Salesforce NGO Donation & Volunteer Management System Daily Development Log

This document records the day-wise development progress of the Salesforce Capstone Project – NGO Donation & Volunteer Management System. Each day corresponds to a project phase and includes tasks completed, deliverables, and status updates.

Day 1 – Phase 1: Problem Understanding & Industry Analysis

Tasks Completed:

- Requirement Gathering: Identified main features donor registration & donation tracking, volunteer registration & event assignment, event management, automated emails, reporting.
- Stakeholder Analysis: Defined key stakeholders NGO Admin, Donor Manager, Volunteer Manager, Donors, Volunteers.
- Business Process Mapping: Outlined donor cycle, volunteer cycle, and event cycle; created process flow diagram.
- Industry-specific Use Case Analysis: Researched NGO practices with Salesforce (Nonprofit Success Pack).
- AppExchange Exploration: Reviewed existing solutions like NPSP, Volunteer Management apps.

Deliverables:

- Requirements_Day1.docx uploaded to GitHub.
- ProcessFlow_Day1.png (business process diagram) uploaded to GitHub.

Status

• Completed requirement gathering, stakeholder analysis, business process mapping, industry-specific use case analysis, and AppExchange exploration for the NGO Donation & Volunteer Management System. Uploaded requirements document and process flow diagram to GitHub.

Day 2 - Daily Progress Report

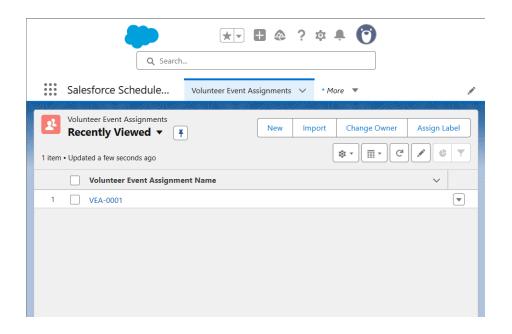
What I worked on today

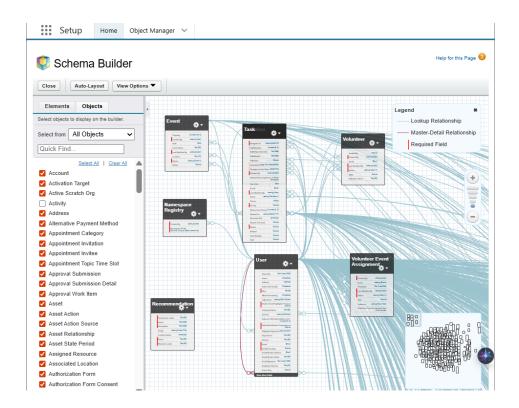
Today, I focused on building the **core data model** for our Salesforce NGO Donation & Volunteer Management System.

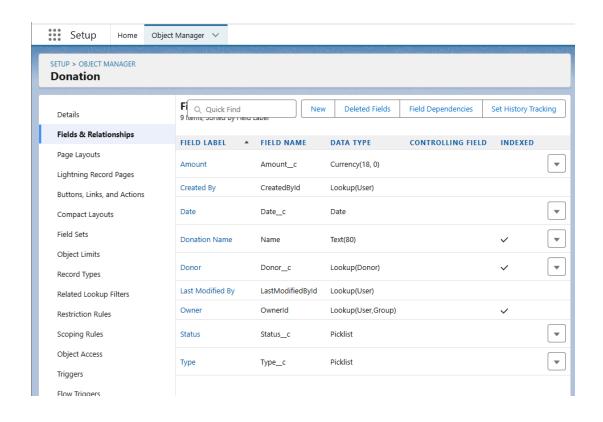
- I created **four main custom objects**: Donor, Donation, Volunteer, and Event.
- I added the important fields for each object, such as email, phone, donation amount, date, event capacity, skills, etc.
- To connect donations with donors, I set up a **lookup relationship** so that every donation record is linked to the correct donor.
- For volunteers and events, I designed a many-to-many relationship using a
 junction object called Volunteer Event Assignment. This allows multiple
 volunteers to join the same event and the same volunteer to participate in many
 events.
- I also set up **tabs** for all custom objects and added them to our **NGO Manager app**, so now they are easily accessible from the App Launcher.
- Finally, I tested the junction object by assigning volunteers to events it worked as expected, confirming the model is functional.

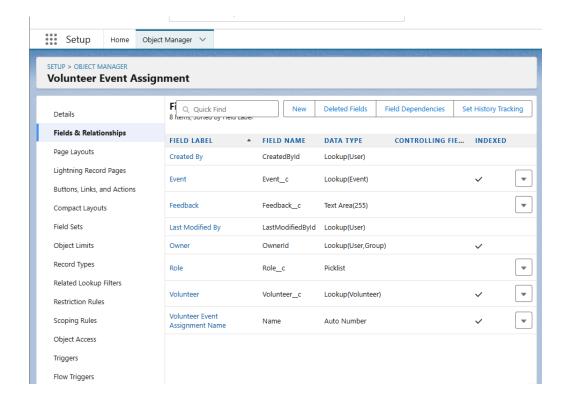
- A **complete data model** with all objects, fields, and relationships.
- A **junction object** that enables flexible volunteer-event assignments.
- A **custom app (NGO Manager)** where all objects are visible and easy to use.

Screenshots:









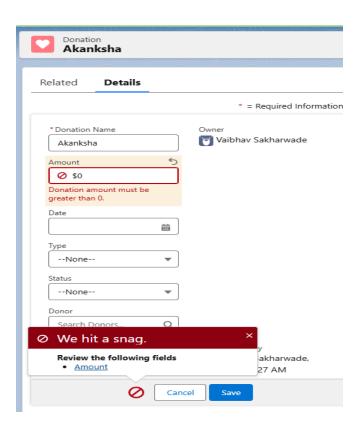
Day 3 - Daily Progress Report

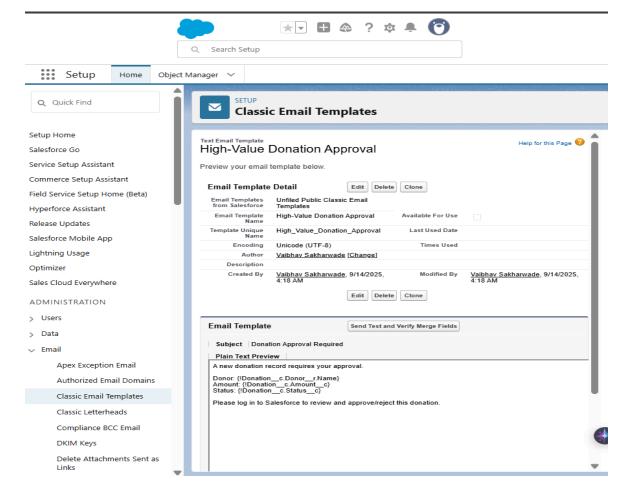
What I worked on today

Today, I focused on building **automation and workflows** for our Salesforce NGO Donation & Volunteer Management System.

- I created **validation rules** to improve data quality: one to ensure donation amounts are always greater than zero, and another to stop volunteers from being assigned to events that have no available slots.
- I built two **record-triggered flows**:
 - The first flow sends a **thank-you email** automatically whenever a new donation is created.
 - The second flow updates the **available slots on an event** whenever a volunteer assignment is made, ensuring event capacity stays accurate.
- I set up an **approval process** for high-value donations (above 50,000). When such donations are entered, they are marked as pending and an email notification is sent to the approver for review.
- Finally, I created two **email templates**: one for thanking donors and another for notifying managers about high-value donations. These templates ensure consistent communication.

- Data validation to prevent wrong entries.
- Smart automation with flows to reduce manual work.
- Approval process for handling big donations in a professional way.
- Reusable email templates for donor and manager communication.





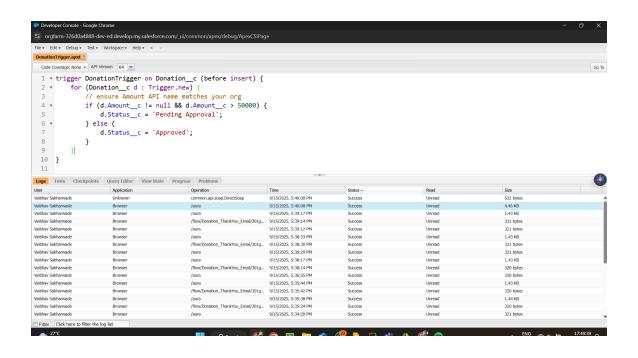
Day 4 - Daily Progress Report

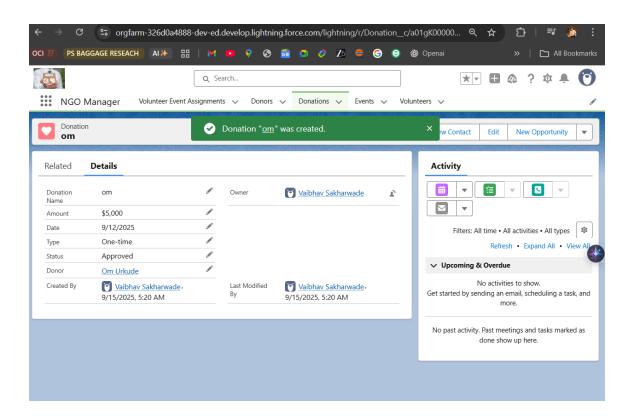
What I worked on today

Today, I focused on the **Apex programming phase** of our Salesforce NGO Donation & Volunteer Management project.

- I created an **Apex Trigger** on the Donation object. This trigger automatically updates the status of donations:
 - Donations above 50,000 are marked as **Pending Approval**.
 - All others are set to **Approved**.
- I developed a reusable Apex Utility Class (DonationUtils). This class calculates the
 total amount donated by a specific donor, which will be useful for reporting and
 analytics.
- I wrote an **Apex Test Class** to validate the utility method and ensure that the code meets Salesforce's requirement of at least 75% coverage. The test created sample donors and donations, verified the calculation, and passed successfully.
- I executed the test in Developer Console, checked the **debug logs**, and confirmed correct results and 100% coverage for the utility class.

- Automated status assignment for donations using Apex Trigger.
- Created a utility method to calculate total donations per donor.
- Verified correctness with Apex test class and achieved full code coverage.
- Successfully tested the functionality with sample data.





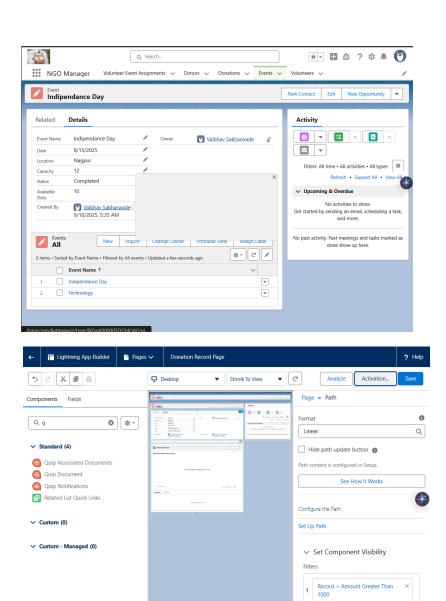
Day 5 - Daily Progress Report

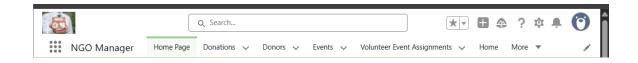
What I worked on today

Today, I worked on improving the **user interface (UI)** of our Salesforce NGO Donation & Volunteer Management project using **Lightning App Builder**.

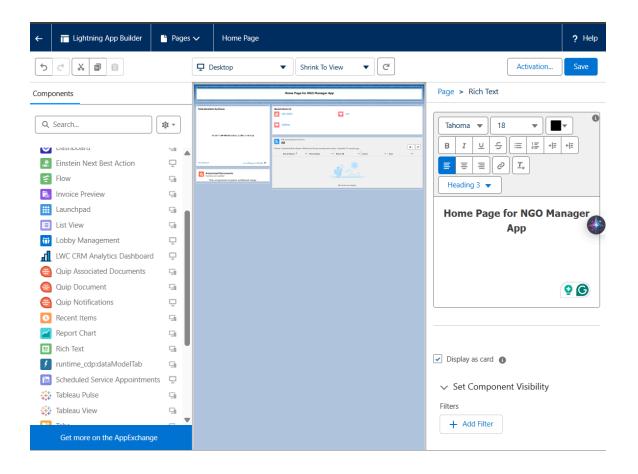
- I customised the **record pages** for Donor, Donation, Volunteer, and Event objects. Each record page now highlights the most important details at the top, includes related lists for quick navigation, and displays charts where relevant.
- I created a custom Home Page for the NGO Manager app. The Home Page now includes:
 - A **Report Chart** showing donation insights (e.g., donations by donor type).
 - **Recent Records** components for quick access to Donations and Events.
 - A List View for Pending Approvals to help managers review high-value donations faster.
 - The **Assistant Component** for reminders and tasks.
- I updated the **NGO Manager app navigation bar** by adding the **Home tab**, ensuring users have a central dashboard when they open the app.

- Improved user experience with intuitive, clean record pages.
- Set up a **central Home dashboard** with charts, lists, and tasks.
- Made the NGO Manager app more **professional and user-friendly**.





+ Add Filter



Day 6 - Daily Progress Report

What I worked on today

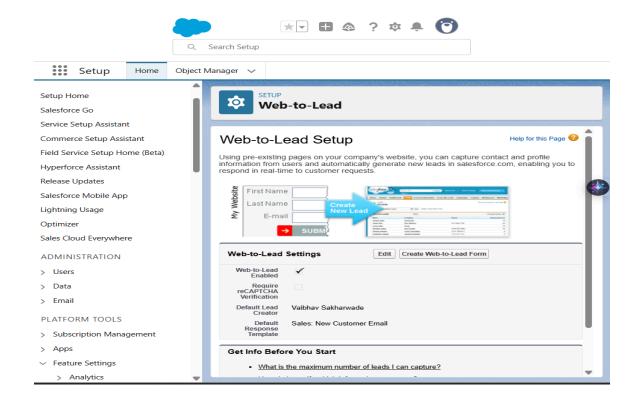
Today was all about building the **integration and external access** part of our Salesforce NGO project. I enabled **Web-to-Lead** and created an external HTML form where donors can enter their details and donation information. When the form is submitted, Salesforce automatically creates a Lead.

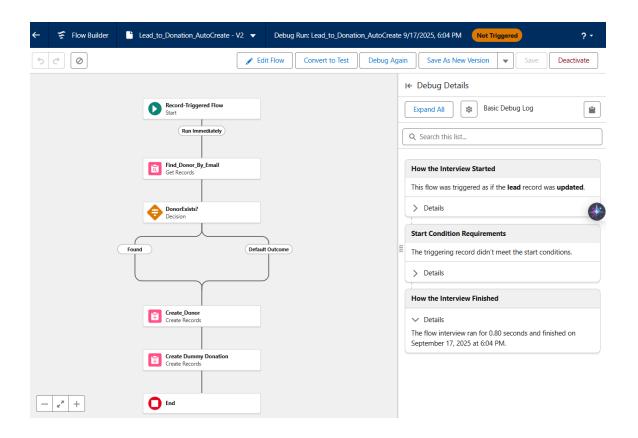
To make this meaningful for our NGO use case, I built a **Record-Triggered Flow** that converts these Leads into proper **Donor and Donation records** inside the NGO Manager app. I also updated the Lead layout to include our custom donation fields, which allowed us to test the flow successfully.

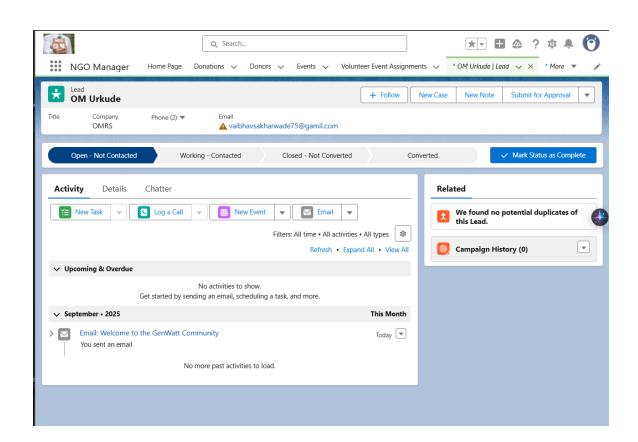
What I achieved today

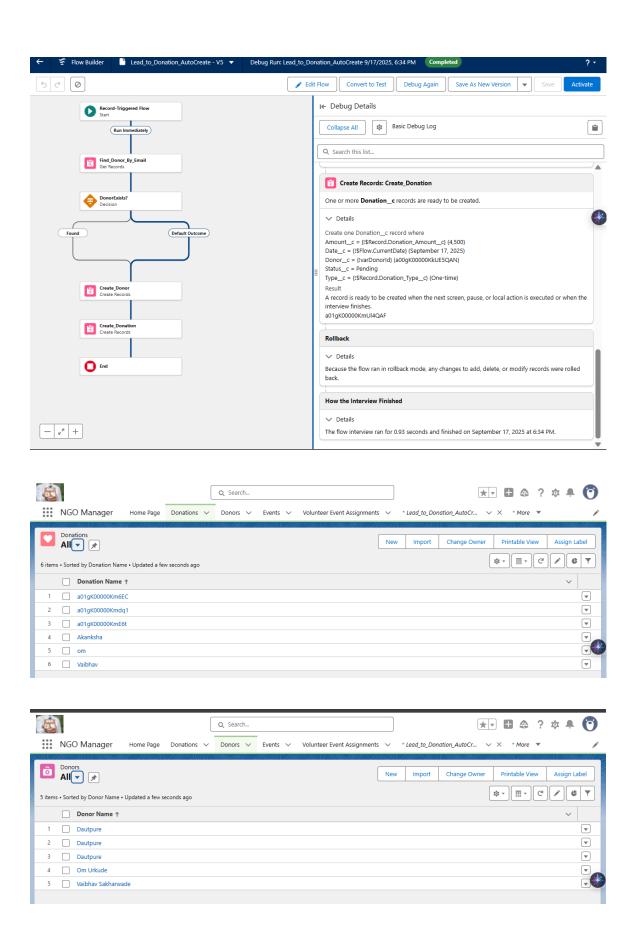
- Enabled Web-to-Lead and generated a working HTML donation form.
- Added **Donation Amount** and **Donation Type** fields to the Lead page layout.
- Built a Record-Triggered Flow that auto-creates Donor + Donation records from new Leads.
- Successfully tested the full flow: HTML form \rightarrow Lead \rightarrow Donor + Donation.

Screenshots









Day 7 — Daily Progress Report

Goal of the Day

To populate the Salesforce NGO App with **sample data** (Donors, Volunteers, Events, Donations, and Volunteer–Event Assignments) so the system can demonstrate full end-to-end workflows in later phases.

Tasks Completed

1. Donors

- Created **25 Donor records** (mix of *Individual* and *Corporate* types).
- Fields filled: *Name, Email, Phone, Donor Type*.
- Verified: Donor records visible under **All Donors** list view.

2. Volunteers

- Created 25 Volunteer records.
- Fields filled: Name, Email, Skills, Availability.
- Skills/Availability values aligned with picklist definitions.
- Verified: Volunteer records visible under **All Volunteers** list view.

3. Events

- Created multiple **Event records** with details:
 - o Name, Date, Location, Capacity, Available Slots, Status.
- Verified: Events visible under **All Events** list view.

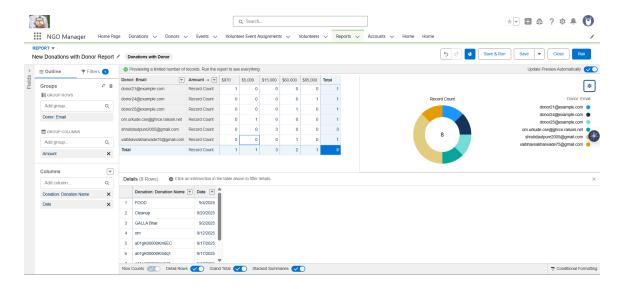
4. Donations

- Created sample **Donations linked to Donors**.
- Fields filled: *Amount, Date, Type (One-time/Recurring), Status (Pending/Approved).*
- Verified: Donations appear in **Donations tab** and under **Donor related list**.

5. Volunteer Event Assignments (Junction Object)

- Configured **Volunteer ≥ Event assignments**.
- Edited **Event record page** to show "Volunteer Event Assignments" related list.
- Added roles (Helper, Coordinator, Photographer).
- Verified: Events show linked Volunteers, Volunteers show linked Events.

Screenshots



Challenges Faced

- Errors with picklist values (Skills__c, Availability__c) resolved by ensuring exact picklist values in Salesforce.
- Field name mismatches (e.g., Event_Name__c vs Name) resolved by using correct API names.
- Initial Import Wizard issues → switched to **manual entry** for clean dataset creation.

Outcome

By the end of Day 7, the NGO Salesforce system has a **connected dataset of 25 Donors, 25 Volunteers, multiple Events, Donations, and Volunteer Assignments**. This data is now ready for **Day 8: Reports & Dashboards**

Day 8 - Daily Progress Report

Goal of the Day

Build **Reports & Dashboards** to provide NGO managers with real-time insights into **donors, donations, volunteers, and events**.

Tasks Completed

1. Created Report & Dashboard Folders

• Report folder: NGO Reports

Dashboard folder: NGO Dashboards
 Keeps all analytics resources organized.

2. Reports Built

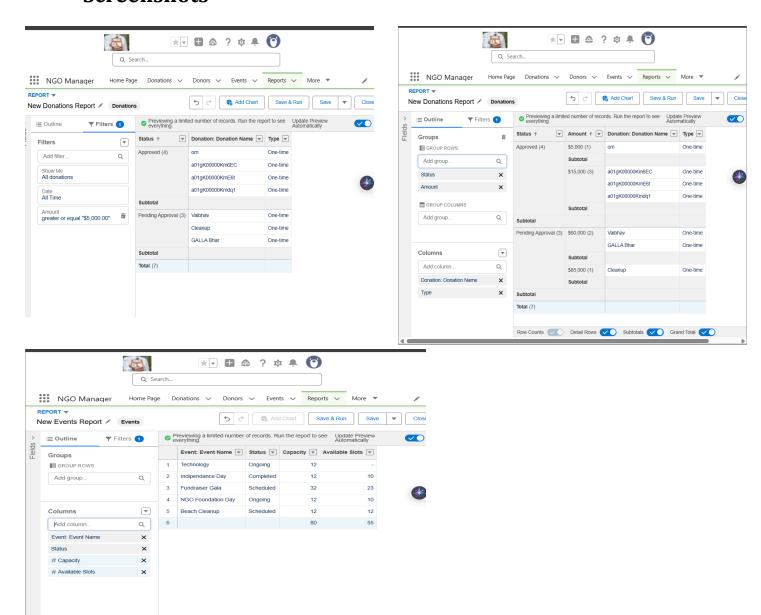
- **Donations by Donor** → Groups donations by Donor, shows total amount.
- **High-Value Donations** \rightarrow Filters approved donations \geq 5000, grouped by Donor Type.
- **Volunteers by Event** \rightarrow Shows volunteers assigned per event with their roles.
- **Event Capacity Utilization** → Displays event capacity vs available slots with formula field for "Filled Slots".

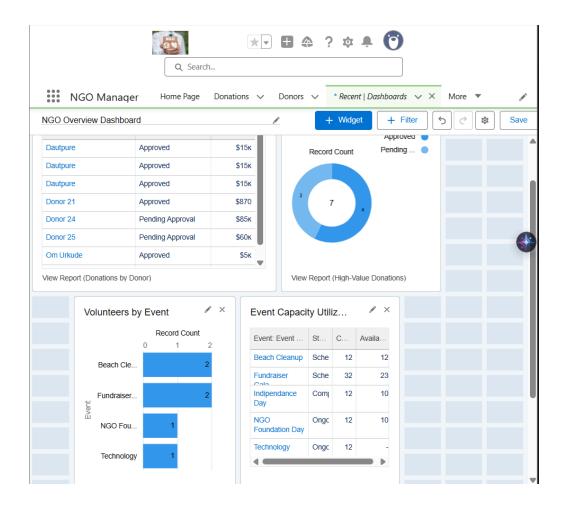
3. Dashboard Created

NGO Overview Dashboard with 4 components:

- Bar Chart → Top Donors (from Donations by Donor report).
- Donut Chart \rightarrow High-Value Donations split by Donor Type.
- Stacked Bar → Volunteers by Event and Role.
- Gauge Chart → Event Capacity Utilization (slots filled).

Screenshots





Challenges Faced

- Needed to adjust **picklist values and formulas** while building reports.
- Ensured correct report types (e.g., "Donations with Donors", "Volunteer Event Assignments with Volunteers").