

SALESFORCE PROJECT IMPLEMENTATION PHASES

Phase 1: Problem Understanding & Industry Analysis

Problem: During natural disasters (floods, earthquakes, cyclones), victims often struggle to request essential resources efficiently, and NGOs/government agencies have difficulty tracking requests and assigning volunteers/resources.

Industry Analysis:

- Sector: Disaster Management / Humanitarian Aid
- Current Challenges:
 - Delayed response due to manual request tracking
 - Lack of real-time visibility of volunteer availability
 - Inefficient allocation of resources
- Salesforce Role: Centralized system to manage requests, volunteers, and resources with automation and dashboards.

1. Requirement Gathering

- Victims should be able to submit requests for essential resources (food, water, medicine, shelter).
- Volunteers should be able to view and accept/complete assignments.
- Coordinators should have a dashboard to track requests, volunteers, and resources.
- The system should automatically assign volunteers/resources based on availability and priority.
- Notifications/alerts for pending or overdue requests.
- Reports and analytics for completed vs pending requests, resource utilization, and volunteer workload.

2. Stakeholder Analysis

Stakeholder	Role	Expectations
Victims (Affected People)	Submit resource requests	Easy-to-use portal, real-time tracking
Volunteers	Fulfill requests	Clear assignments, update status easily
Coordinators/NGOs	Manage relief operations	Central dashboard, automated assignment, analytics
Government Agencies	Oversight/monitoring	Reports, transparency, faster response

3. Business Process Mapping

Process Flow:

- 1 Victim submits a request.
- 2 System validates request and auto-assigns volunteer/resource.
- 3 Volunteer receives task notification and updates status.
- 4 Coordinator tracks progress and reallocates if needed.
- 5 Reports and dashboards provide insights into overall relief efforts.

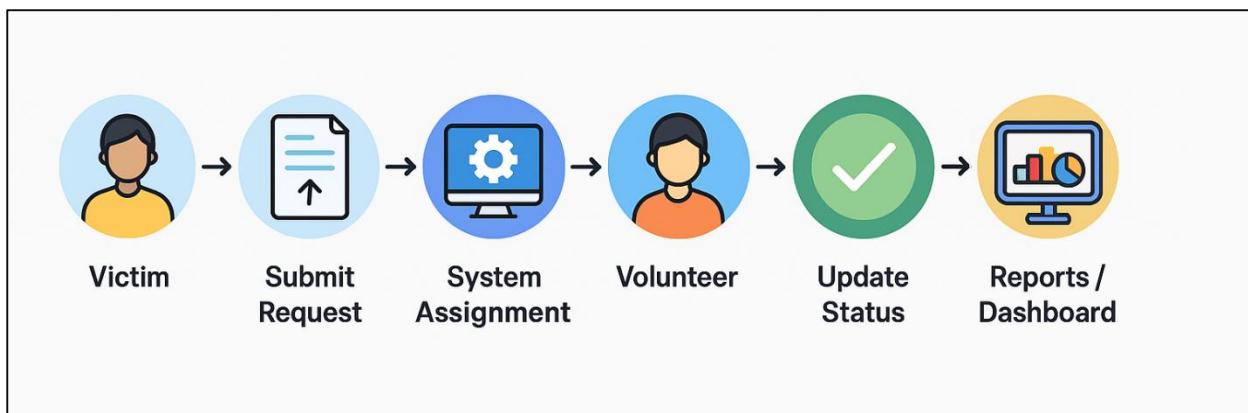


Figure 1. Process Flow Diagram

4. Industry-specific Use Case Analysis

- Use Case: Flood Relief in a rural district
- Victims request food, water, and shelter.
- Volunteers from NGOs and community groups are available for deployment.
- Coordinators need real-time tracking of requests and volunteer workload.
- Outcome: Faster allocation of relief resources, reduced duplication of effort, and improved victim support.

5. AppExchange Exploration

- Volunteer Management Apps (for NGOs) → provide partial solutions but are generic.
- Nonprofit Success Pack (NPSP) → widely used in nonprofit operations but not disaster-specific.
- Case Management Apps → good for tracking issues but lack volunteer/resource assignment logic.
- **Differentiation:** Our solution focuses specifically on disaster relief scenarios, integrates volunteer and resource assignment, and includes LWC dashboards for real-time tracking — all built in a free Salesforce Developer Org.

Phase 2: Org Setup & Configuration – ReliefConnect (*Disaster Relief & Resource Management System*)

0. Preliminaries

1. Sign up / log into **Salesforce Developer Edition** (<https://developer.salesforce.com>).

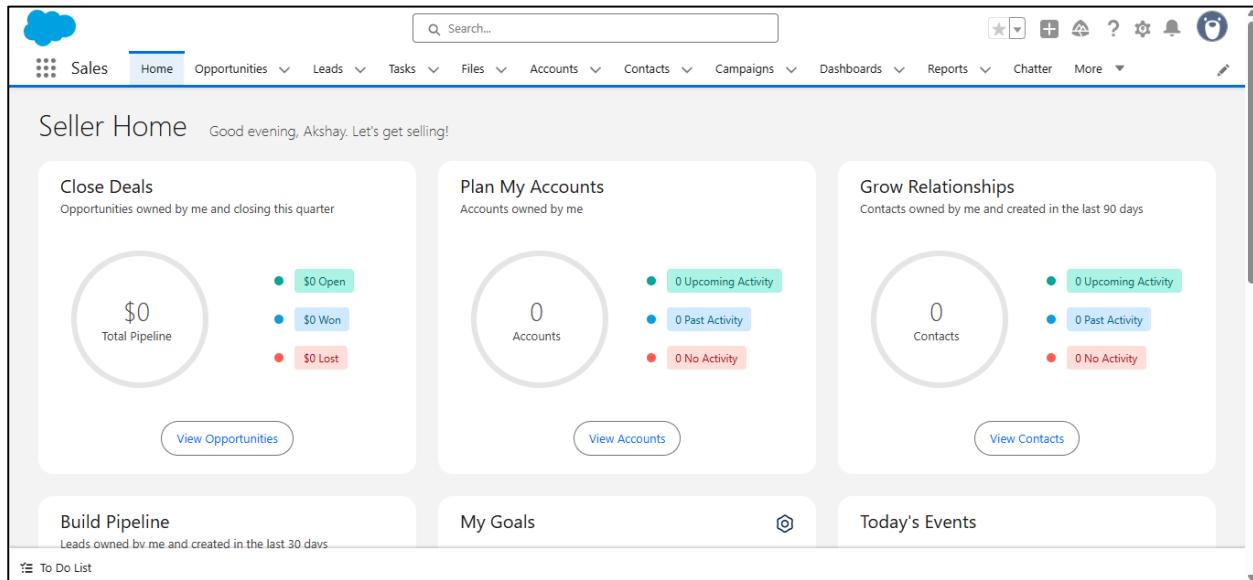


Figure 1 Developer Org home

1. Company Profile (Company Information)

1. Setup → Quick Find: Company Information → Open.
2. Edit → set Organization Name = **ReliefConnect**
 - o Set Default Time Zone = Asia/Kolkata, Default Currency = INR. → Save.

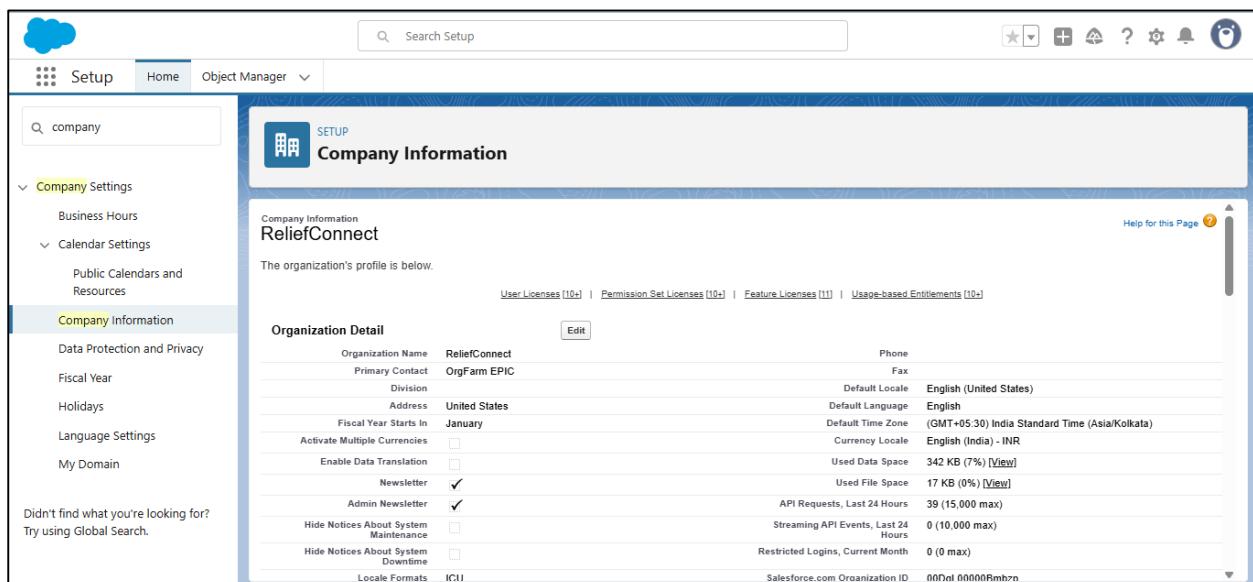


Figure 2 Company info with org name, timezone, currency.

2. Business Hours & Holidays

1. Setup → Quick Find: **Business Hours** → New Business Hours.
 - o Label: Emergency Operations (24x7) → Set Mon–Sun 12:00 AM–12:00 AM
→ Save.

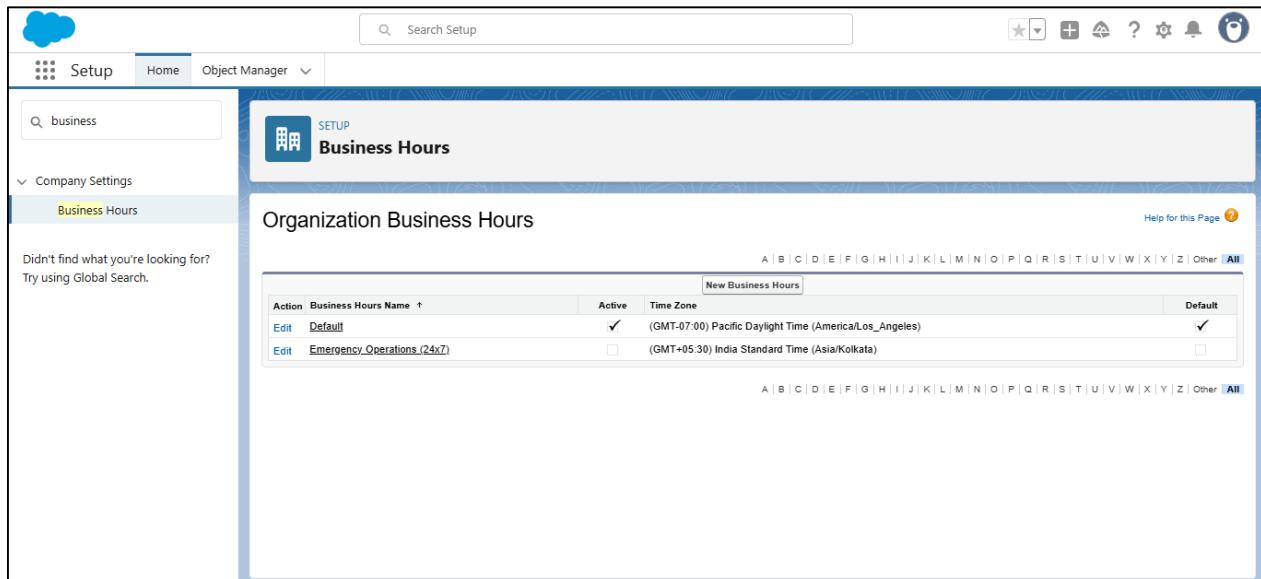


Figure 3 Business Hours

Setup → Quick Find: **Holidays** → New Holiday.

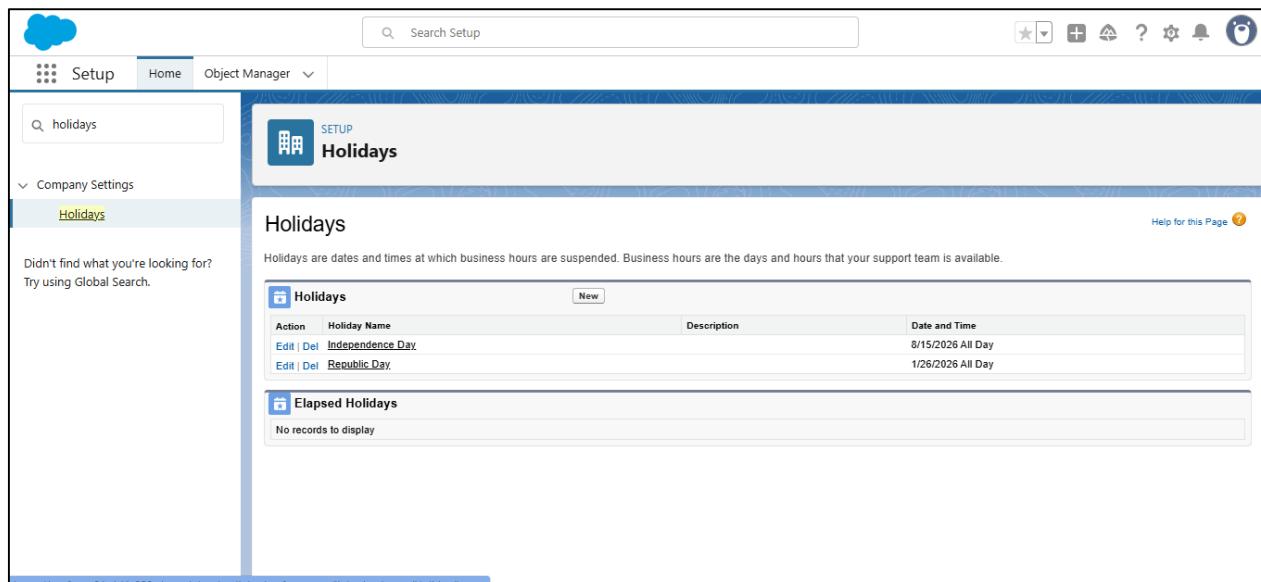


Figure 4 Holidays

3. Fiscal Year

1. Setup → Quick Find: **Fiscal Year** → Verified default fiscal year (Standard). set **April-March**.

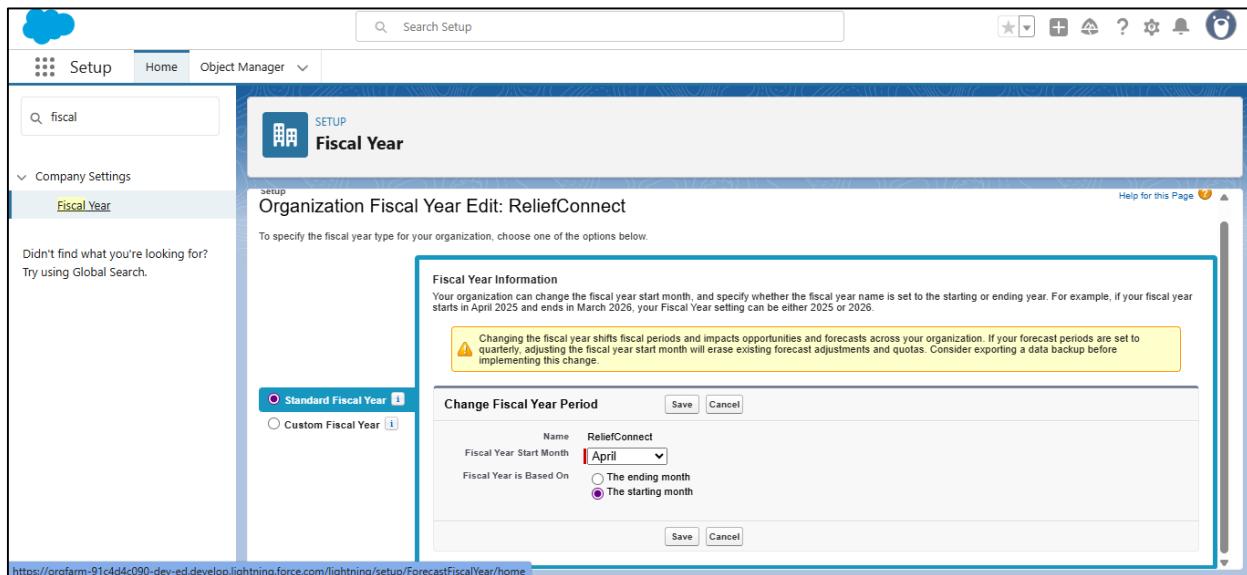


Figure 5 Fiscal Year

4. Create Sample Users & Assign Licenses

1. Setup → Quick Find: **Users** → Users → New User. Create three users:
 - Relief Head — relief.head@demo.com — Profile: System Administrator
 - Regional Coordinator — coordinator@demo.com — Profile: Standard User
 - Volunteer — volunteers@demo.com — Profile: Standard User
2. Fill First/Last name, Username (unique), Email, License = Salesforce or Platform if available. Save

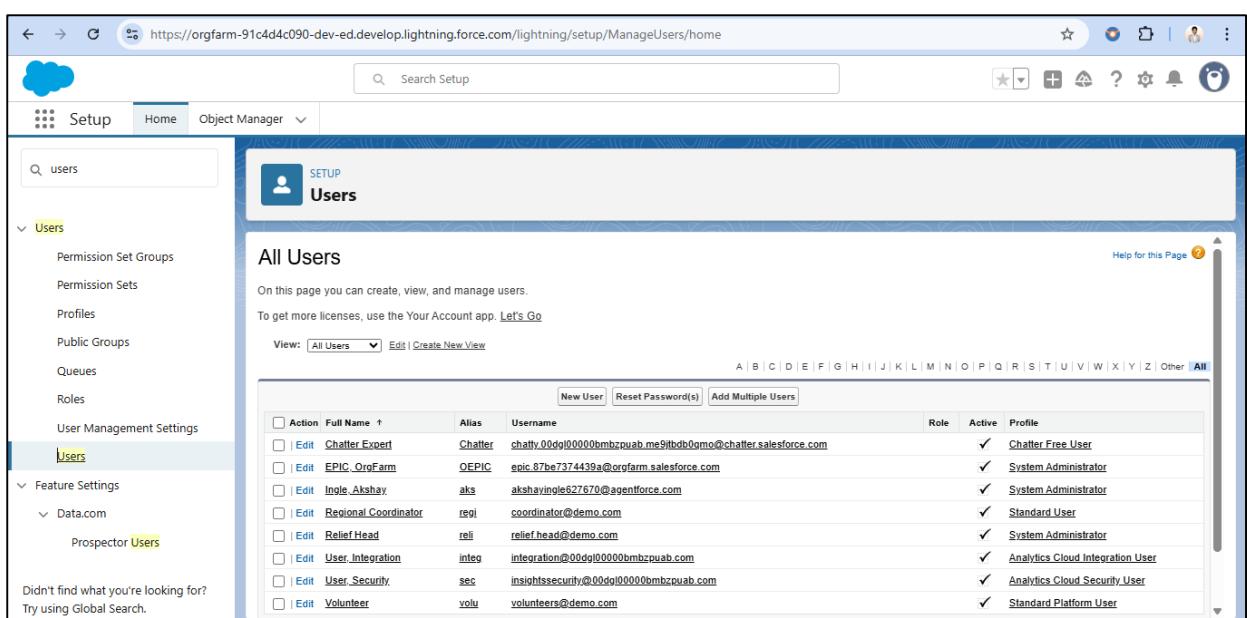


Figure 6 Sample Users

5. Role Hierarchy

1. Setup → Quick Find: **Roles** → Click **Set Up Roles** → Expand and **Add Role**:
 - o Top Role: Relief Head
 - o Child under Relief Head: Regional Coordinator
 - o Child under Regional Coordinator: Volunteer
2. Save.

The screenshot shows the Salesforce Setup interface with the 'Roles' page selected. On the left, there's a sidebar with 'Users' expanded, showing 'Sales' and 'Service' sections. Under 'Sales', 'Contact Roles on Contracts' and 'Contact Roles on Opportunities' are listed. Under 'Service', 'Case Teams' and 'Case Team Roles' are listed. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Creating the Role Hierarchy'. It shows a tree structure of roles:
ReliefConnect
 └ ReliefHead
 └ CEO
 └ RegionalCoordinator
 └ Volunteer

Figure 7 Role hierarchy tree (Relief Head > Coordinator > Volunteer).

6. Profiles (clone & edit)

1. Setup → Quick Find: **Profiles** → Open Standard User → Click **Clone** → Name: Coordinator Profile.
2. Clone another profile → Volunteer Profile

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. On the left, there's a sidebar with 'Users' expanded, showing 'Profiles' selected. A note at the bottom says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Profiles'. It shows a list of profiles with columns for Action, Profile Name, User License, and Custom. The 'Coordinator' profile is highlighted with a blue background and has a lock icon in the User License column. Other profiles listed include Chatter Moderator User, Contract Manager, XOrg Proxy User, Custom: Marketing Profile, Custom: Sales Profile, Custom: Support Profile, Customer Community Login, Customer Community Plus Login, and Customer Community Plus.

Figure 8 Coordinator Profile object permissions

7. Organization-Wide Defaults (OWD)

1. Setup → Quick Find: **Sharing Settings** → Edit.
2. Set defaults:
 - o **Requests** → Private
 - o **Resources** → Public Read Only
 - o **Volunteer** → Private
3. Save.

The screenshot shows the Salesforce Sharing Settings page. The left sidebar has a search bar and a 'Sharing Settings' section. The main area is titled 'Sharing Settings' and contains a table with columns for object name, sharing rule, and access level. Most objects have 'Private' as the access level, except for 'Resources' which is 'Public Read Only'. A note at the bottom right of the table says 'This table lists all objects that have a sharing rule defined in the current sharing settings. To view or edit sharing rules for an individual object, click its name in the first column.'

Object	Sharing Rule	Access Level	Action
Shipping Carrier Method	Sharing Rule 1	Private	✓
Shipping Configuration Set	Sharing Rule 1	Private	✓
Streaming Channel	Sharing Rule 1	Private	✓
Tableau Host Mapping	Sharing Rule 1	Private	✓
User Presence	Sharing Rule 1	Private	✓
User Provisioning Request	Sharing Rule 1	Private	✓
Whitelist	Sharing Rule 1	Private	✓
Web Cart Document	Sharing Rule 1	Private	✓
Work Order	Sharing Rule 1	Private	✓
Work Plan	Sharing Rule 1	Private	✓
Work Plan Template	Sharing Rule 1	Private	✓
Work Step Template	Sharing Rule 1	Private	✓
Work Type	Sharing Rule 1	Private	✓
Work Type Group	Sharing Rule 1	Private	✓
Request	Sharing Rule 1	Private	✓
Resource	Sharing Rule 1	Public Read Only	✓

Figure 9 OWD table showing Requests private, Resources public read only

8. Sharing Rules

1. Setup → Quick Find: **Sharing Settings** → Scroll to object Requests → Click **New** under Sharing Rules.
2. Create a rule:
 - Rule Type: **Owner based**
 - Owned By: Regional Coordinator (or Owner = Volunteer) → Share with: Role: Regional Coordinator or a Public Group.
 - Access Level: Read/Write. → Save.

9. Login Access Policies, IP Ranges & Login Hours

- Setup → Quick Find: **Login Access Policies** → Enable Administrators Can Log in as Any User

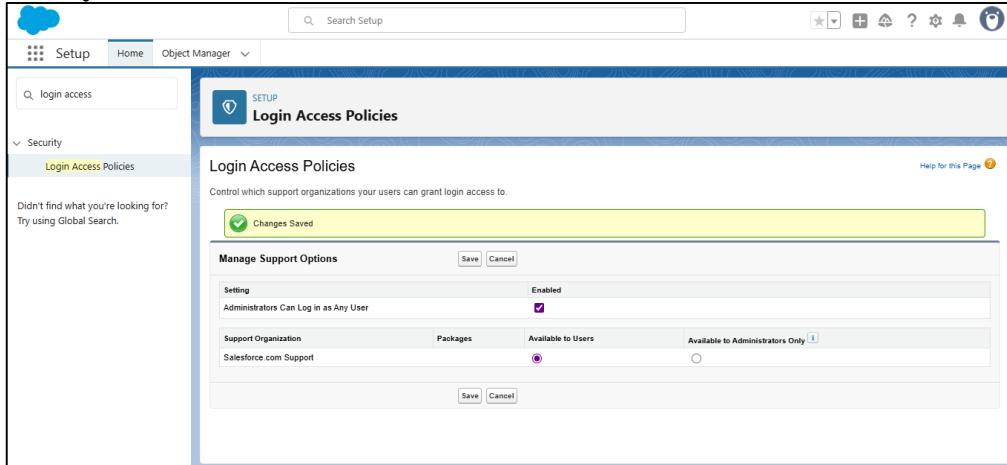


Figure 10 Login Access Policies

- Setup → Profiles → open Volunteer Profile → Login Hours → Edit → Set 08:00–22:00 for allowed days → Save.

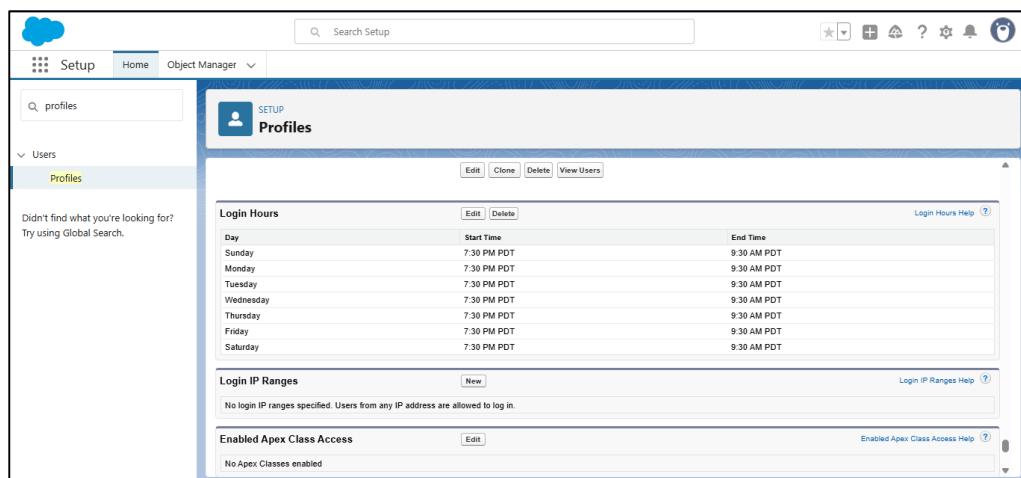


Figure 11 Login Hours

- Setup → Profiles → open Coordinator Profile → Login IP Ranges → Add IP ranges to restrict logins → Save.

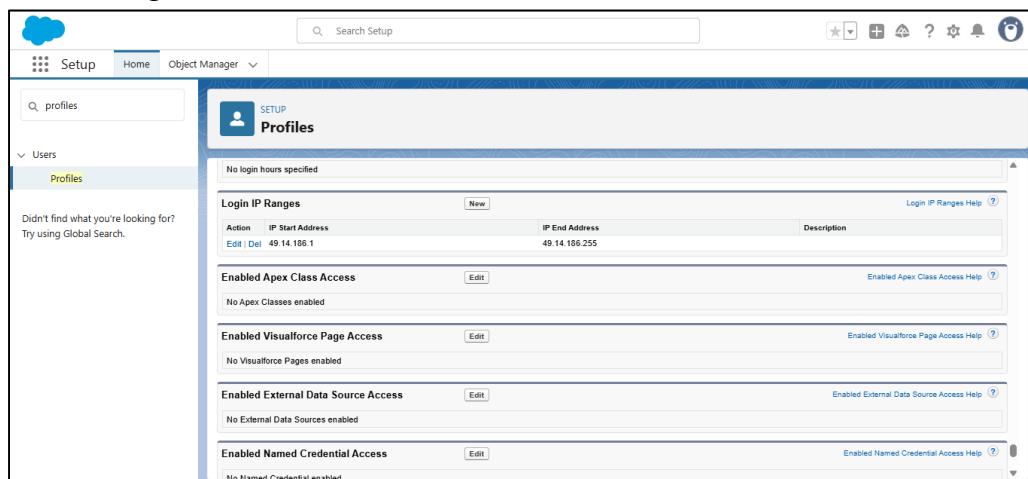


Figure 12 IP Assignment

10. Create Lightning App (ReliefConnect)

1. Setup → Quick Find: **App Manager** → New Lightning App.
 - o App Name: ReliefConnect → Branding icon added → Next.
 - o Add Nav Items: Requests, Volunteers, Resources, Locations, Reports, Dashboards → Save & Finish.

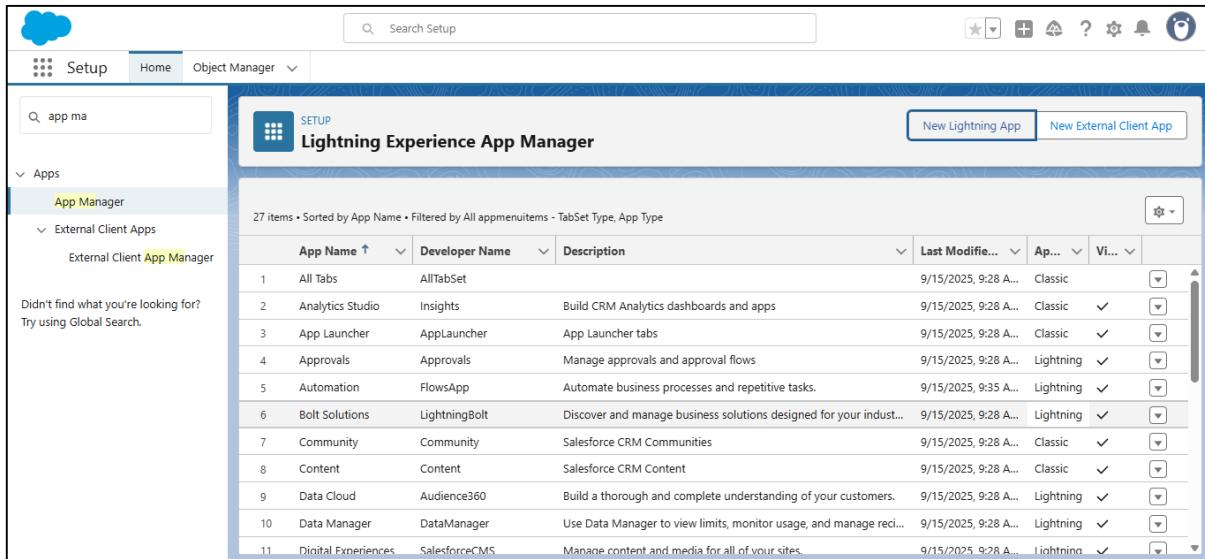


Figure 13 App Manager

App Launcher → search for ReliefConnect → click → ReliefConnect App is opened

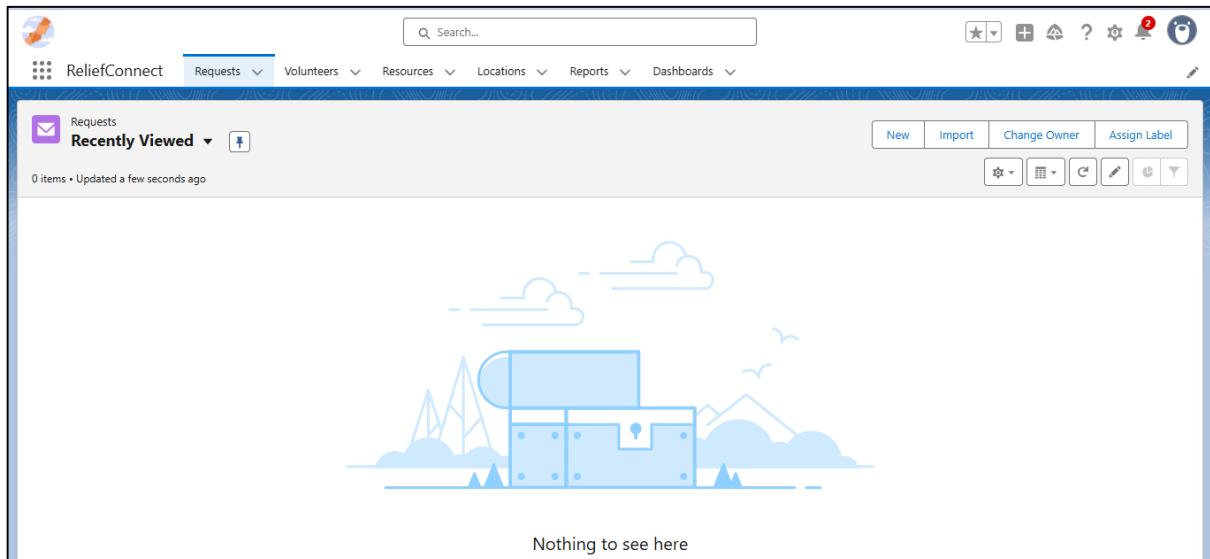
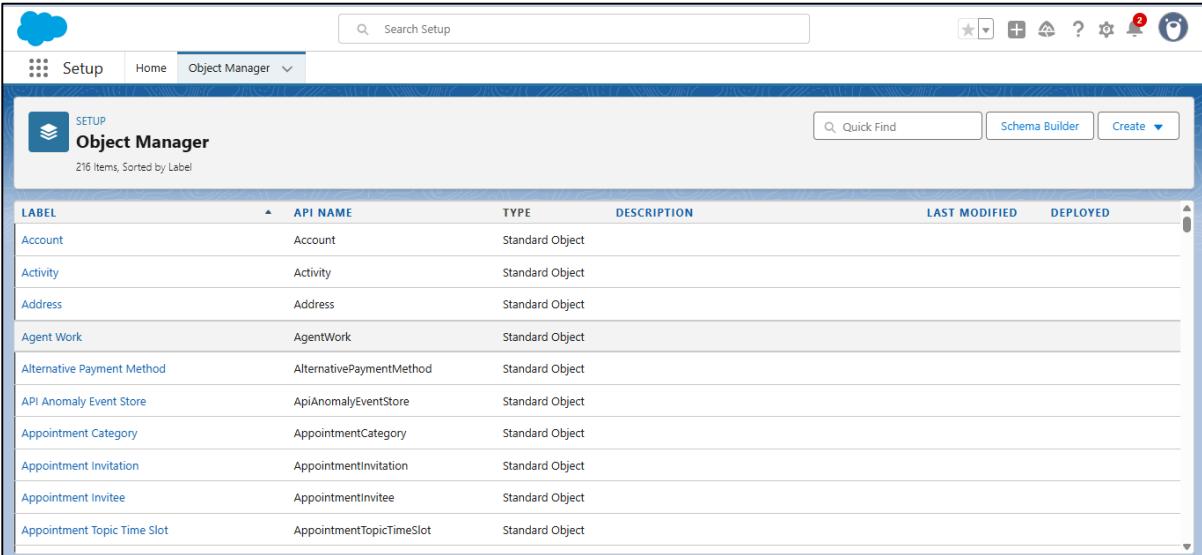


Figure 14 ReliefConnect App

Phase 3: Data Modeling & Relationships

Step 1 — Standard & Custom Objects

1. Go to Setup → Object Manager → Create → Custom Object.
2. Create these objects:
 - Request → for disaster relief requests.
 - Volunteer → for volunteers.
 - Resource → for supplies/resources.
 - Location → for geographical areas.
 - Assignment → junction object between Request, Volunteer, Resource.
3. The **Standard Objects** I have used: User, Contact, Report, etc.



The screenshot shows the Salesforce Object Manager interface. At the top, there's a navigation bar with 'Setup', 'Home', and 'Object Manager'. Below that is a search bar and various icons. The main area is titled 'Object Manager' and shows a list of 216 items, sorted by Label. The columns in the table are 'LABEL', 'API NAME', 'TYPE', 'DESCRIPTION', 'LAST MODIFIED', and 'DEPLOYED'. Some rows are highlighted in light blue. The objects listed include Account, Activity, Address, Agent Work, Alternative Payment Method, API Anomaly Event Store, Appointment Category, Appointment Invitation, Appointment Invitee, and Appointment Topic Time Slot, all categorized as Standard Objects.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Address	Address	Standard Object			
Agent Work	AgentWork	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			

Step 2 — Fields

For each object, added fields:

- **Request**
 - Requester Name (Text)
 - Phone (Phone)
 - Email (Email)
 - Request Type (Picklist: Food, Water, Medicine, Shelter, Other)
 - Priority (Picklist: High, Medium, Low)
 - Status (Picklist: Submitted, Assigned, In Progress, Fulfilled, Closed)
 - Location (Lookup → Location)
 - Assigned Volunteer (Lookup → Volunteer)

- Assigned Resource (Lookup → Resource)
- Requested On (Date/Time)
- Notes (Long Text Area)

The screenshot shows the Salesforce Object Manager interface for the 'Request' object. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area displays the 'Fields & Relationships' section with 16 items, sorted by Field Label. The fields include Owner (Ownerid, Lookup(User,Group)), Priority (Priority__c, Picklist), Request Type (Request_Type__c, Picklist), Requested On (Requested_On__c, Date/Time), Requested Quantity (Requested_Quantity__c, Number(18, 0)), Requester Name (Name, Text(80)), and Status (Status__c, Picklist). A 'Long Text Area' field is also listed under the 'Fields & Relationships' section.

• Volunteer

- Phone (Phone)
- Email (Email)
- Skills (Multi-picklist: Medical, Logistics, Transport, Food Distribution)
- Availability (Picklist: Available, Busy, Inactive)
- Location (Lookup → Location)

The screenshot shows the Salesforce Object Manager interface for the 'Volunteer' object. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area displays the 'Fields & Relationships' section with 9 items, sorted by Field Label. The fields include Created By (CreatedById, Lookup(User)), Email (Email__c, Email), Last Modified By (LastModifiedById, Lookup(User)), Location (Location__c, Lookup(Location)), Owner (Ownerid, Lookup(User,Group)), Phone (Phone__c, Phone), Skills (Skills__c, Picklist (Multi-Select)), and Volunteer Name (Name, Text(80)). A 'Show desktop' button is visible at the bottom right of the interface.

- **Resource**

- Resource Type (Picklist: Medicine, Food, Shelter Material, Clothing)
- Quantity Available (Number)
- Location (Lookup → Location)

The screenshot shows the Salesforce Object Manager interface for the 'Resource' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Fields & Relationships. The main area displays the 'Fields & Relationships' section with the following data:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location__c	Lookup(Location)	✓	▼
Owner	OwnerId	Lookup(User,Group)	✓	
Quantity Available	Quantity_Available__c	Number(18, 0)		▼
Resource Name	Name	Text(80)	✓	▼
Resource Type	Resource_Type__c	Picklist		▼

Location

- Region (Picklist: North, South, East, West)
- Latitude (Number, 2 decimal places)
- Longitude (Number, 2 decimal places)

The screenshot shows the Salesforce Object Manager interface for the 'Location' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Fields & Relationships. The main area displays the 'Fields & Relationships' section with the following data:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Latitude	Latitude__c	Number(16, 2)		▼
Location Name	Name	Text(80)	✓	▼
Longitude	Longitude__c	Number(16, 2)		▼
Owner	OwnerId	Lookup(User,Group)	✓	
Region	Region__c	Picklist		▼

- **Assignment** (junction object)
 - Request (Master-Detail → Request)
 - Volunteer (Lookup → Volunteer)
 - Resource (Lookup → Resource)
 - Status (Picklist: Assigned, In Progress, Completed)
 - Assigned On (Date/Time)

Assignment

Details	API Name	Description
Assignment	Assignment__c	Custom
Singular Label	Assignment	Enable Reports
Plural Label	Assignments	Track Activities
		Track Field History
		Deployment Status
		Deployed
		Help Settings
		Standard salesforce.com Help Window

Step 3 — Record Types

- Go to **Object Manager** → **Request** → **Record Types** → **New**.
- Create record types for **Medical Request** and **Supply Request**.
- Assign different **picklist values** and **page layouts**.

Request

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
Medical Request		✓	Akshay Ingle, 9/23/2025, 1:52 AM
Supply Request			Akshay Ingle, 9/23/2025, 1:54 AM

Step 4 — Page Layouts

- Edit **Request Page Layout**: show Requester details, Priority, Status, Assigned Volunteer.
- Edit **Volunteer Page Layout**: show Skills, Availability, Location.
- Different layouts for **Coordinator vs Volunteer** (assign via Profiles).

The screenshot shows the Salesforce Setup interface with the Object Manager for the 'Request' object. The 'Page Layouts' tab is selected in the sidebar. A 'Layout Properties' window is open, showing the current layout configuration. The layout includes fields for Requester Name, Contact Email, Last Modified By, Priority, Request Type, Requester Name, Blank Space, Contact Phone, Location, Record Type, Request Type, Assigned Resource, Created By, Notes, Requested On, Status, Assigned Volunteer, Fulfilled On, Owner, Requested Quantity, and Requested Quantity.

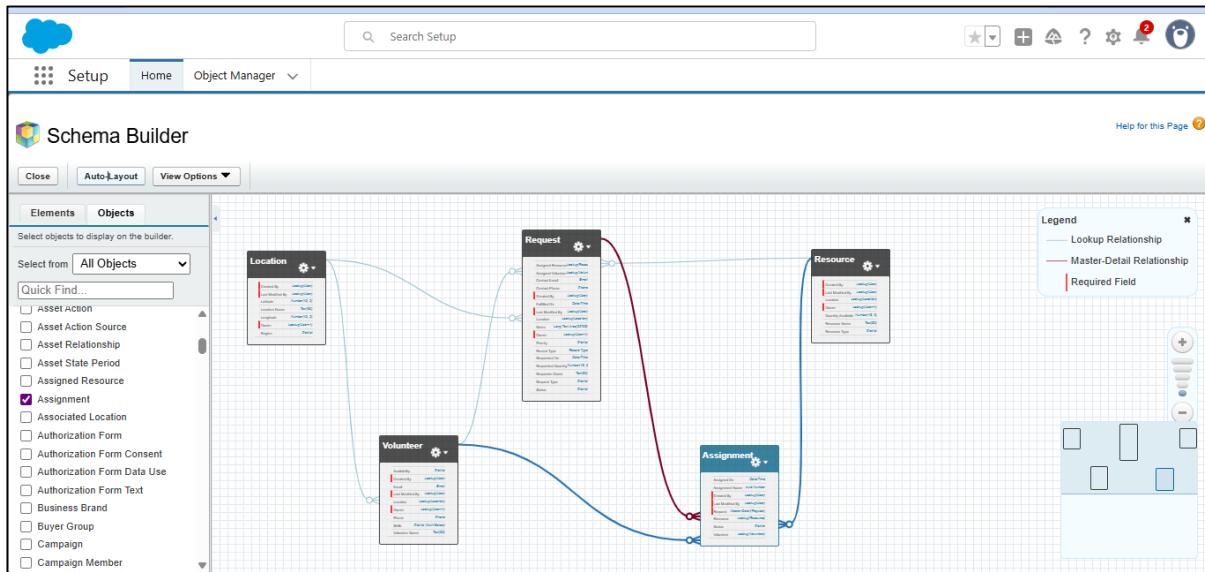
Step 5 — Compact Layouts

- Go to **Object Manager** → **Request** → **Compact Layouts** → **New**.
- Fields to show: Priority, Status, Location, Assigned Volunteer.
- Set as **Primary Compact Layout**.

The screenshot shows the Salesforce Setup interface with the Object Manager for the 'Request' object. The 'Compact Layouts' tab is selected in the sidebar. A specific compact layout record is displayed, titled 'Request Compact Layout' with the label 'Request Highlights' and API name 'Request_Highlights'. The layout includes fields for Priority, Status, Location, and Assigned Volunteer. The 'Included Fields' section lists these fields. The 'Created By' field shows 'Akshay Ingle' and the 'Modified By' field also shows 'Akshay Ingle'. There are buttons for 'Edit', 'Clone', 'Delete', and 'Compact Layout Assignment'.

Step 6 — Schema Builder

- Setup → Quick Find → **Schema Builder**.
- Drag objects: Request, Volunteer, Resource, Location, Assignment.
- Relationships will appear visually (lookups & master-detail).



Step 7 — Lookup vs Master-Detail vs Hierarchical Relationships

• Master-Detail (Request – Assignment)

- Reason: An Assignment cannot exist without a Request. If the Request is deleted, all related Assignments should also be deleted.
- Example: If Request #101 (Food Needed in Nagpur) is removed, its related volunteer/resource assignments are also removed.

• Lookup (Assignment – Volunteer, Assignment – Resource)

- Reason: A Volunteer or Resource can exist independently, even if they're not currently assigned.
- Example: Volunteer “John Doe” may be free (no assignments) but still exists in the system.

• Lookup (Request – Location, Volunteer – Location, Resource – Location)

- Reason: Requests, Volunteers, and Resources are linked to a region (Location), but Locations can exist without them.
- Hierarchical (**Not used here**)

Step 8 — Junction Objects

- Assignment is the **junction object**.
- Links many Volunteers & Resources to many Requests.
- Demonstrate a record where 1 Request is assigned to multiple Volunteers.

The screenshot shows the Salesforce Object Manager interface for the Assignment object. The left sidebar has a 'Fields & Relationships' section selected. The main area displays a table titled 'Fields & Relationships' with 8 items. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data is as follows:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Assigned On	Assigned_On__c	Date/Time		
Assignment Name	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Request	Request__c	Master-Detail(Request)		✓
Resource	Resource__c	Lookup(Resource)		✓
Status	Status__c	Picklist		

Phase 4: Automation & Logic

1 Validation Rules

Purpose: Stop invalid data (prevent save if condition fails).

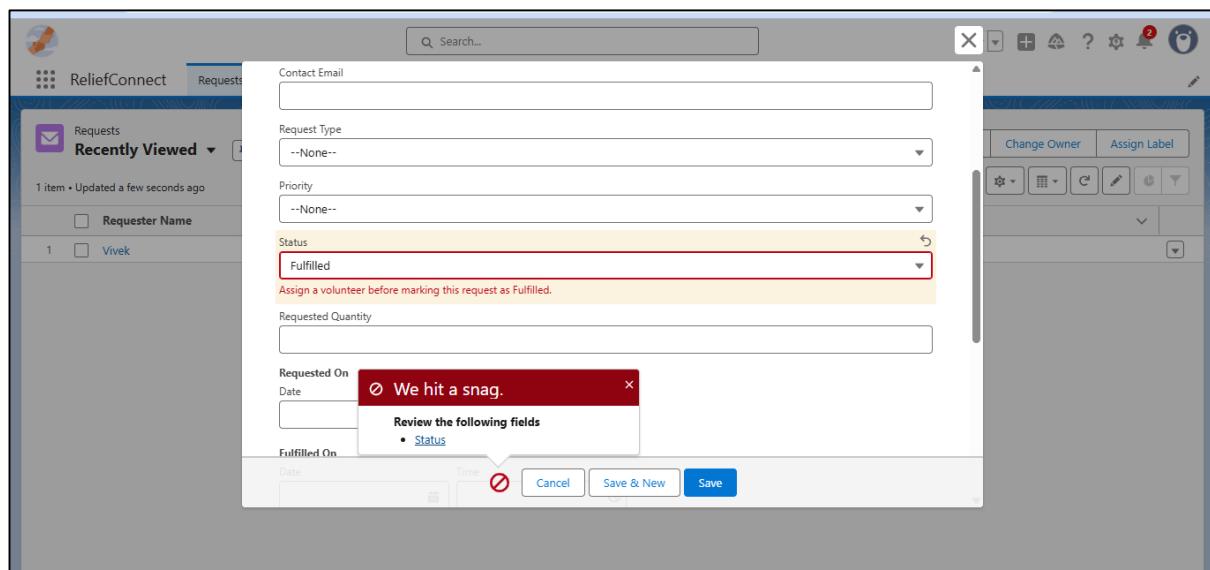
Example rule: A request cannot be marked **Fulfilled** unless an assigned volunteer exists.

Steps

1. Setup → Quick Find → **Object Manager** → Request → **Validation Rules** → New.
2. Fill:
 - **Rule Name:** VR_Request_Fulfilled_Assigned
 - **Error Condition Formula:**
AND(
 ISPICKVAL(Status__c, "Fulfilled"),
 ISBLANK(Assigned_Volunteer__c)
)
 - **Error Message:** Assign a volunteer before marking this request as Fulfilled.
 - **Error Location:** Field → Status.
3. Save & Activate.

Test

- Open a Request → set Status = Fulfilled without Assigned Volunteer → Save → you should see the error.
- Assign a Volunteer → set Status = Fulfilled → Save succeeds.



2 Email Alerts (used by Workflow/Flow)

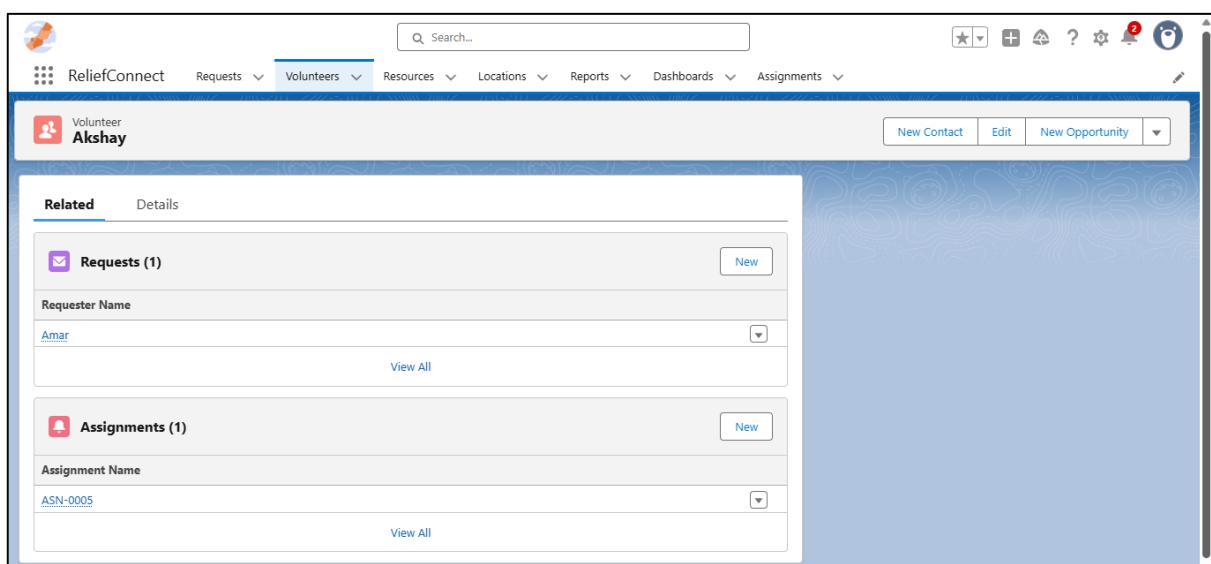
Purpose: send templated emails to users on events.

Steps

1. Create an Email Template:
 - o Setup → Quick Find → **Email Templates** → **New Email Template (Lightning)**.
 - o Name: ET_Request_Assigned
 - o Subject: You have been assigned to Request {!Request__c.Name}
 - o Body: include merge fields like {!Request__c.Requester_Name__c}, {!Request__c.Location__c}.
 - o Save.
2. Create Email Alert (used by Workflow/Flow):
 - o Setup → Quick Find → **Email Alerts** → **New Email Alert**.
 - o Label: EA_Request_Assigned
 - o Object: Assignment (or Request if you prefer)
 - o Email Template: ET_Request_Assigned
 - o Recipient Type: User/Email Field → Volunteer__c Save.

Test

- Create an Assignment (or update Request to Assigned) that triggers the Email Alert.
- Check the recipient inbox (or ActivityHistory Email record) in Salesforce for the sent message.



3 Process Builder

Purpose: if/then branching on object events (use Flow instead, but here's how).

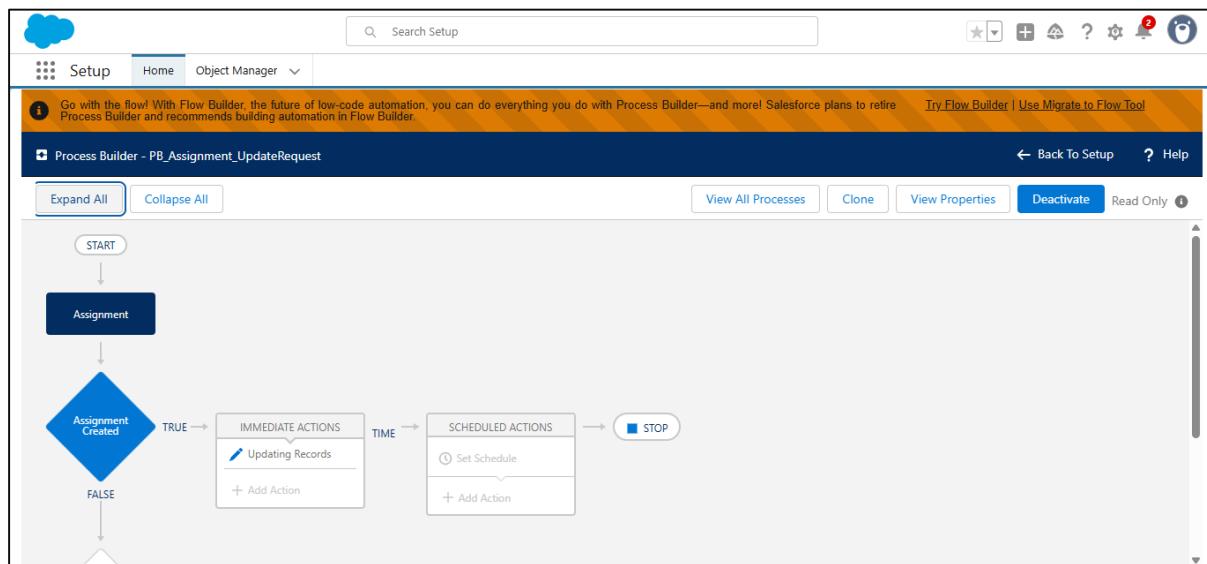
Example: When Assignment created → update Request Status to In Progress.

Steps

1. Setup → Quick Find → **Process Builder** → New.
 - Name: PB_Assignment_UpdateRequest.
2. Add Object: Assignment → start the process when a record is created.
3. Add Criteria Node:
 - Criteria Name: Always (or Assignment Created) → no conditions or Status = Assigned.
4. Immediate Actions:
 - Action Type: **Update Records** → select the associated Request record ([Assignment].Request__c) → set Status__c = In Progress.
5. Activate.

Test

- Create an Assignment linked to a Request → the Request's status should be updated.



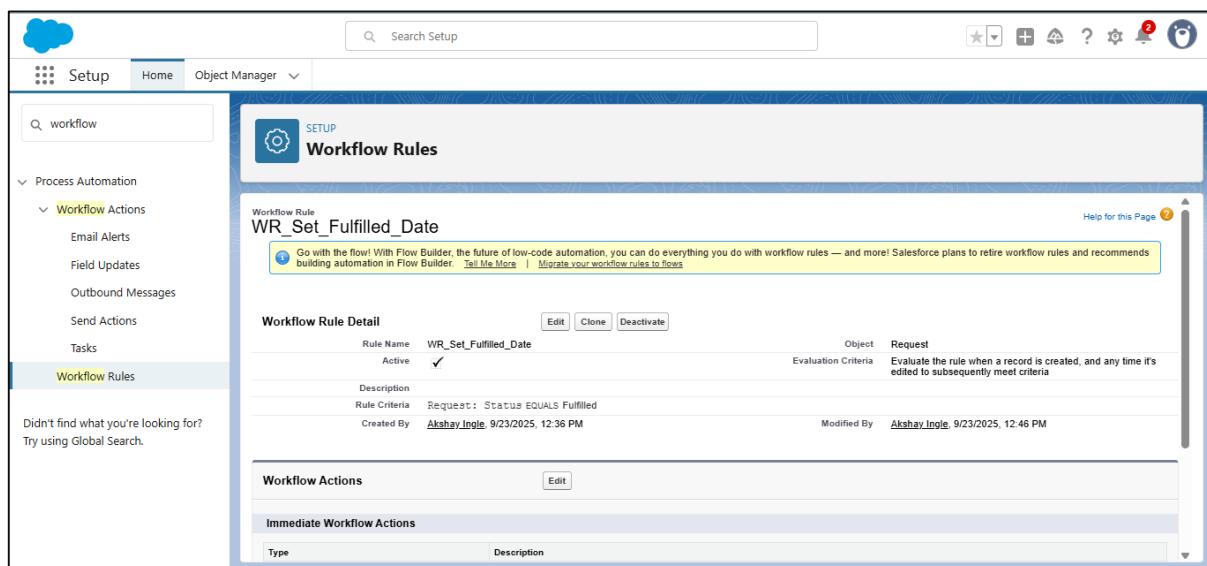
4 Workflow Rules

Steps:

1. Setup → **Workflow Rules** → New Rule.
2. Object: **Request__c**.
3. Rule Name: WR_Set_Fulfilled_Date.
4. Rule Criteria: Status__c Equals Fulfilled.
5. Action: **New Field Update**.
 - o Name: FU_Set_Fulfilled_Date.
 - o Field to Update: Fulfilled_On__c.
 - o Formula: NOW()
6. Save → Activate Workflow.

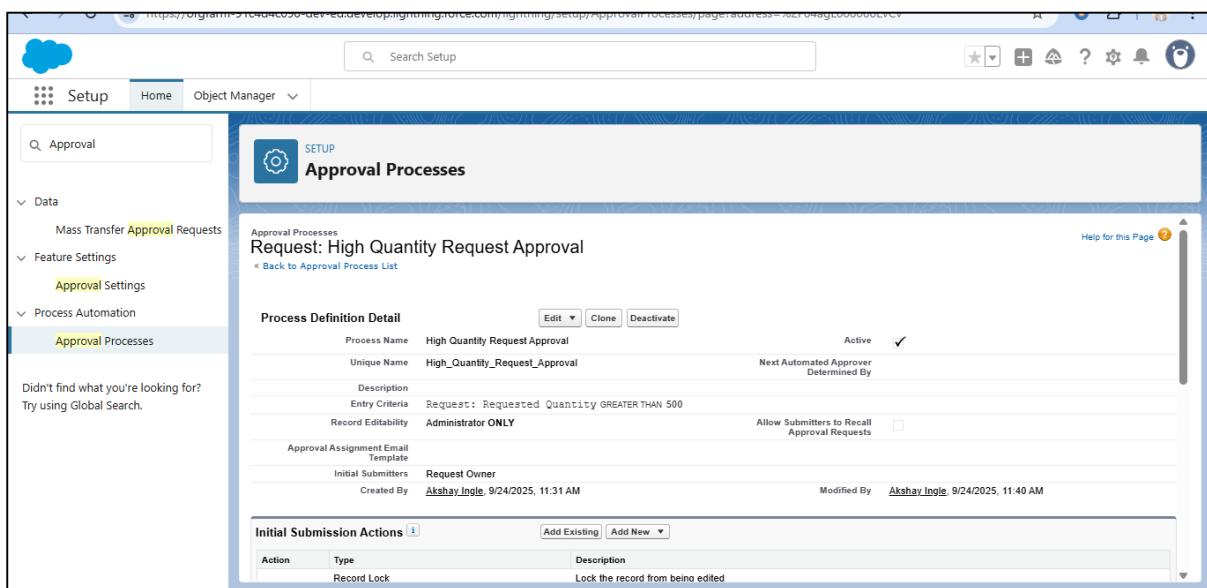
Test:

- Open a Request record.
- Change Status = Fulfilled → Save.
- Check that Fulfilled_On__c is now set.



5 Approval Process: High Quantity Request

- Navigate: Setup → Quick Find → Approval Processes
- Object: Request__c
- Create Process: Jump Start Wizard
- Basic Info: Name = High Quantity Request Approval
- Entry Criteria: Requested_Quantity__c > 500
- Assign Approver: Automatically → Relief Head
- Initial Submission: Status__c = Pending Approval
- Final Approval: Status__c = Approved
- Final Rejection: Status__c = Rejected
- Activate: Save & Activate



Notify Volunteer Flow

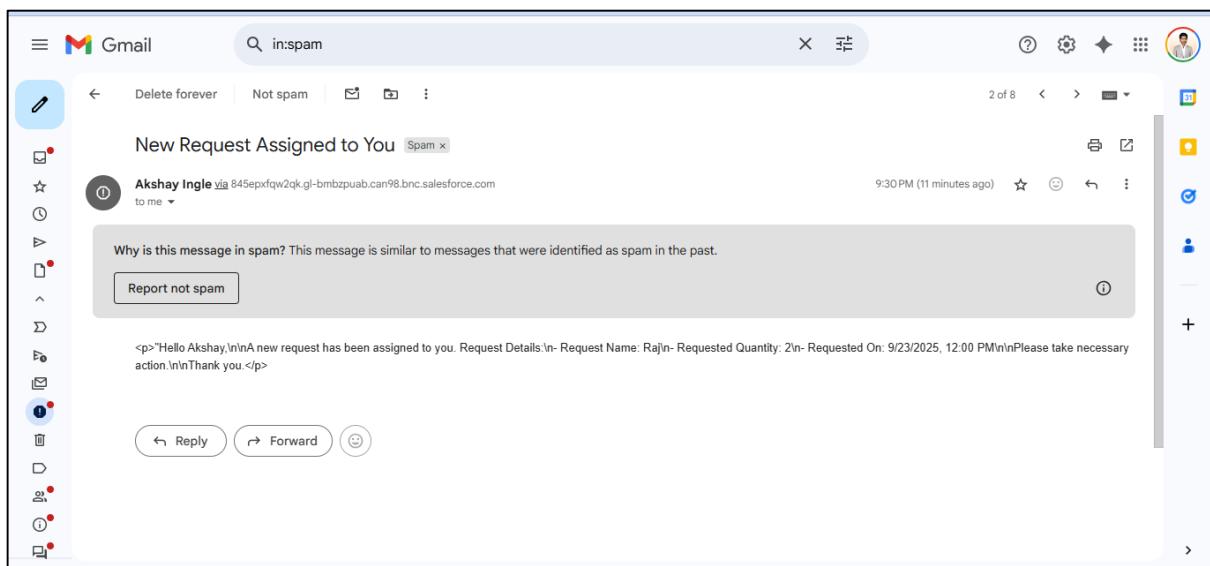
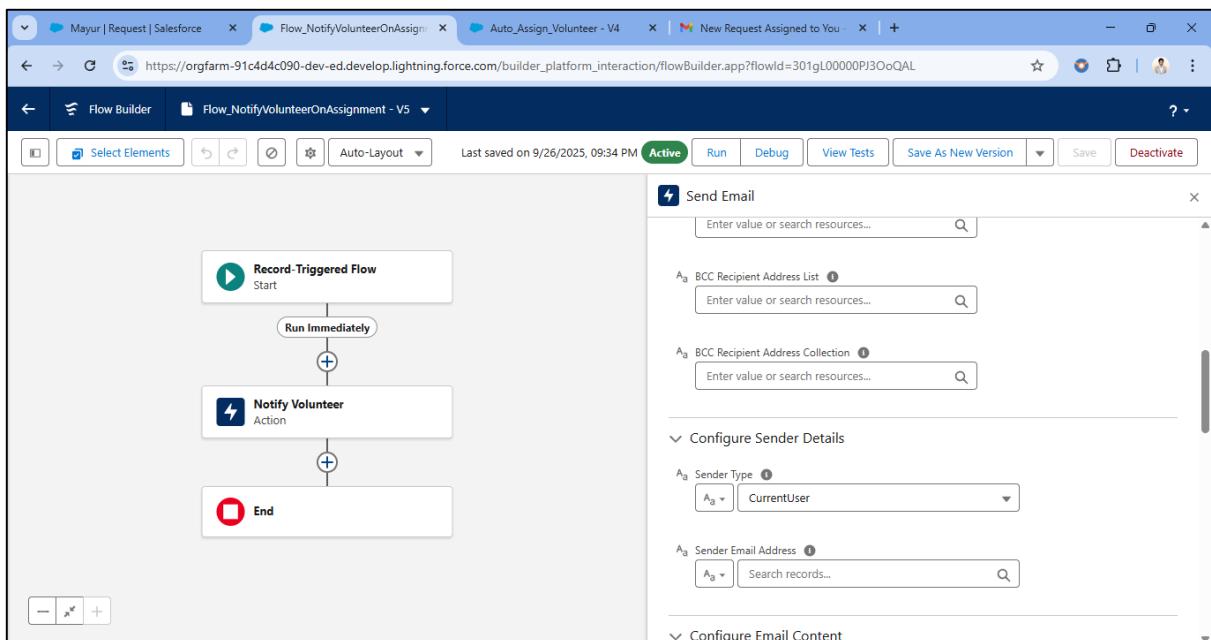
Step 1: Create Flow

- **Type:** Record-Triggered Flow
- **Object:** Request__c
- **Trigger:** On record update
- **Condition:** Assigned_Volunteer__c Is Null = False
- **Optimize:** Actions and Related Records

Step 2: Add Email Action

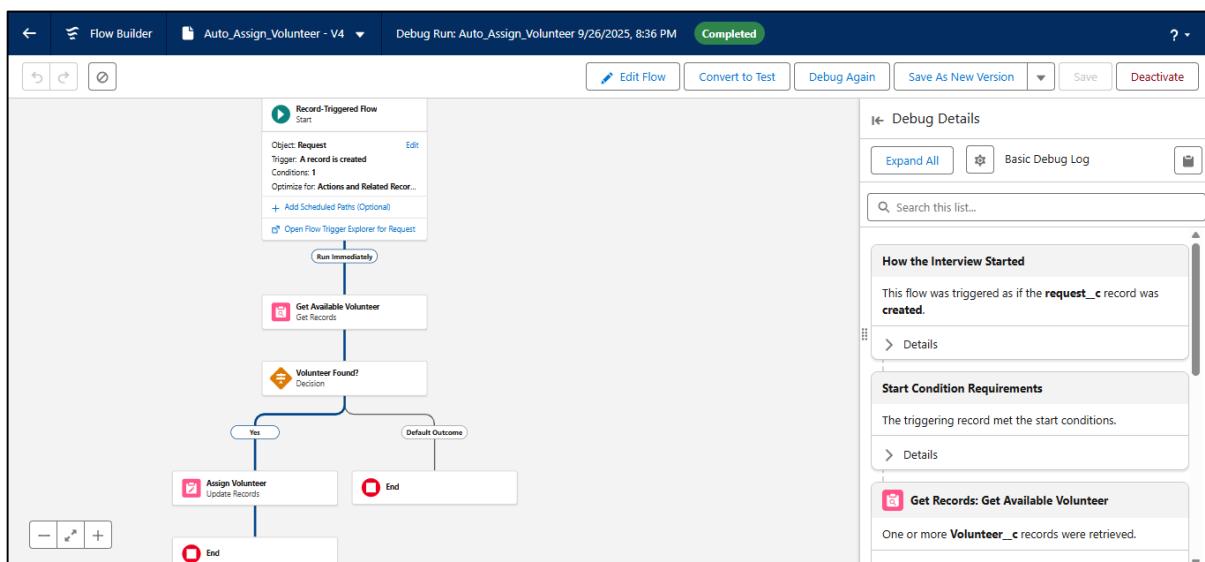
- **Action:** Email Alert (or Send Email)
- **Template:** "New Request Assigned to You"
- **Body:** "Hello {!Assigned_Volunteer__c.Name}, you are assigned to Request {!Request__c.Name}."
- **Recipient:** {!\$Record.Assigned_Volunteer__r.Email__c}

Step 3: Save & Activate



Auto Assign Volunteer Flow

- Flow Trigger
 - Flow Name: Flow_AutoAssignVolunteer
 - Object: Request__c
 - Trigger: When a record is created or updated
- Get Records Element
 - Element Label: Get Available Volunteer
 - Object: Volunteer__c
 - Filter Criteria: Availability__c Equals Available
- Decision Element
 - Condition: {!Get_Available_Volunteer.Id} Is Null = False
 - Paths:
 - Yes: Update Records
 - Default: Do nothing
- Update Records Element
 - Record to Update: Record that triggered the flow
 - Field to Update: Assigned_Volunteer__c
 - Value: {!Get_Available_Volunteer.Id}

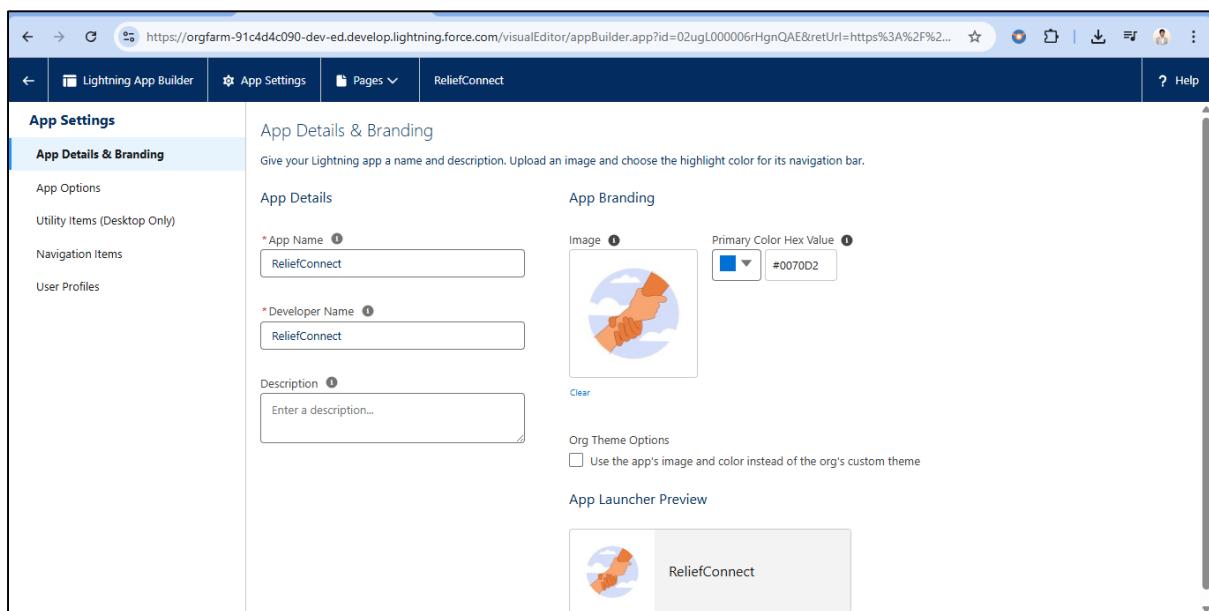


Phase 6: User Interface Development

In this phase, the focus was on designing the **Lightning Experience user interface** to provide users with an intuitive and accessible way to interact with the Disaster Response System.

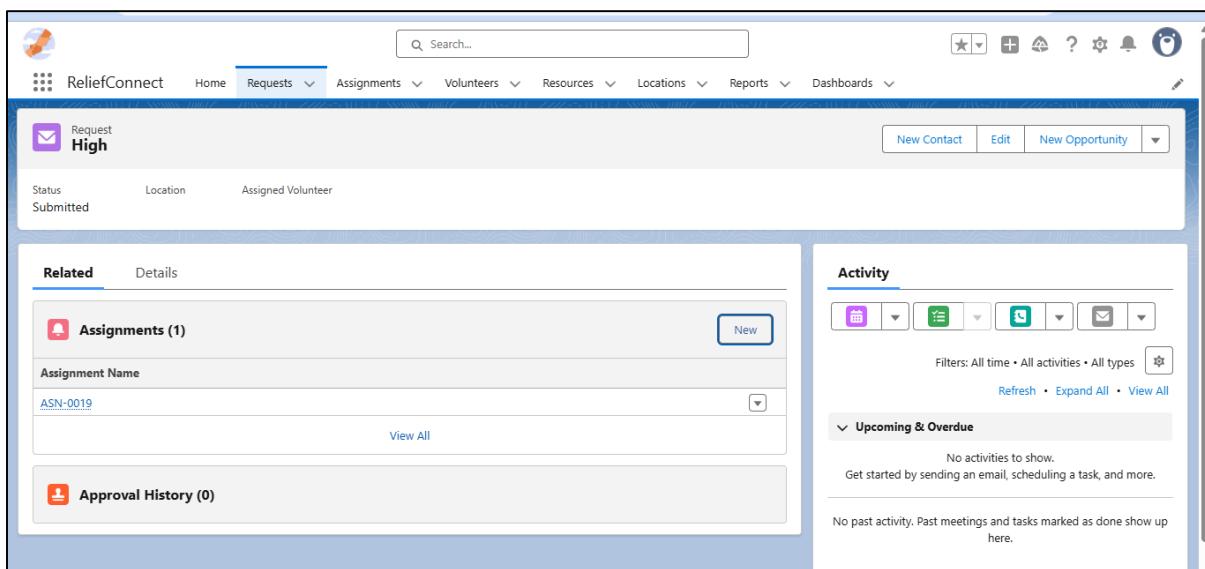
Lightning App Builder

- Customized the **Home Page** using Lightning App Builder.
- Added regions and placed standard components (e.g., Rich Text, Recent Items, Reports/Charts).
- Ensured quick navigation to **Requests, Volunteers, and Reports**.



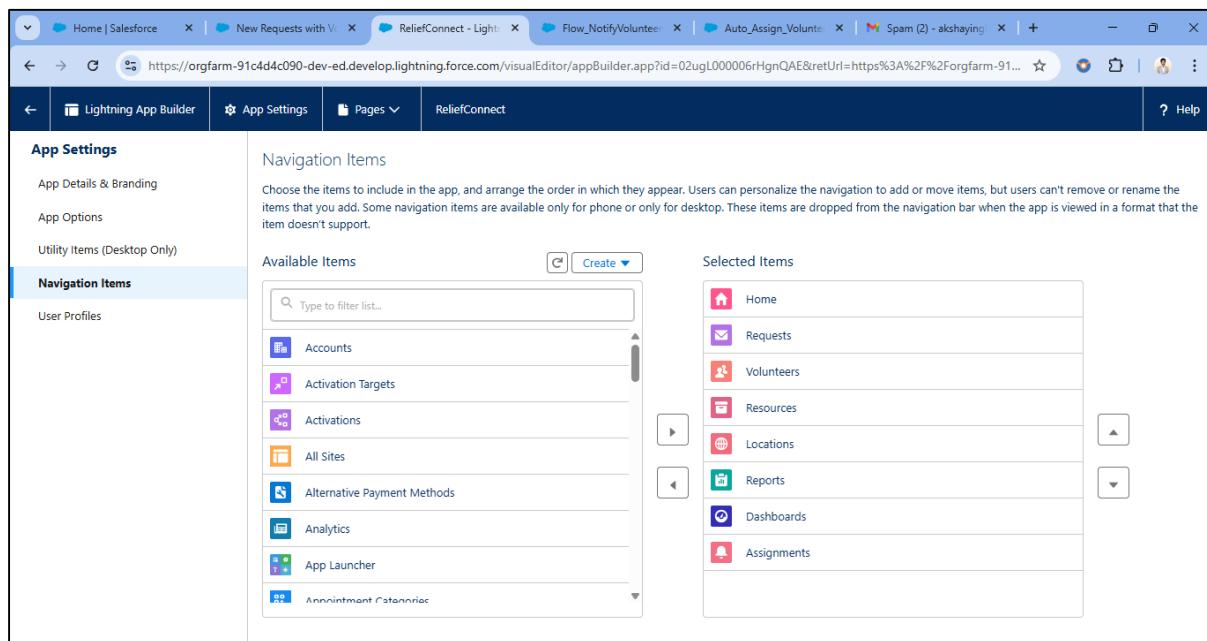
Record Pages

- Customized the **Request__c record page** to display request details, assigned volunteer, and status in a user-friendly format.



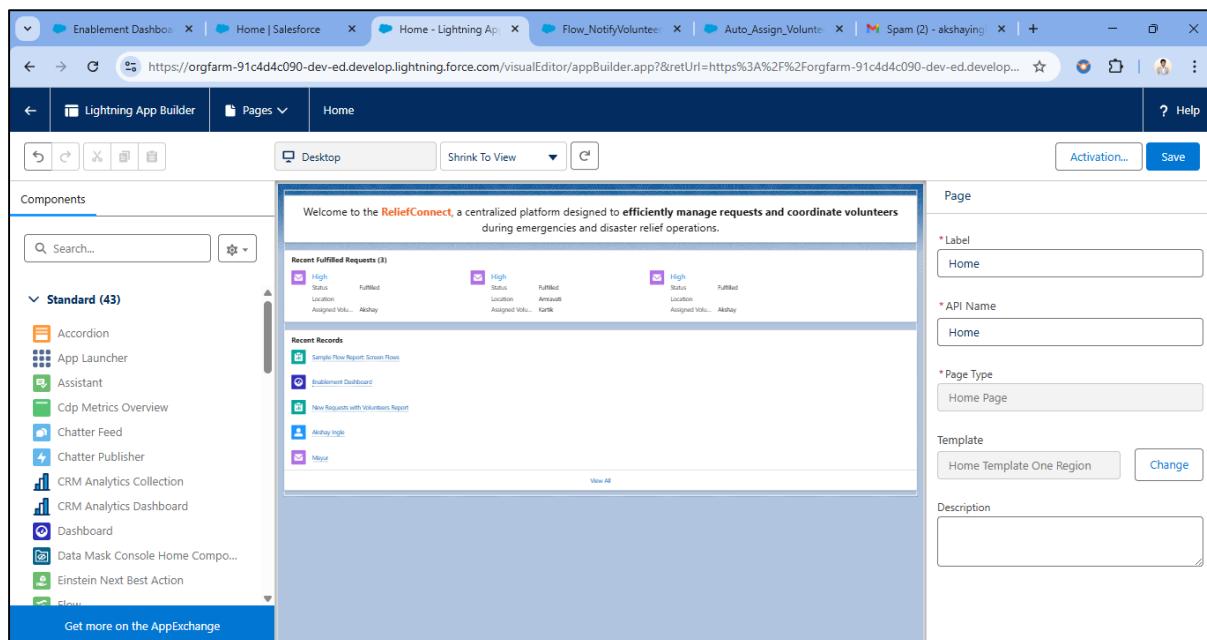
Tabs & Navigation

- Created tabs for **Requests** and **Volunteers** so users can access these objects directly from the Lightning App.



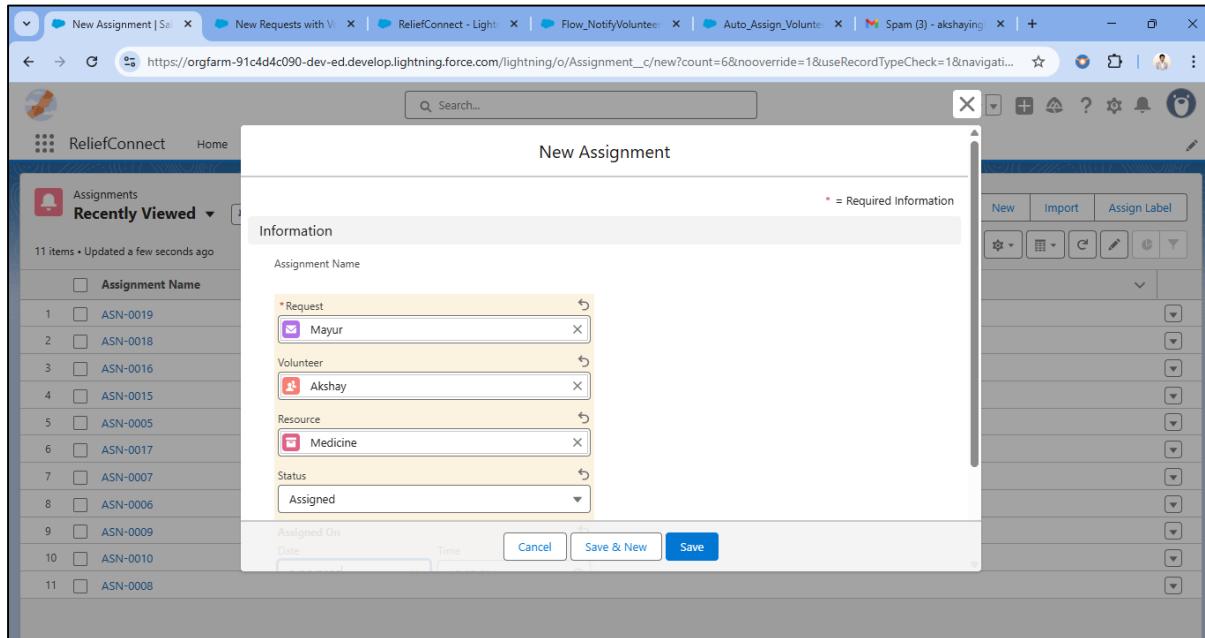
Home Page Layouts

- Added a **Rich Text component** introducing the project, key features, and usage instructions.

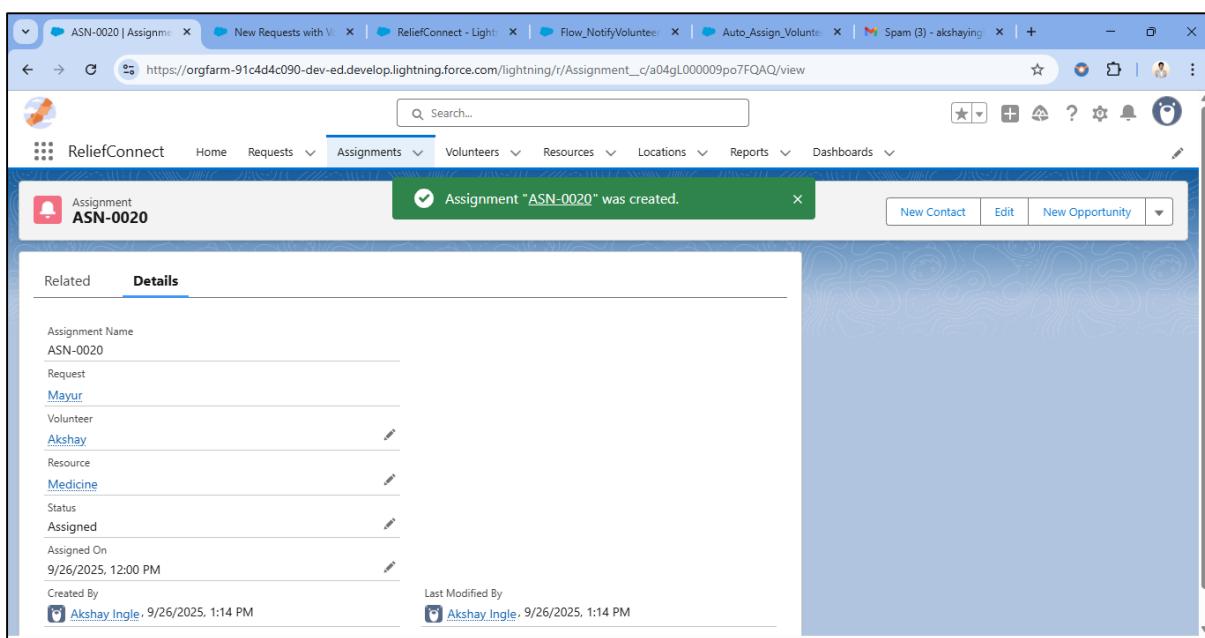


To simplify the tracking of which volunteer is assigned to which request, an **Assignments tab** was added in the Lightning App

The Assignments tab acts as a central place where users can view and manage the relationship between **Requests** and **Volunteers**.



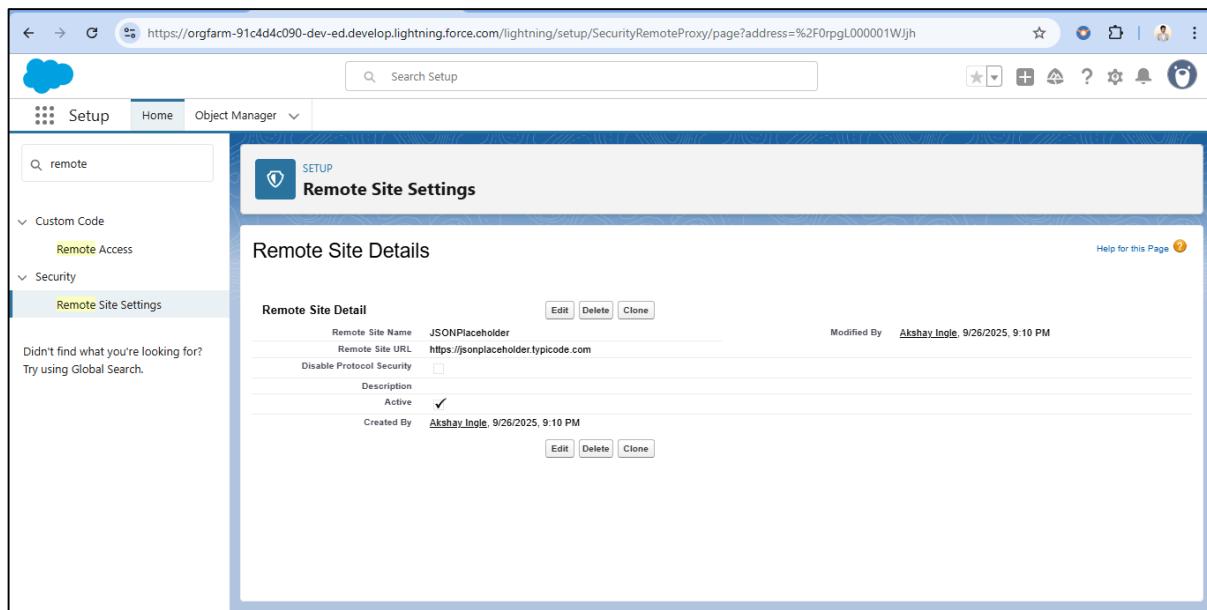
- Displays all request–volunteer assignments in a list view.
 - Request Name
 - Volunteer Name
 - Assignment Status (Active / Completed)
 - Requested Quantity
 - Fulfilled On Date



Phase 7: Integration & External Access

A Remote Site Setting (required for Apex callouts)

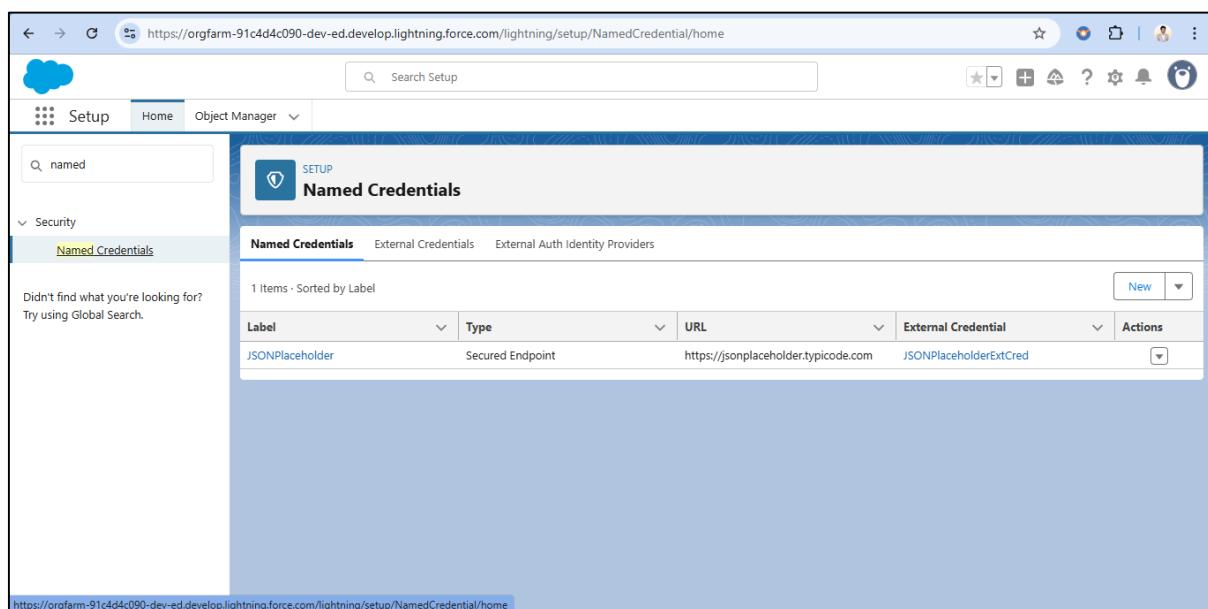
1. Setup → Quick Find → Remote Site Settings → New Remote Site.
2. Label: JSONPlaceholder (example). Remote Site URL:
<https://jsonplaceholder.typicode.com> → Save.
3. Why: allows Salesforce to call that external endpoint (demo/test).



The screenshot shows the 'Remote Site Settings' page in the Salesforce Setup. The left sidebar has 'Remote Site Settings' selected under 'Remote Access'. The main area displays a 'Remote Site Details' section for a site named 'JSONPlaceholder' with the URL 'https://jsonplaceholder.typicode.com'. The 'Active' checkbox is checked. The page includes standard Salesforce navigation and edit buttons.

B Named Credential

1. Setup → Quick Find → **Named Credentials** → New Named Credential.
2. Label: JSONPlaceholder_NC. URL: <https://jsonplaceholder.typicode.com>. Identity Type: **Anonymous** (for demo) or **Named Principal** if you have credentials. Authentication: **No Authentication** (for demo). Save.



The screenshot shows the 'Named Credentials' page in the Salesforce Setup. The left sidebar has 'Named Credentials' selected under 'Security'. The main area shows a table with one item: 'Label' is 'JSONPlaceholder', 'Type' is 'Secured Endpoint', and 'URL' is 'https://jsonplaceholder.typicode.com'. The page includes standard Salesforce navigation and edit buttons.

C Test an Apex Callout using Named Credential

- Open Developer Console (avatar → Developer Console).
- Debug → Open Execute Anonymous Window.
- Check Open Log then Execute.

The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and a back/forward button. The URL is https://orgfarm-91c4d4c090-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. A yellow header bar indicates the log is for executeAnonymous at 9/27/2025, 10:14:50 AM. The main area has two panes: 'Execution Log' on the left and 'Enter Apex Code' on the right. The Execution Log table shows several USER_DEBUG entries. The Apex code pane contains the following code:

```
1 HttpRequest req = new HttpRequest();
2 req.setEndpoint('callout:JSONPlaceholder/po');
3 req.setMethod('GET');
4 Http http = new Http();
5 HttpResponse res = http.send(req);
6 System.debug('Status: ' + res.getStatus());
7 System.debug('Body: ' + res.getBody());
```

Below the code pane are three buttons: Open Log (checked), Execute, and Execute Highlighted. At the bottom of the console are filter options (This Frame, Executable, Debug Only, Filter, Click here to filter the log) and tabs for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The Logs tab shows a single entry for Akshay Ingle.

User	Application	Operation	Time	Status	Read	Size
Akshay Ingle	Unknown	/services/data/v64.0/to...	9/27/2025, 10:14:50 AM	Success		4.59 KB

Phase 8 — Data Management & Deployment

A — Data Import Wizard

1. Setup → Quick Find → **Data Import Wizard** → Launch Wizard.
2. Select **Custom Objects** → Request (or Volunteers/Resources).
3. Upload your CSV file (prepare columns matching API names: e.g., Requester_Name__c, Priority__c, Request_Type__c, Requested_On__c).

The screenshot shows the 'Edit Field Mapping: Requests' page in the Salesforce Data Import Wizard. A progress bar at the top indicates 'Almost done'. Below it, a table maps CSV headers to Salesforce fields:

Edit	Mapped Salesforce Object	CSV Header	Example	Example	Example
Change	Requester Name	Requester_Name__c	Aarav Sharma	Ananya Patel	Rohan Verma
Change	Priority	Priority__c	High	Medium	Low
Change	Request Type	Request_Type__c	Medical	Supply	Medical
Change	Requested On	Requested_On__c	20-09-2025	21-09-2025	22-09-2025

At the bottom right are 'Cancel', 'Previous', and 'Next' buttons.

Map fields (Data Import Wizard shows mapping) → Start Import

The screenshot shows the 'Review & Start Import' page in the Salesforce Data Import Wizard. A progress bar indicates 'Great job'. The 'Your selections:' section lists 'Requests ✓', 'Add new records ✓', and 'Requested_Records.csv ✓'. The 'Your import will include:' section shows 'Mapped fields' with the number '4' and 'Unmapped fields' with the number '0'. At the bottom right are 'Cancel', 'Previous', and 'Start Import' buttons.

B- Data Loader

The screenshot shows the Bulk Data Load Jobs page in the Salesforce Setup. A single job named '750gL00000ECwcr' is listed. The job details are as follows:

Job ID	Submitted By	Start Time	End Time	Time to Complete ([hh:mm:ss])	Object	External ID Field	Content Type	Concurrency Mode	API Version	Job Type	Bulk V1	Status	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)						
750gL00000ECwcr	Akshay Ingle	9/26/2025, 10:55 PM PST	9/26/2025, 10:55 PM PST	00:01	Request		CSV	Parallel	54.0	Insert	0 Queued Batches	0 In Progress Batches	Closed	69	0	0					
										Completed Batches	1	Failed Batches	0	Progress	100%	Records Processed	10	Records Failed	10	Retries	0

C — Duplicate Rules & Matching Rules

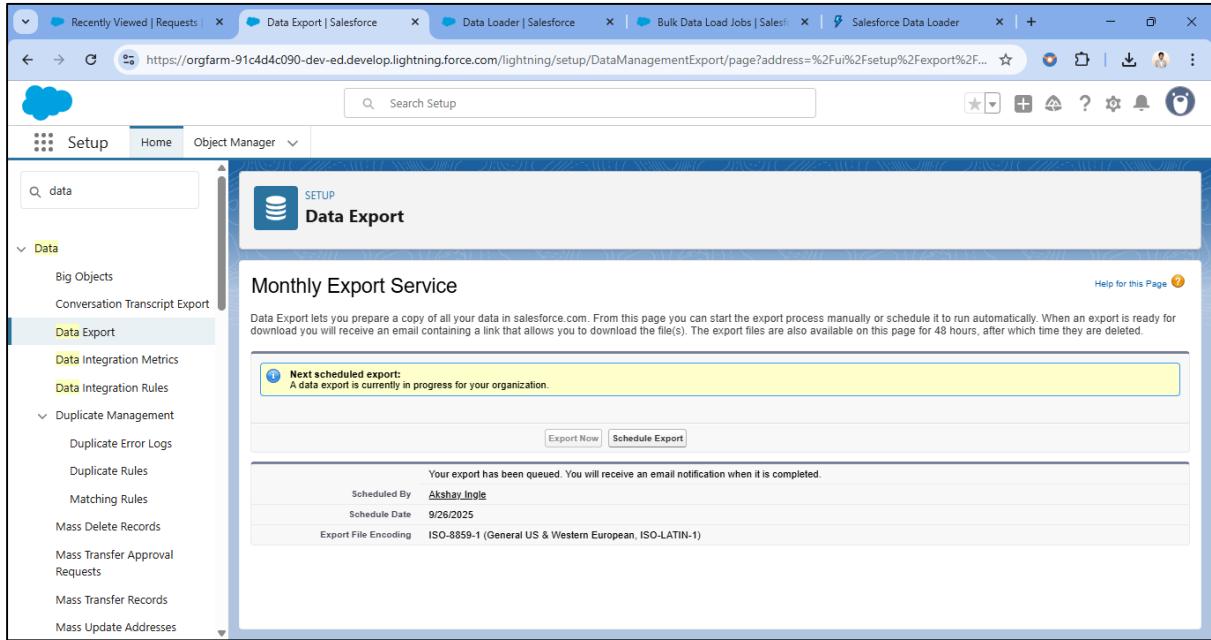
1. Setup → Quick Find → **Matching Rules** → New (create matching rule for Request by phone/email).
2. Setup → Quick Find → **Duplicate Rules** → New → choose object Request__c → link to matching Rule → Action: Block or Alert (Alert recommended for demo). Activate.
3. Test: try inserting duplicate Request with same phone → system shows duplicate alert.

The screenshot shows the Matching Rules page in the Salesforce Setup. A new rule named 'Request_Duplicate_ByPhoneEmail' is displayed. The rule details are as follows:

Object	Request	Rule Name	Request_Duplicate_ByPhoneEmail	Unique Name	Request_Duplicate_ByPhoneEmail	Description	select duplicates by phone or email	Matching Criteria	(Request: Contact_Phone EXACT MatchBlank = FALSE) AND (Request: Contact_Email EXACT MatchBlank = FALSE)	Status	Active	Created By	Akshay Ingle	Modified By	Akshay Ingle
Created By	Akshay Ingle	Modified By	Akshay Ingle	Date	9/26/2025, 11:19 PM	Date	9/26/2025, 11:20 PM								

D — Data Export & Backup

1. Setup → Quick Find → **Data Export** → **Export Now** or Schedule Export → choose objects (Requests, Volunteers, Resources) → Start Export.

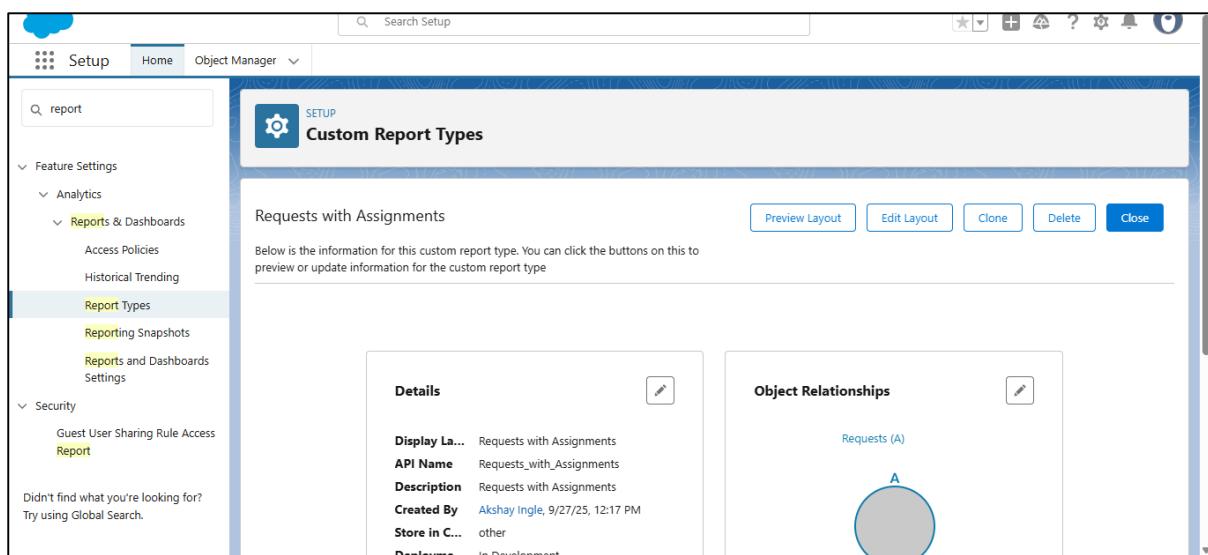


Phase 9 — Reporting, Dashboards & Security Review

Relevant: Reports types, Dashboards (including dynamic), Sharing & Field-level security, Login IP ranges, Audit Trail.

A — Custom Report Type (for Requests + Assignments)

1. Setup → Quick Find → **Report Types** → New Custom Report Type.
 - o Primary Object: Request__c.
 - o Give it a name: Requests with Assignments.
 - o Click Save.



B — Create Key Reports (Tabular & Summary)

1. Summary Report

1. App Launcher → Reports → New Report → select Requests with Assignments.
2. Group Rows by **Location__c**.
3. Columns: Requester Name, Priority, Status, Assigned Volunteer.
4. Filter: Status ≠ Fulfilled.
5. Save as **Open Requests by Location**.

REPORT ▾

New Requests with Assignments Report ▾ Requests with Assignments

Fields

Filters 2

Add filter... Search...

Show Me My requests

Created Date Current FQ (Jul 1, 2025 - Sep 30, 2025)

Requester Name Priority Assigned Volunteer: Volunteer Name Status

1 Vivek High Akshay Fulfilled

2 Raj High Akshay Fulfilled

3 Amar Medium Akshay Fulfilled

4 Sita High Akshay Assigned

5 Arya High - Submitted

6 Pranav High Akshay Fulfilled

7 Akshay Ingle High - Submitted

8 Preet High Vijay Submitted

9 User High Test Volunteer Assigned

10 Mayur High Kartik Fulfilled

Update Preview Automatically

Figure 1 Before Applying filter

REPORT ▾

New Requests with Assignments Report ▾ Requests with Assignments

Fields

Filters 3

Add filter... Search...

Show Me My requests

Created Date Current FQ (Jul 1, 2025 - Sep 30, 2025)

Status not equal to Fulfilled

Requester Name Priority Assigned Volunteer: Volunteer Name Status

1 Sita High Akshay Assigned

2 Arya High - Submitted

3 Akshay Ingle High - Submitted

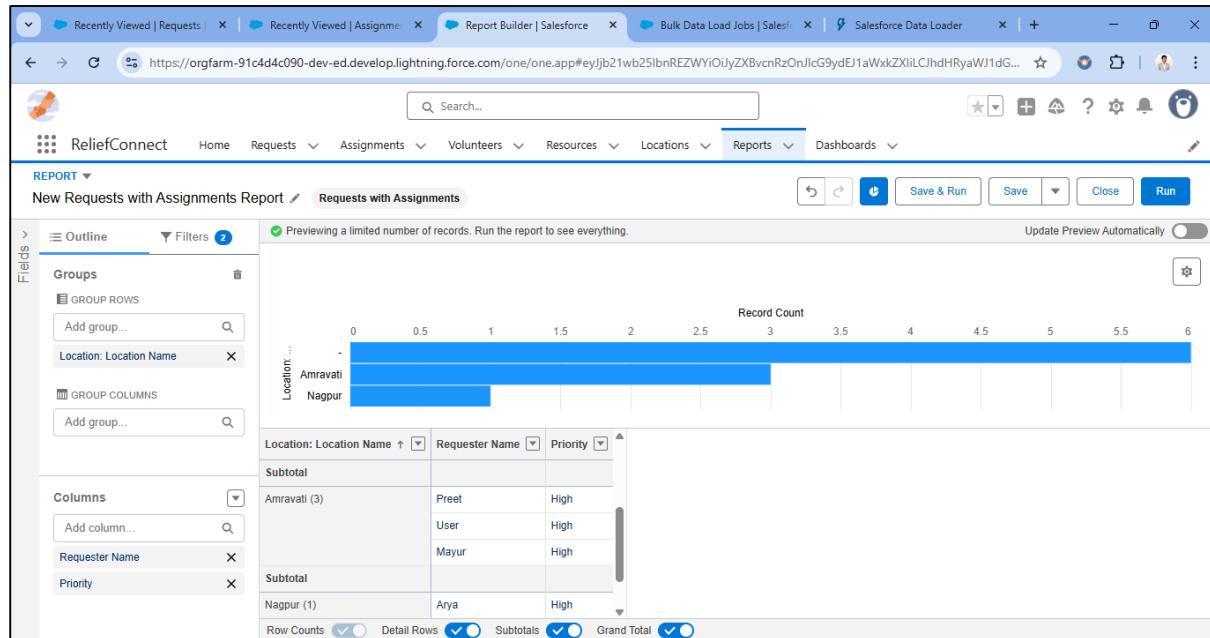
4 Preet High Vijay Submitted

5 User High Test Volunteer Assigned

Figure 2 After Applying filter

2. Matrix Report

1. App Launcher → Reports → New Report → select Requests with Assignments.
2. Rows = Region / Columns = Priority.
3. Aggregate = Count of Requests.
4. Save as **Requests by Region & Priority**.



C — Dashboards & Dynamic Dashboards

1. App Launcher → Dashboards → New Dashboard → Name: DRMS Overview.
2. Add Components:
 - **Bar Chart:** Open Requests by Location.
 - **Table:** Assignments by Volunteer.
3. Enable **Dynamic Dashboard:** View dashboard as Logged-in User (if org allows).
4. Save & Run.

The screenshot shows the DRMS Overview dashboard in a web browser. The dashboard features a bar chart titled "Requests by Region & Priority" with data for Amravati, Nagpur, and another location. It also includes a table titled "Requests Status" showing assignments for various volunteers. The dashboard is titled "DRMS Overview" and is dated Sep 27, 2025.

Requester Name	Priority	Assigned Volunteer	Volunteer Name	Status
Akshay Ingle	High	-	-	Submitted
Arya	High	-	-	Submitted
Preet	High	Vijay	-	Submitted
Sita	High	Akshay	-	Assigned
User	High	Test Volunteer	-	Assigned

D — Sharing Settings & Field Level Security

1. Organization-Wide Defaults (OWD)
 1. Setup → Quick Find → Sharing Settings.
 2. Show OWD for Request__c (should be Private).
2. Field Level Security
 1. Setup → Object Manager → Request__c → Fields & Relationships → select a field Notes.
 2. Set **Field-Level Security** → hide from Volunteer profile if needed.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes tabs for Recently Viewed, Request, Home, DRMS Overview, Bulk Data Load Jobs, and Salesforce Data Load. The main title is "SETUP > OBJECT MANAGER Request". On the left, a sidebar lists "Details", "Fields & Relationships" (which is selected), and other layout-related options like Page Layouts, Lightning Record Pages, Buttons, etc. The main content area is titled "Request Custom Field Notes" and shows the "Custom Field Definition Detail" for the "Notes" field. The field is defined as a "Long Text Area" with the API name "Notes__c". It was created by Akshay Ingle on 9/23/2025 at 12:31 AM and modified by the same user on 9/23/2025 at 12:31 AM.

3. Profiles & Permission Sets

1. Ensure **Coordinator** has Read/Write on Requests.
2. Volunteers have limited access as planned.

The screenshot shows the Salesforce Profiles page. The top navigation bar includes tabs for Recently Viewed, Profiles, Home, DRMS Overview, Bulk Data Load Jobs, and Salesforce Data Load. The main title is "SETUP Profiles". The left sidebar shows a search bar and lists "Users" and "Profiles" (which is selected). A message says "Didn't find what you're looking for? Try using Global Search." The main content area is titled "Coordinator Profile" and shows the "Profile Detail" for the "Coordinator Profile". The profile is assigned to the "Salesforce" user license and is a "Custom Profile". It was created by Akshay Ingle on 9/18/2025 at 12:32 PM and modified by the same user on 9/25/2025 at 12:50 AM. Under "Page Layouts", it lists "Standard Object Layouts" and "Email Application".

E — Session Settings, Login IP Ranges & Audit Trail

1. Session Settings

- Setup → Quick Find → Session Settings.
- Review timeout, secure cookie settings.

The screenshot shows the Salesforce Session Settings page. The URL is <https://orgfarm-91c4d4c090-dev-ed.develop.lightning.force.com/lightning/setup/SecuritySession/home>. The page title is "Session Settings". On the left, there's a sidebar with "Setup" selected. Under "Security", "Session Management" is listed, and "Session Settings" is selected. A message says "Didn't find what you're looking for? Try using Global Search." The main content area has a "Session Timeout" section with a dropdown set to "2 hours", a checked checkbox for "Force logout on session timeout", and an unchecked checkbox for "Disable session timeout warning popup". Below that is a "Session Settings" section with several checkboxes:

- Lock sessions to the IP address from which they originated
- Lock sessions to the domain in which they were first used
- Terminate all of a user's sessions when an admin resets that user's password
- Force reload after Login-As-User
- Require HttpOnly attribute
- Use POST requests for cross-domain sessions
- Enforce login IP ranges on every request
- When embedding a Lightning application in a third-party site, use a session token instead of a session cookie.

A note at the bottom says "Extended use of IE11 with Lightning Experience".

2. Login IP Ranges

- Profile → open Volunteer Profile → Login IP Ranges.
- Add if needed (demo: note none set if not configured).

The screenshot shows the Salesforce Profiles page. The URL is <https://orgfarm-91c4d4c090-dev-ed.develop.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00egL000004pDyN>. The page title is "Profiles". The left sidebar shows "Setup" selected under "Users" and "Profiles" selected. A message says "Didn't find what you're looking for? Try using Global Search.". The main content area has three sections:

- Login Hours**: A table showing daily start and end times for login.

Day	Start Time	End Time
Sunday	7:30 PM PDT	9:30 AM PDT
Monday	7:30 PM PDT	9:30 AM PDT
Tuesday	7:30 PM PDT	9:30 AM PDT
Wednesday	7:30 PM PDT	9:30 AM PDT
Thursday	7:30 PM PDT	9:30 AM PDT
Friday	7:30 PM PDT	9:30 AM PDT
Saturday	7:30 PM PDT	9:30 AM PDT
- Login IP Ranges**: A table showing IP range details.

Action	IP Start Address	IP End Address	Description
Edit Del	49.14.186.1	49.14.186.50	
- Enabled Apex Class Access**: A table showing apex class access status.

No Apex Classes enabled

3. Audit Trail

- Setup → Quick Find → View Setup Audit Trail → Download last 6 months.

The screenshot shows the Salesforce Setup Audit Trail page. The left sidebar has sections like Feature Settings, Sales, Security, and View Setup Audit Trail, with the latter being the active tab. The main area displays a table of audit events:

Date	User	Action	Section	Delegate User
9/27/2025, 12:53:34 AM PDT	akshayingle627670@agentforce.com	Added Login Ip Range to Voluter Manage Users		
9/27/2025, 12:42:47 AM PDT	akshayingle627670@agentforce.com	Changed profile Volunteer Pro Manage Users		
9/26/2025, 11:24:14 PM PDT	akshayingle627670@agentforce.com	Requested an export	Data Export	
9/26/2025, 11:20:48 PM PDT	akshayingle627670@agentforce.com	Request matching rule, Reque Matching Rule		
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:20:16 PM PDT	akshayingle627670@agentforce.com	Request matching rule, Reque Matching Rule		
9/26/2025, 11:20:06 PM PDT	akshayingle627670@agentforce.com	Request matching rule, Reque Matching Rule		
9/26/2025, 11:20:01 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:20:01 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com	For matching rule Request_Du Matching Rule		
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com	Created new Request matchin Matching Rule		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Finished the process to create External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Associated a new External Cli External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Generated the consumer secr External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Generated the consumer key External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Updated the External Client A External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Associated a new External Cli External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Started the process to create t External Client Application		
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com	Created an External Client And External Client Application		

SetupAuditTrail1758959738703 - Excel (Product Activation Failed)						
Date	User	Source Namespace	Action	Section	Delegate User	
9/27/2025, 12:53:34 AM PDT	akshayingle627670@agentforce.com		Added Login Ip Range to Voluter Manage Users			
9/27/2025, 12:42:47 AM PDT	akshayingle627670@agentforce.com		Changed profile Volunteer Pro Manage Users			
9/26/2025, 11:24:14 PM PDT	akshayingle627670@agentforce.com		Requested an export	Data Export		
9/26/2025, 11:20:48 PM PDT	akshayingle627670@agentforce.com		Request matching rule, Reque Matching Rule			
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:20:43 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:20:16 PM PDT	akshayingle627670@agentforce.com		Request matching rule, Reque Matching Rule			
9/26/2025, 11:20:06 PM PDT	akshayingle627670@agentforce.com		Request matching rule, Reque Matching Rule			
9/26/2025, 11:20:01 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:20:01 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com		For matching rule Request_Du Matching Rule			
9/26/2025, 11:19:37 PM PDT	akshayingle627670@agentforce.com		Created new Request matchin Matching Rule			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Finished the process to create External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Associated a new External Cli External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Generated the consumer secr External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Generated the consumer key External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Updated the External Client A External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Associated a new External Cli External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Started the process to create t External Client Application			
9/26/2025, 10:06:36 PM PDT	akshayingle627670@agentforce.com		Created an External Client And External Client Application			