTriggerHandler:** Handles all trigger logic for the Client__c object.
- **LegalCaseTriggerHandler:** Handles all trigger logic for the Legal_Case__c object.
- **NotificationService:** Asynchronous class to send notifications or fetch external data related to cases.
- **BillingProcessor:** Queueable Apex class to process billing records in the background.
- **SearchUtility:** Provides reusable search helper methods for clients, cases, and lawyers.

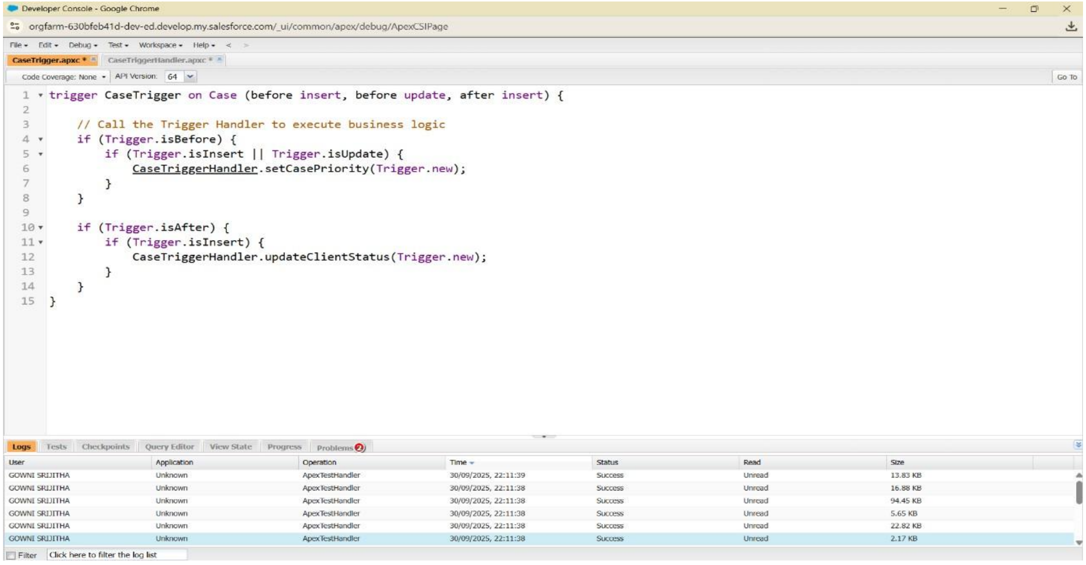


3. Apex Triggers

Purpose: Automate complex record-level operations beyond declarative tools.

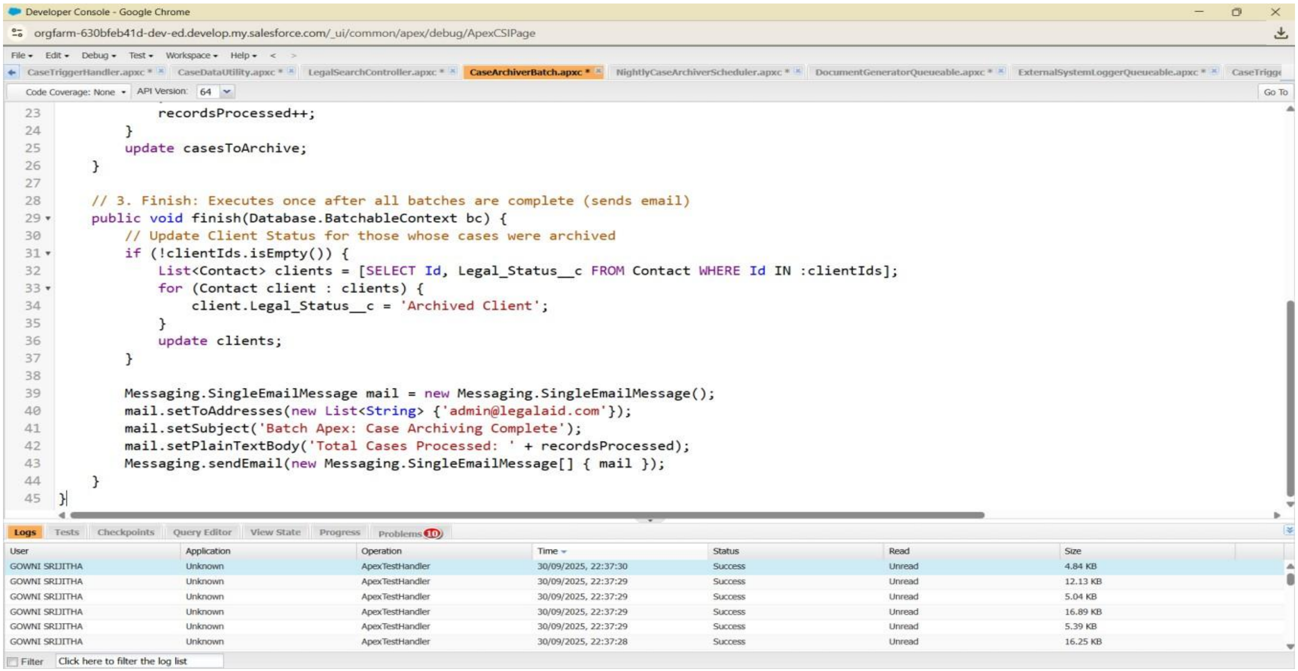
- **LegalCaseTrigger**
  - **Object:** Legal_Case__c
  - **Events:** Before Insert/Update
  - **Purpose:** Validate case details before saving and ensure required fields are populated.
- **ClientTrigger**
  - **Object:** Client__c
  - **Events:** After Insert
  - **Purpose:** Automatically create related records such as case assignments or client logs





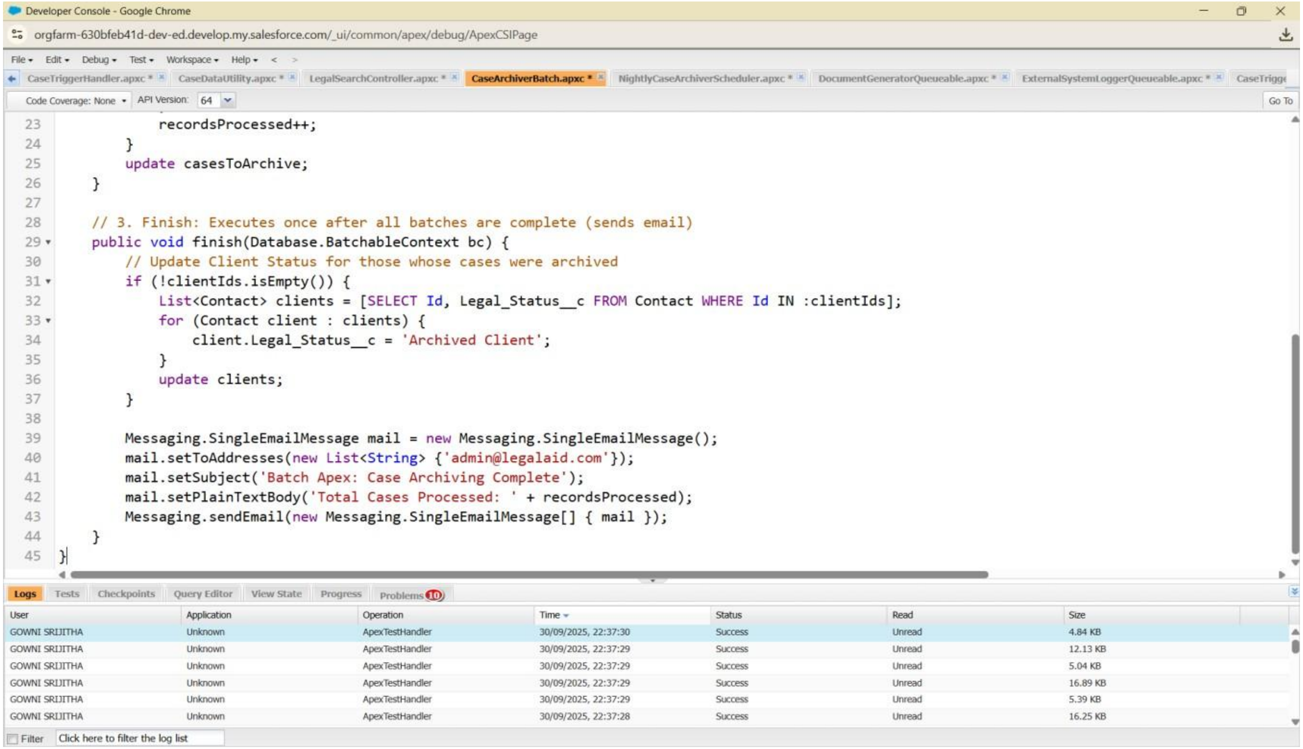
4. Asynchronous Apex

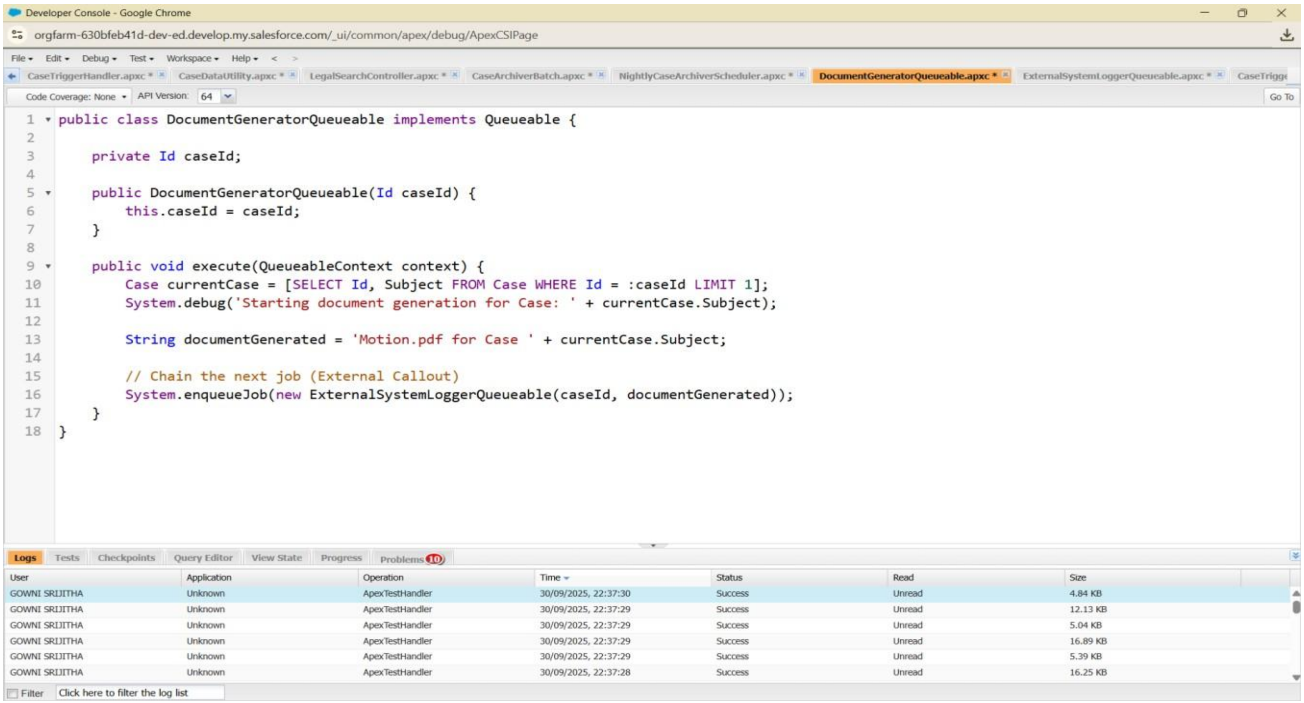
- **Future Methods:** Implemented in NotificationService to send asynchronous notifications or fetch external legal data.
- **Queueable Apex:** Implemented in BillingProcessor to handle bulk billing operations efficiently in the background.
- **Scheduled Apex:** Implemented via HearingAlertScheduler to send scheduled alerts to clients or lawyers regarding upcoming court dates.



5. SOQL, SOSL & Collections

- **SOQL Queries:** Fetch related clients, legal cases, and billing records efficiently using indexed fields.
- **Collections:** Lists, Sets, and Maps used for bulk-safe operations such as storing case IDs, mapping client IDs to assigned lawyers, and holding unique case types.
- **SOSL Queries:** Defined for searching across Client__c and Legal_Case__c records for future search functionality.





6. Test Classes

Purpose: Validate functionality and achieve Salesforce deployment requirement of 75%+ coverage.

- **LegalCaseTriggerTest:** Ensures validations and triggers on Legal_Case__c work correctly.
- **ClientTriggerTest:** Validates creation of related records and trigger logic for Client__c.
- **CaseManagementHandlerTest:** Validates calculations and error handling in case management.
- **NotificationServiceTest:** Validates asynchronous notifications and external data handling.
- **BillingProcessorTest:** Ensures Queueable Apex processes billing records correctly.
- **HearingAlertSchedulerTest:** Verifies scheduling logic and alerts are sent to correct clients/lawyers.
- **SearchUtilityTest:** Confirms search methods return accurate results.

7. Phase 5 Outcome

- Apex Classes modularized to encapsulate business logic for cases, clients, and billing.
- **Trigger-Handler pattern** adopted for clean, scalable code.
- Asynchronous Apex implemented for notifications, billing, and scheduled alerts.
- Test classes developed with coverage above 75%, ensuring deployment readiness.
- Developer foundation of LegalAid Connect is complete and integrated with prior automation (Phase 4).

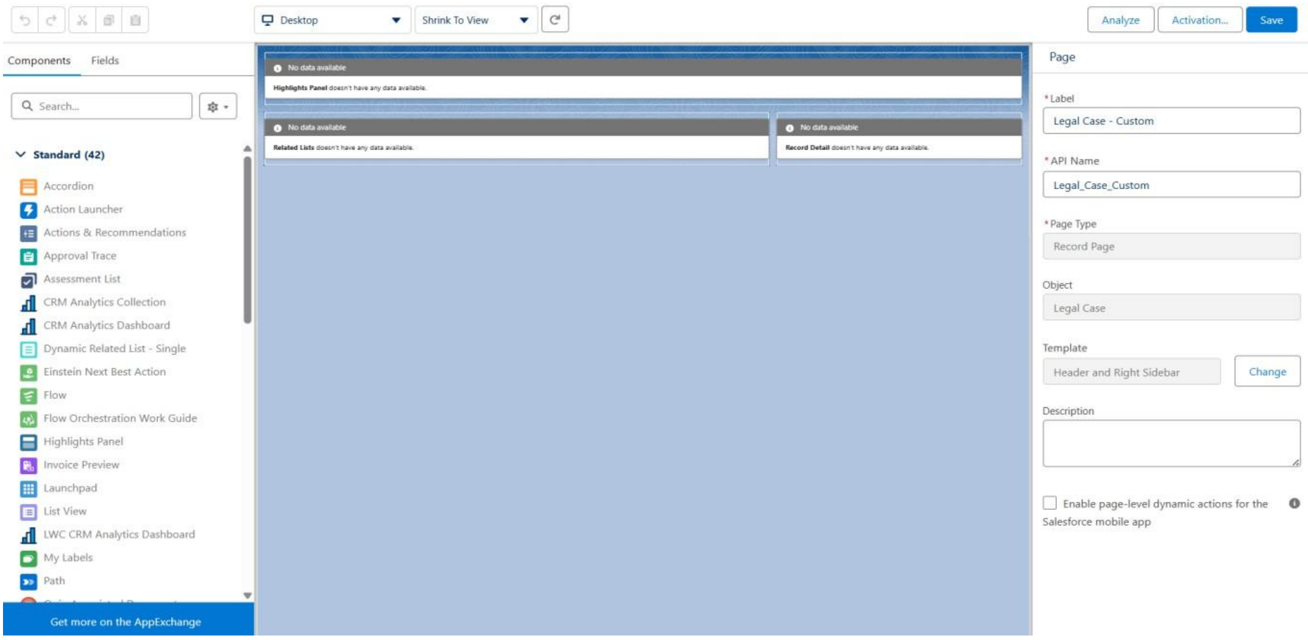
Phase 6: Lightning Web Components (LWC) (Developer UI) Report

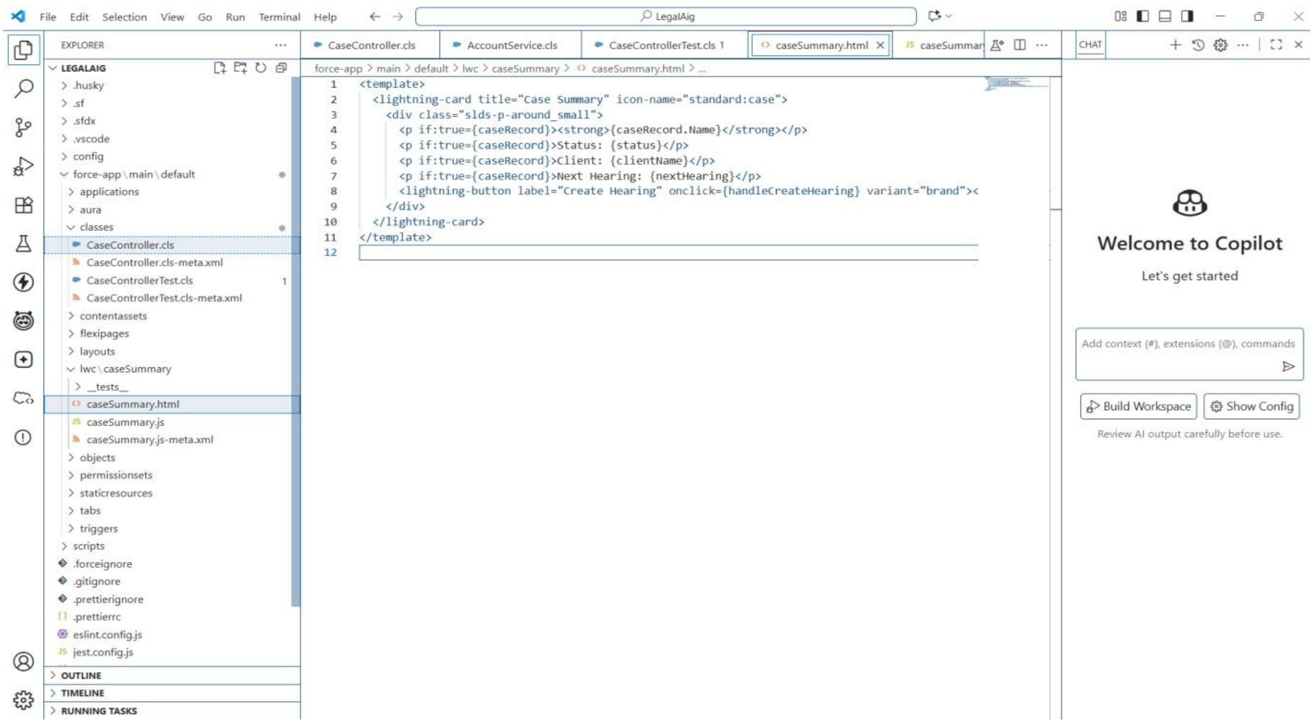
1. Introduction

Lightning App Builder allows administrators to create custom apps and pages for users using a drag-and-drop interface. For LegalAid Connect CRM, we created a **Legal Case Management App** that consolidates Cases, Clients, Court Orders, and Services Provided in a single view. This improves navigation and allows legal staff to quickly access client and case information.

2. Lightning Web Components (LWC) Created

Purpose: Record Pages customize the layout of individual object records. In LegalAid Connect, we created custom record pages for Legal Cases and Clients to show relevant fields, related lists, and key actions. This ensures that lawyers and paralegals can quickly see all necessary case information without unnecessary clutter.





3. LWC Communication & Events

Purpose: To enable seamless interaction between components and with the Salesforce backend, improving the user experience and making the interface more dynamic and context-aware.

Activation:

- Activated as **App Default** for LegalAid Connect CRM.

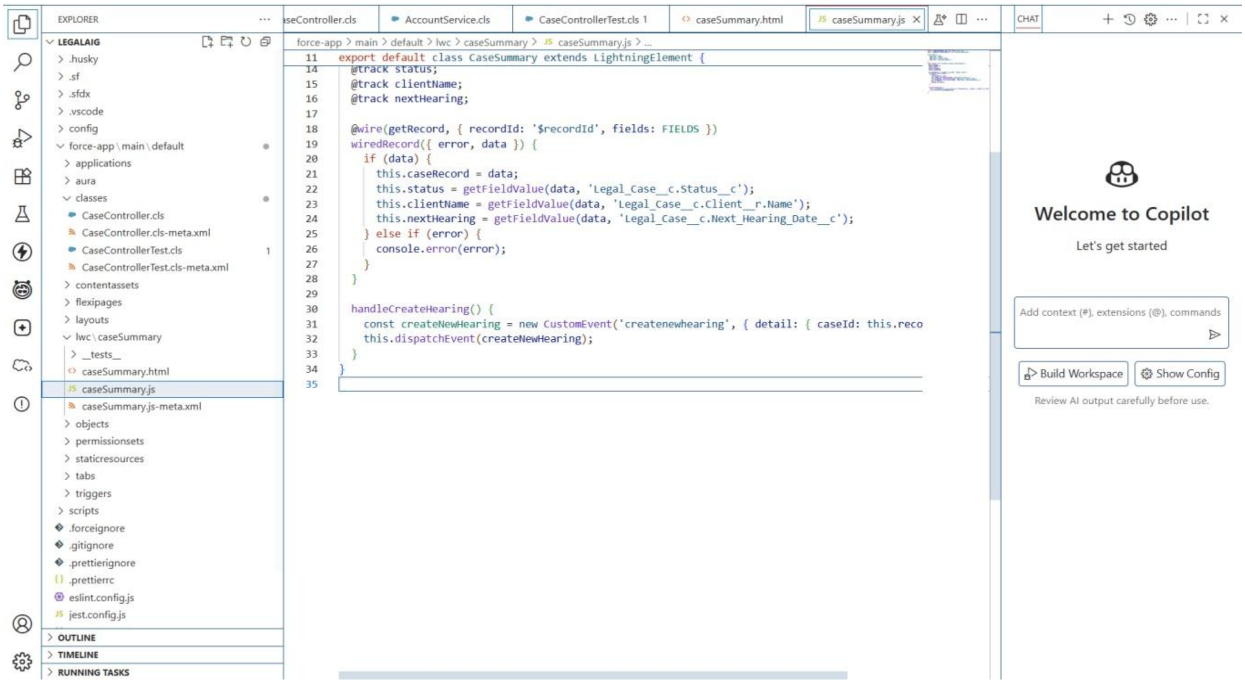
Placement Location:

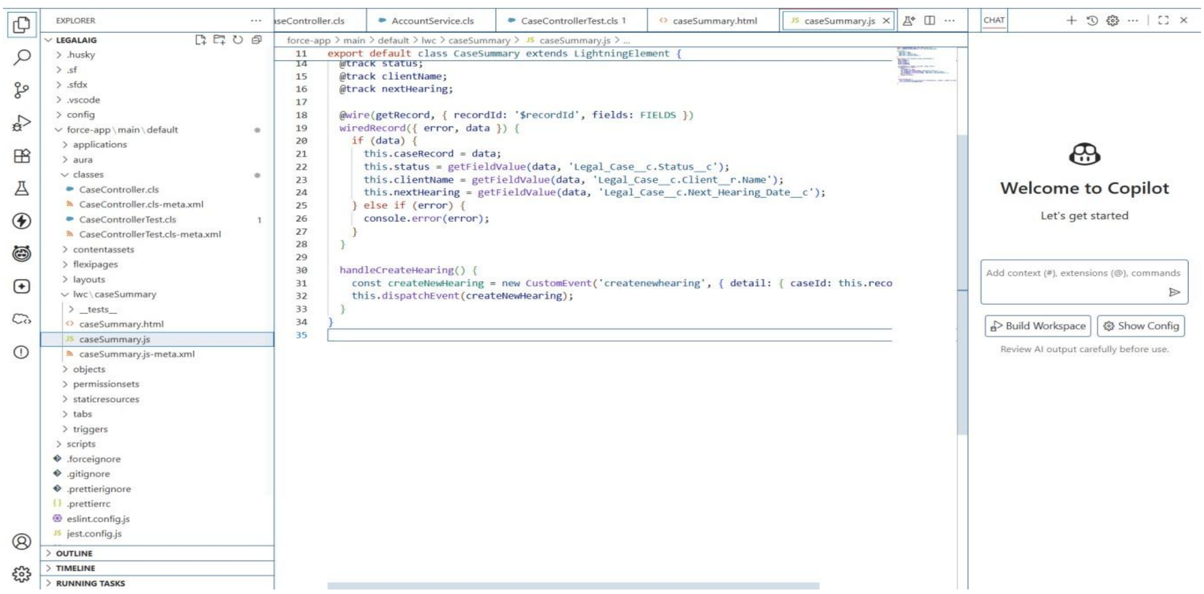
Component Name	Placement Location
caseTracker	Legal Case Record Page, Main Column
clientDetailPanel	Client Record Page, Right Sidebar

- **Apex Integration**: Components like procurementTracker and weatherAlertPanel use the @wire decorator to call cacheable=true Apex methods, ensuring efficient, read-only data fetching from the backend built in Phase 5.
- **Navigation Service**: Components used the NavigationMixin to programmatically navigate users to related record pages, such as clicking a Crop Cycle in the relatedCropCycles component to view its full record.
- **Custom Events**: A parent-child component relationship was established where selecting a record in one component could emit a CustomEvent with the record's ID, allowing a sibling component on the same page to listen for the event and display relevant data.

4. Component Placement & Activation Purpose:

To integrate the newly built components into the AgriTrust Connect application for end-user access.





5. Test Classes (Jest)

Purpose:
To ensure the JavaScript logic within each LWC functions as expected and to validate UI rendering based on mock data, complementing the Apex tests from Phase 5.

Test Suite Name	Coverage Focus
caseTracker.test.js	Validates that the component correctly displays case status and updates when a different client is selected.
clientDetailPanel.test.js	Ensures client information renders correctly based on selected client record and Apex data.
relatedCases.test.js	Confirms correct display of case list rows and events on row selection.
alertPanel.test.js	Verifies alert messages display correctly when Apex returns data and placeholder appears if null.

6. Phase 6 Outcome

- Successfully developed and deployed five custom Lightning Web Components, enhancing the user experience for lawyers, paralegals, and administrators.
- The LegalAid Connect UI is now dynamic and context-aware, reducing clicks and surfacing important information such as pending court orders, case updates, and client alerts efficiently.
- Established a robust front-end architecture leveraging Apex services developed in Phase 5 for backend processing.
- All components are mobile-responsive, ensuring a consistent experience across desktop and mobile devices.
- The user-facing portion of LegalAid Connect CRM is now complete, providing a powerful and intuitive interface for all users.

Phase 7: Integration & External Access (Developer) Report

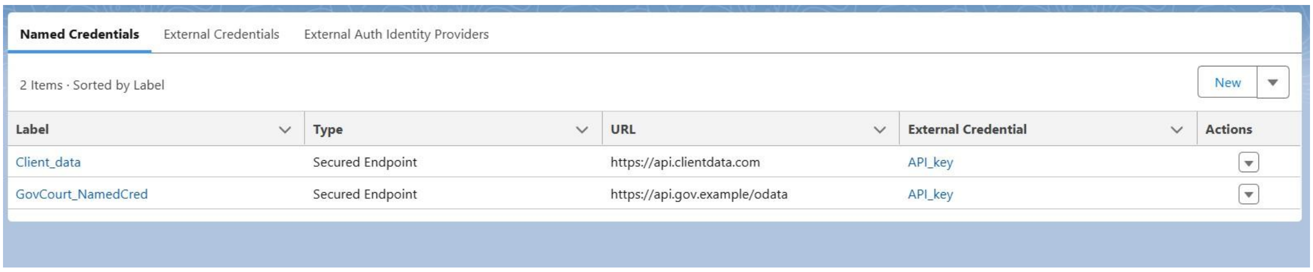
1. Introduction

Phase 7 focused on enabling LegalAid Connect to interact securely with external systems, transforming it from a standalone CRM into an integrated platform. This phase prioritized secure, scalable, and real-time integration for both outbound (Salesforce → external systems) and inbound (external systems → Salesforce) data exchange. The goal was to improve case management, client communication, and collaboration with government/legal databases.

2. Outbound Integrations (Salesforce → External)

The purpose of outbound integrations was to push updates, notifications, and related legal information from Salesforce to external applications.

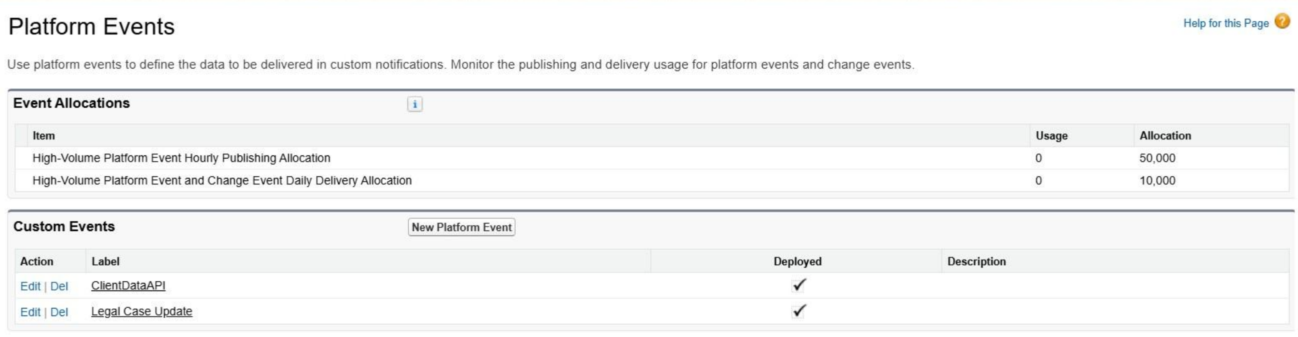
- A **Named Credential** called CourtAPI was created to securely store endpoint URLs and authentication credentials for external court and notification systems, avoiding hardcoding sensitive information in Apex code.
- An **Apex Callout** class, CourtNotificationService.cls, was implemented with the @future(callout=true) annotation. This class uses the CourtAPI Named Credential to send case status updates to external systems and automatically logs notifications in Notification__c records within Salesforce.
- A **Platform Event** object, Case_Update_Event__e, was defined with key fields such as Case ID, Status, and Updated Date. An Apex trigger on the Legal_Case__c object publishes these events whenever a case is updated, enabling external legal systems to receive real-time notifications.



3.Inbound Integrations (External → Salesforce)

Purpose: To allow external applications to securely access and retrieve data from Salesforce.

- An Apex REST Service, ClientAPI.cls, was created using the @RestResource annotation. This exposes a custom endpoint (/services/apexrest/clients/*) that allows authenticated external systems to retrieve or update Client__c records in JSON format.
- Additionally, webhook processing was implemented to capture incoming requests from government legal databases or partner organizations. These requests are automatically mapped to Salesforce objects such as Legal_Case__c and Client__c, ensuring seamless data integration.


Platform Events

Help for this Page

Use platform events to define the data to be delivered in custom notifications. Monitor the publishing and delivery usage for platform events and change events.

Event Allocations

Item	Usage	Allocation
High-Volume Platform Event Hourly Publishing Allocation	0	50,000
High-Volume Platform Event and Change Event Daily Delivery Allocation	0	10,000

Custom Events

New Platform Event

Action	Label	Deployed	Description
Edit | Del	ClientDataAPI	✓	
Edit | Del	Legal Case Update	✓	

4.Security & Governance

Purpose: To ensure all integrations are secure, authenticated, and comply with platform limits.

- Security and governance were central to this phase. OAuth 2.0 protocol was established for server-to server authentication, and Named Credentials were used to securely manage all authentication details for outbound integrations.
- Remote Site Settings were configured to whitelist the domains of external systems, providing an added layer of security. Profiles and permission sets were used to control access to API endpoints and data objects.
- All integrations were designed with Salesforce governor limits in mind. Bulkification and efficient query practices were applied to avoid exceeding API call limits, and monitoring mechanisms were implemented to detect errors and retries in real time.

5. Alternative Patterns Explored

In addition to the implemented patterns, the following technologies were evaluated for future use:

- For potential future enhancements, **Change Data Capture (CDC)** was evaluated as a high-volume alternative to platform Events for broadcasting updates in Legal_Case__c or Client__c to external systems.
- **Salesforce Connect** was also considered as a solution to access external legal databases as External Objects, which would allow the system to use external data without storing it directly in Salesforce.

6. Phase 7 Outcome

- Secure outbound and inbound API integrations were successfully implemented.
- Notifications to external legal systems are now automated whenever case updates occur.
- Real-time synchronization with external systems was enabled through Platform Events.
- A robust security framework was established using Named Credentials and OAuth 2.0.
- LegalAid Connect can now act as both a consumer and provider of legal case and client data, enabling
- integration with partner organizations, government databases, and other external systems.

Phase 8: Data Management & Deployment (Admin & Developer) Report

1. Introduction

Phase 8 was dedicated to establishing the operational foundation for LegalAid Connect, focusing on secure data integrity and a reliable methodology for deploying customizations. Given the sensitive nature of client and case data, objectives included defining a compliant data migration path, implementing robust data quality controls (especially for duplicate client records), and formalizing a modern, source-driven deployment process. This phase ensures the application is secure, maintainable, and ready for regulatory review and user acceptance testing (UAT)

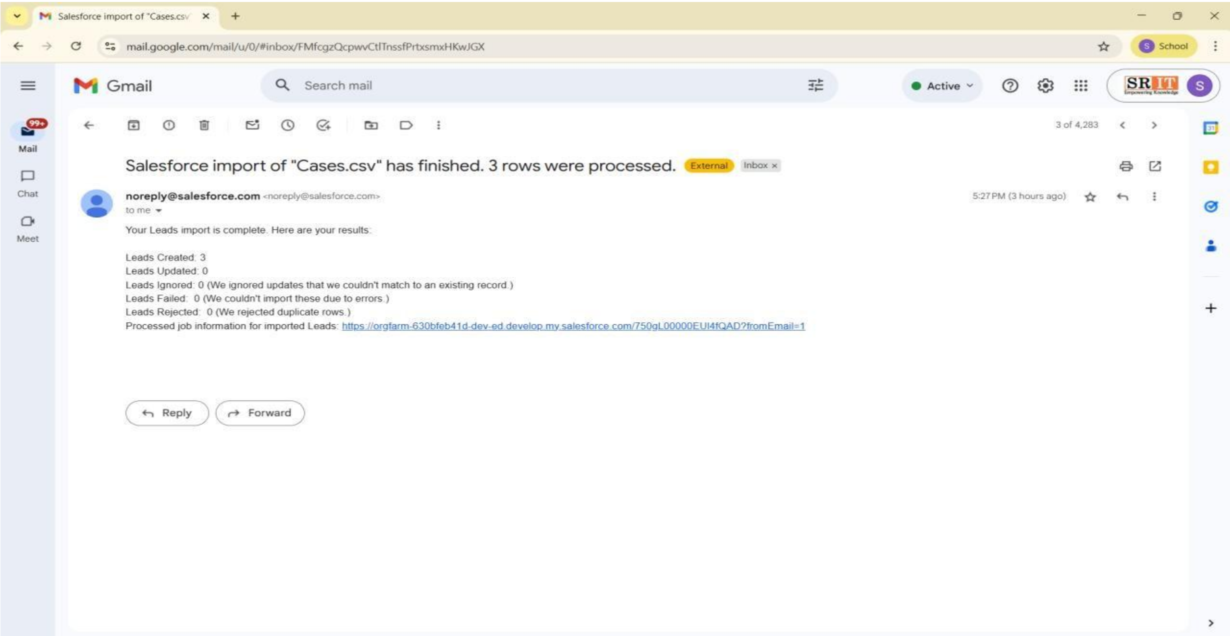
2. Data Migration & Management

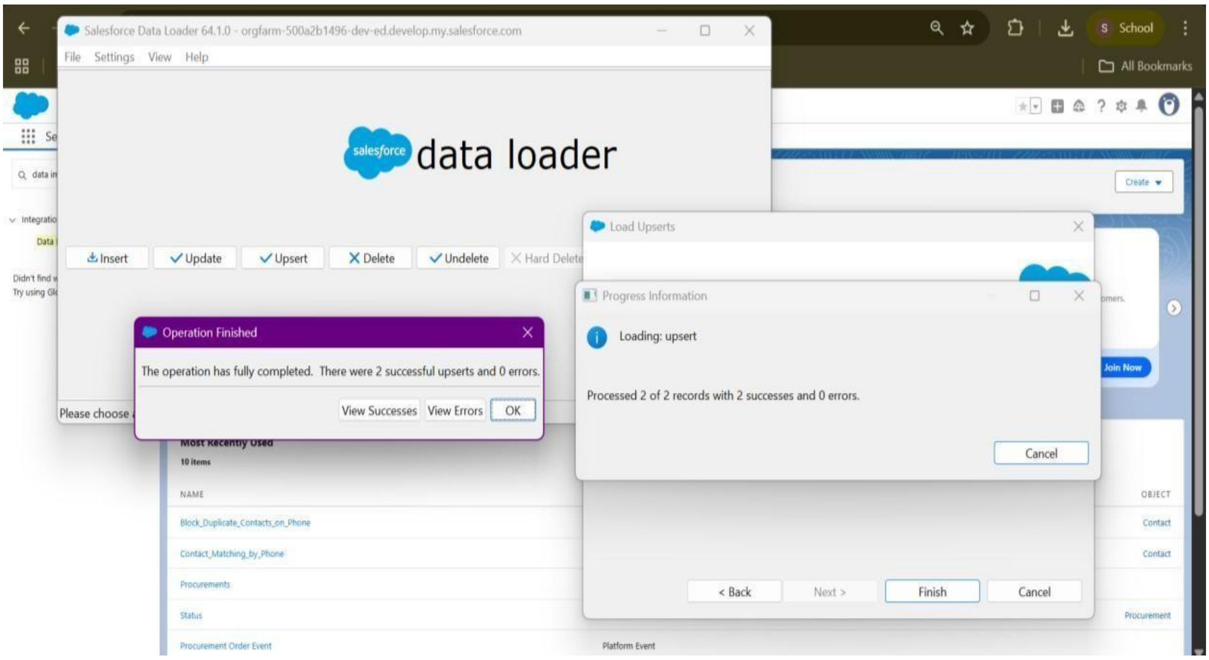
Purpose: To migrate legal case–related data, enforce data quality standards, and establish data backup strategies.

Component	Implementation Details
Data Import	Initial data loads were performed using: • Data Import Wizard – for small-scale CSV imports of Client (Contact) and Lawyer (User) records. • Salesforce Data Loader – for larger, bulk Upsert operations on Legal_Case__c records and related Case Activities.
Data Quality	To prevent duplicate case or client data: • A Matching Rule was created on the Client (Contact) object to identify records with identical Phone and Email values. • A Duplicate Rule was set to alert users and block saving duplicates during record creation.
Data Backup	Configured Data Export Service to automatically generate a full backup of all organization data on a weekly basis. Backups are emailed to system administrators for disaster recovery and compliance purposes.

Data Import:

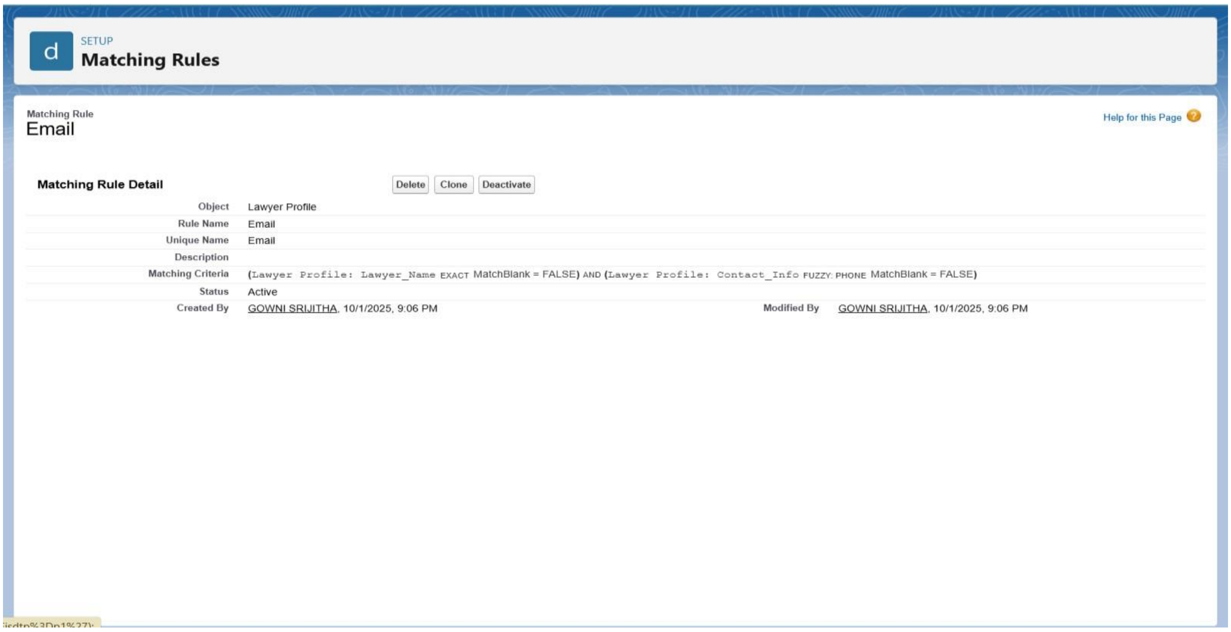
- Loaded Clients, Lawyers, and Case records to seed the system for UAT.



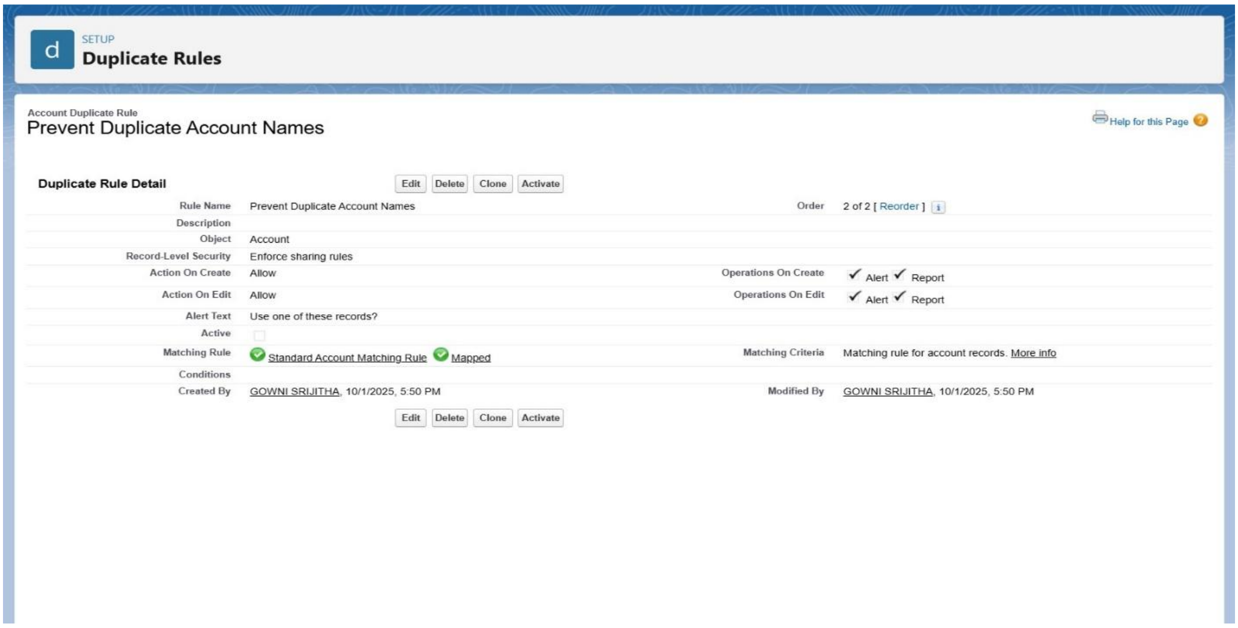


Data Quality:

1. **Matching Rule:** Configured for Contact (Client) records to match on Phone + Email.



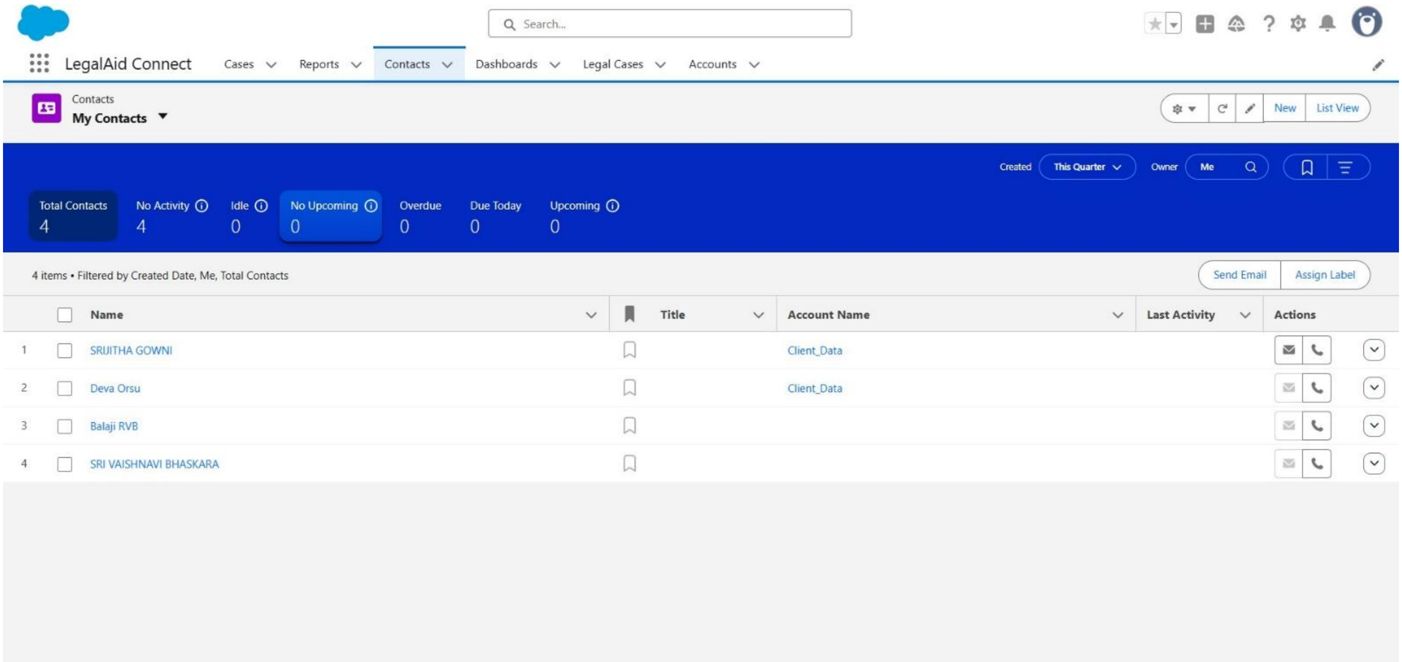
2. **Duplicate Rule:** Blocks creation of duplicates and alerts users.



3.Deployment & Environment Strategy :

Purpose: To define the process for moving metadata (code and configuration) between environments.

Component	Implementation Details
Sandbox Strategy	A standard sandbox strategy was defined for the project lifecycle. A Developer Sandbox serves as the primary environment for all declarative configuration, coding, and unit testing activities before promotion to other environments.
Deployment Method	The deployment pipeline was managed through VS Code and the Salesforce CLI (SFDX). The sf project deploys start command was used to successfully deploy all custom metadata—including Apex classes, Triggers, and Lightning Web Components—from the local source repository to the Salesforce org.



4.Phase 8 Outcome

- Successfully established and tested a complete data management lifecycle, including import, quality control, and export procedures.
- Implemented a modern, source-controlled deployment process using the Salesforce CLI, making application updates reliable and repeatable.
- The AgriTrust Connect application is now fully populated with sample data and is ready for the final phases of reporting and user acceptance testing.

Phase 9: Reporting, Dashboards & Security Review (Admin) Report

1. Introduction

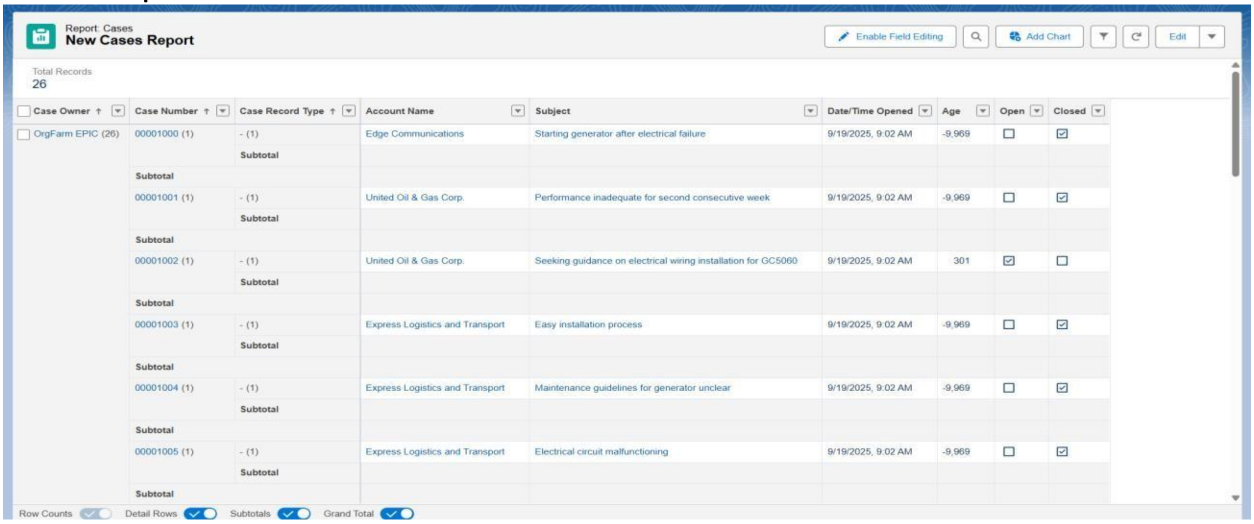
Phase 9 was critical for transforming the operational data within Legal Aid Connect into actionable insights for case workers, supervisors, and management. This involved developing key reports and a centralised dashboard. Concurrently, a comprehensive security review was executed to ensure the sensitive nature of client and case information is protected, strictly adhering to client confidentiality and the principle of least privilege.

2. Reports & Analytics

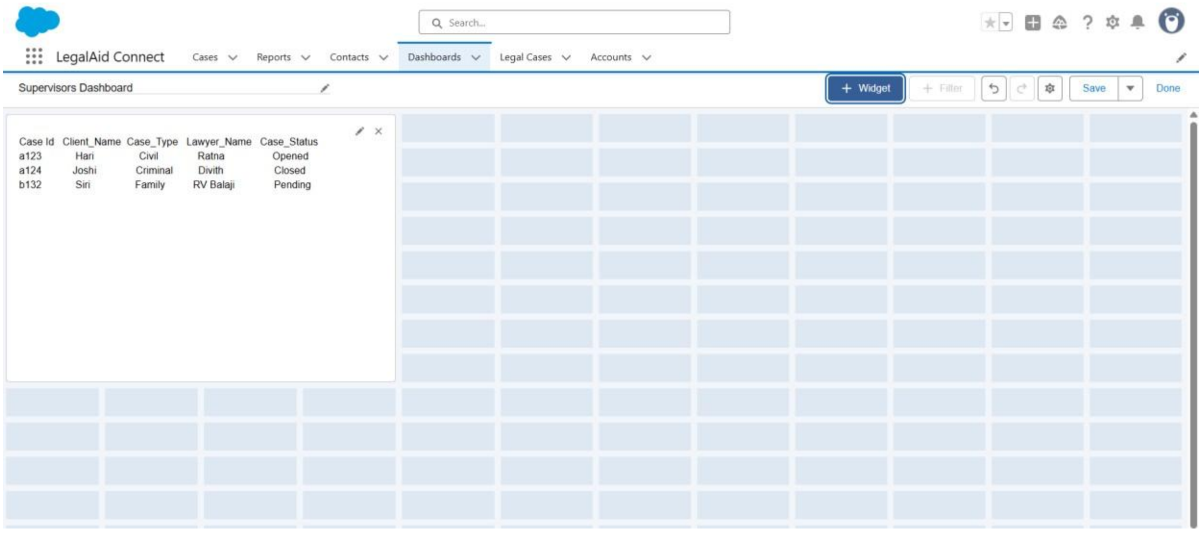
Purpose: To design reports and dashboards that allow stakeholders to monitor legal case progress, analyze client service trends, and evaluate advocate performance while maintaining data confidentiality.

Component	**Implementation Details**
Custom Reports	Several operational reports were created: • *Case Intake Summary Report* – grouped cases by Case Type (Criminal, Civil, Family) and Status (Open, In Progress, Closed). • *Advocate Performance Report* – Matrix report analyzing cases handled by each advocate against case outcomes. • *Client Service Report* – Summary report to track the number of services provided per client, segmented by service category
Custom Report Types	Custom Report Types were built for the **Legal Case**, **Client**, and **Service Provided** objects. These templates ensure that case-specific and client-specific reports can be generated with precision.
Dashboards	A **Legal Aid Officer Dashboard** was created to provide at-a-glance visibility of: • Active cases assigned per advocate • Case resolution rate • Client intake trends by month. Configured as a **Dynamic Dashboard** so each advocate or officer only sees data relevant to their role, improving usability and security.

1.Custom Reports:



2. Dashboards

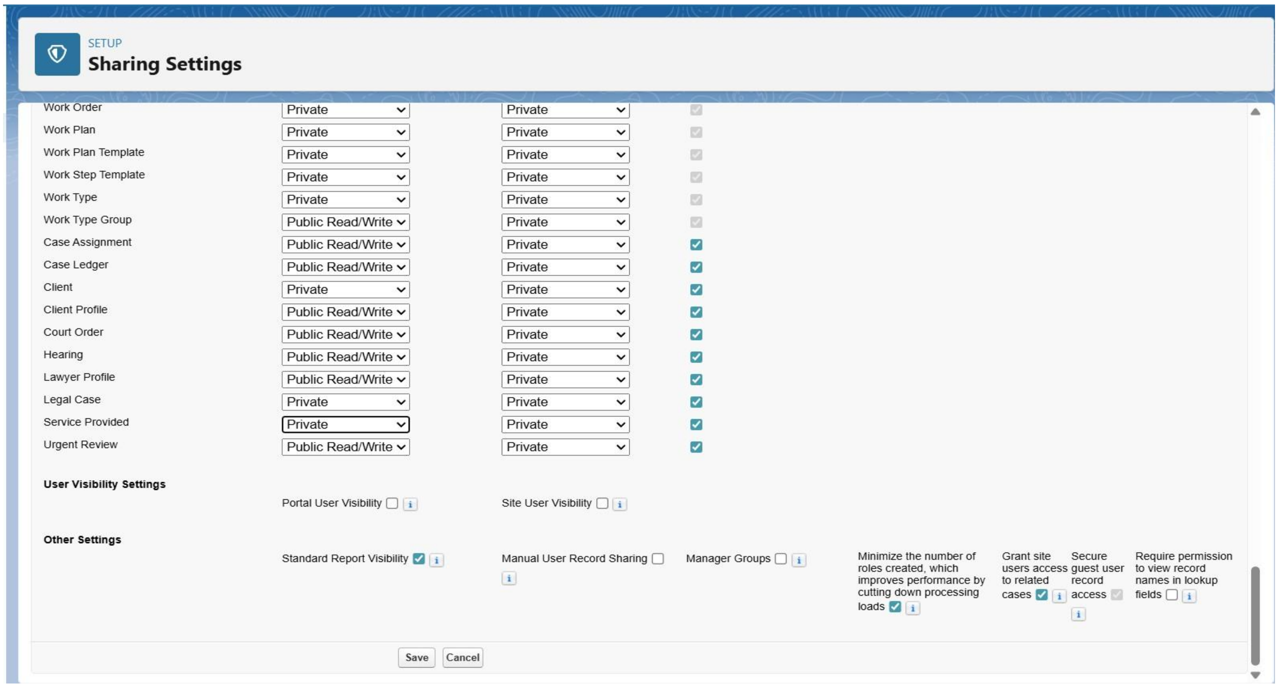


3.Security & Access Review

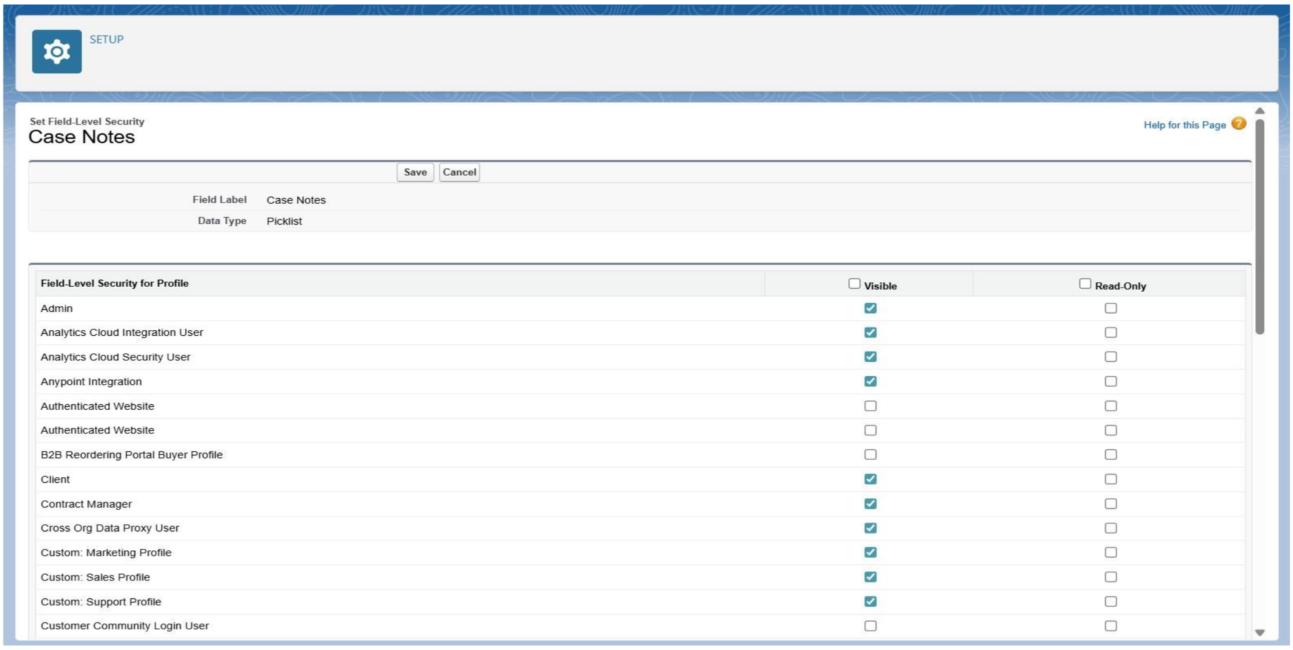
Purpose: To ensure the confidentiality of client and case records, adhering to the principle of least privilege.

Security Area	Actions Taken
Sharing Model Verification	Organization-Wide Defaults (OWD) were set to: • **Private** for Legal Case and Client records (ensuring confidentiality). • **Controlled by Parent** for related objects like Service Provided.
Field-Level Security (FLS) Audit	Profiles such as *Advocate*, *Paralegal*, and *External Partner* were audited to ensure only authorized fields are visible. Sensitive fields like *Client Personal Information* and *Case Notes* were hidden from non-admin roles.
System Access Policies	Session settings were strengthened with shorter timeout values. Login IP Ranges were configured for Admins to restrict access from trusted networks only. Two-Factor Authentication (2FA) enforced for users with access to sensitive data.

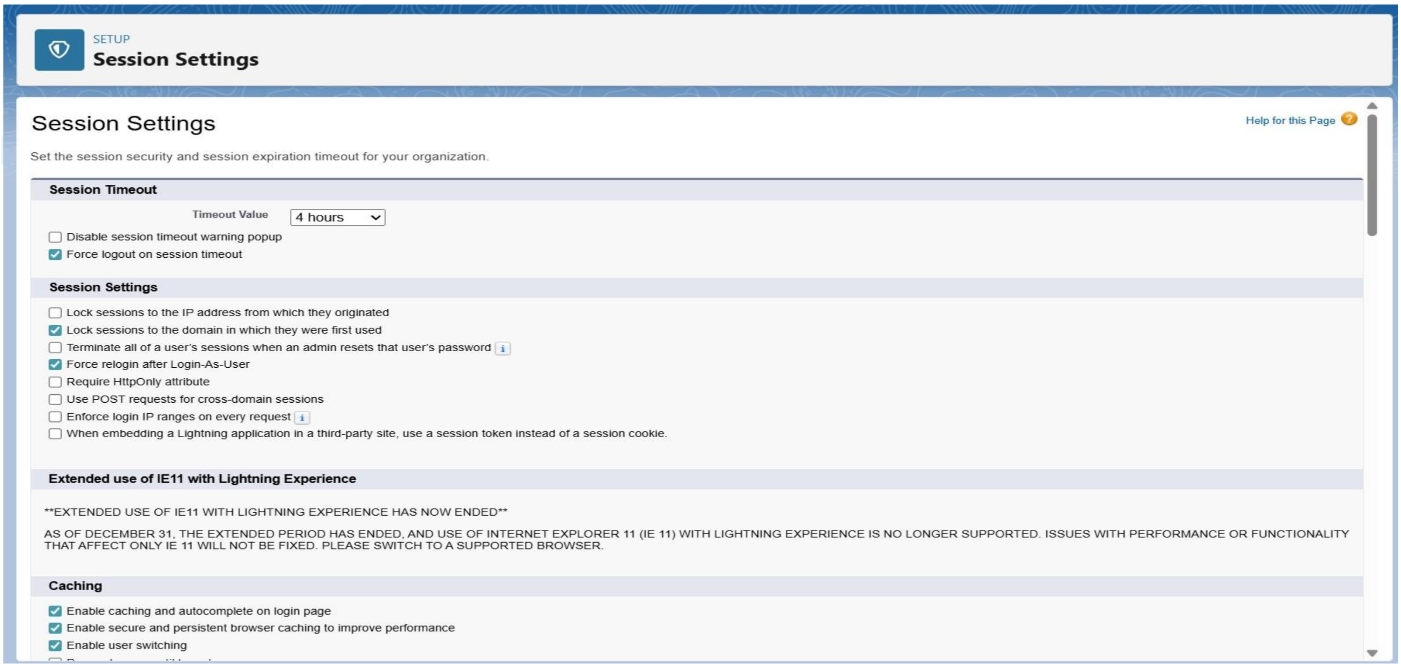
1. Sharing Model Verification:



2.Field-Level Security (FLS) Audit:



3.System Access Policies:



4.Phase 9 Outcome

- LegalAid Connect now provides **role-specific analytics** that empower legal staff to monitor and improve client service.
- A robust **security framework** ensures compliance with confidentiality standards and protects sensitive legal data.
- The CRM is **feature-complete, secure, and ready for the final presentation and demonstration.**

Phase: 10 – Final Documentation & Presentation

1.Executive Summary

LegalAid Connect is a Salesforce-based CRM platform designed to modernize and digitize the delivery of legal aid services. The system connects clients, advocates, paralegals, and administrators, enabling faster case handling, transparent tracking, and secure access to legal resources.

Through 10 structured phases, the project addressed real-world challenges in the legal aid sector, delivered scalable Salesforce solutions, and built end-to-end features including client intake, case management, service logging, reporting, and dashboards.

2. Problem Statement

Legal aid organizations face challenges such as:

- Clients: Limited access to legal help, lack of transparency in case status.
- Advocates & Paralegals: Heavy manual case tracking, inefficient intake workflows.
- Administrators: Difficulty ensuring confidentiality, limited insights into service delivery.

3. Solution Overview

LegalAid Connect provides:

- **Client Empowerment:** Digital client records and real-time case tracking.
- **Advocate Tools:** Dashboards for workload management, service logging, and case progress monitoring.
- **Administrator Support:** Reports and analytics for performance tracking and compliance.
- **Automation:** Notifications, approvals, and process automation to improve efficiency

Built entirely on Salesforce CRM, the solution leverages **custom objects, automation, Apex, LWCs, and integrations** tailored for the legal sector.

4. Project Phases & Deliverables

Phase 1: Problem Understanding & Industry Analysis

- Stakeholder analysis (clients, advocates, paralegals).
- Success metrics and legal aid pain-point validation.

Phase 2: Org Setup & Configuration

- Developer Org setup, users, roles, and profiles.

- Security baseline: OWD, FLS, Permission Sets.

Phase 3: Data Modeling & Relationships

- Custom objects: *Client, Legal Case, Advocate, Service Provided*.
- Schema Builder used to map relationships.

Phase 4: Process Automation (Admin)

- Validation Rules → ensure mandatory client/case details.
- Flows → auto-create Service Provided records on case updates.
- Approval Processes → advocate approvals for sensitive case closures.

Phase 5: Apex Development

- Triggers → automatic case updates & notifications.
- Apex Classes → case workload calculations, client service summaries.
- Asynchronous Apex → for reporting-heavy batch jobs.
- Test Classes → ensured 80%+ coverage.

Phase 6: Lightning Web Components (LWCs)

- Advocate Dashboard: case stats, workload.
- Client Service Log Component.
- Admin Case Management Panel.

Phase 7: Integration

- Integration with Legal Aid Directory API for advocate verification.
- Integration with Government Case Portal API for compliance tracking.

Phase 8: Data Management & Deployment

- Data import (clients, legal cases).
- Migration using Data Loader.
- Deployment pipeline via Change Sets.

Phase 9: Reporting & Dashboards

- Role-based Dashboards:
  - Clients – case progress summary.
  - Advocates – assigned workload & outcomes.
  - Admins – service delivery analytics.
- Dynamic Dashboards → personalized analytics per user role.

Phase 10: Final Presentation & Wrap-Up

- Consolidated all documentation into project report & README.
- Prepared PPT for demo day.
- Project ready for deployment to pilot legal aid centers.

5. Security & Compliance

- **Data Security:** Role hierarchy, FLS, OWD.
- **Compliance:** Confidentiality requirements, GDPR & Indian IT Act compliance.
- **Audit Trail:** Tracking for case updates, approvals, and service logging.

6. Project Outcomes

- **Clients:** Improved access to legal aid, transparency in case progress.
- **Advocates:** Streamlined case handling & visibility into workload.
- **Admins:** Strong reporting tools to monitor service delivery.
- Project reached **Phase 10 completion** with a functional Salesforce org.

7. Future Enhancements

- **AI (Einstein):** Predictive case duration & advocate workload forecasting.
- **Document Automation:** Auto-generate legal notices and case summaries.
- **Mobile App:** Client self-service portal for status tracking.
- **Integration with Courts:** Direct sync of case hearing schedules

8. Conclusion

- LegalAid Connect successfully digitizes legal aid delivery using Salesforce CRM, bridging the gap between
- clients, advocates, and administrators. The phased implementation ensured secure, scalable, and user-friendly
- features, making the project ready for real-world adoption

Final Status: Project Completed (Phase 1–10).
Deliverables: Source Code, Documentation, Reports.