Salesforce Project Documentation

Project Title:

Simple Contact Management System

Project Overview

The Simple Contact Management System is a Salesforce CRM application developed to store, manage, and organize contact information effectively. The system enables users to maintain records of customer details such as name, phone, email, address, and the company they are associated with. It helps streamline contact management, improve data accessibility, and support better customer relationship tracking through reports and dashboards.

Objectives

- To develop a user-friendly Salesforce application for managing customer contact data.
- To automate record creation and validation for clean data input.
- To enable quick reporting and analysis of customer data using dashboards.
- To demonstrate Salesforce core admin functionalities like custom objects, validation rules, automation, and reporting.

Phase 1 – Problem Understanding & Industry Analysis

Requirement Gathering:
Businesses often rely on scattered spreadsheets or documents to manage customer contact details. This leads to duplication, data loss, and difficulty tracking communication history. The goal is to create a centralized Salesforce app that stores all contact-related information securely and accessibly.

Stakeholder Analysis:

Stakeholder	Role	Responsibility
Admin	System Setup	Create objects, fields, and automation
Sales Executive	User	Add, view, and manage contact records
Manager	Reviewer	Review reports and monitor customer data

Business Process Mapping:

1. User adds a new contact.
2. System validates email format.
3. If the company doesn't exist, the system auto-creates it.
4. Reports and dashboards summarize total contacts per company.

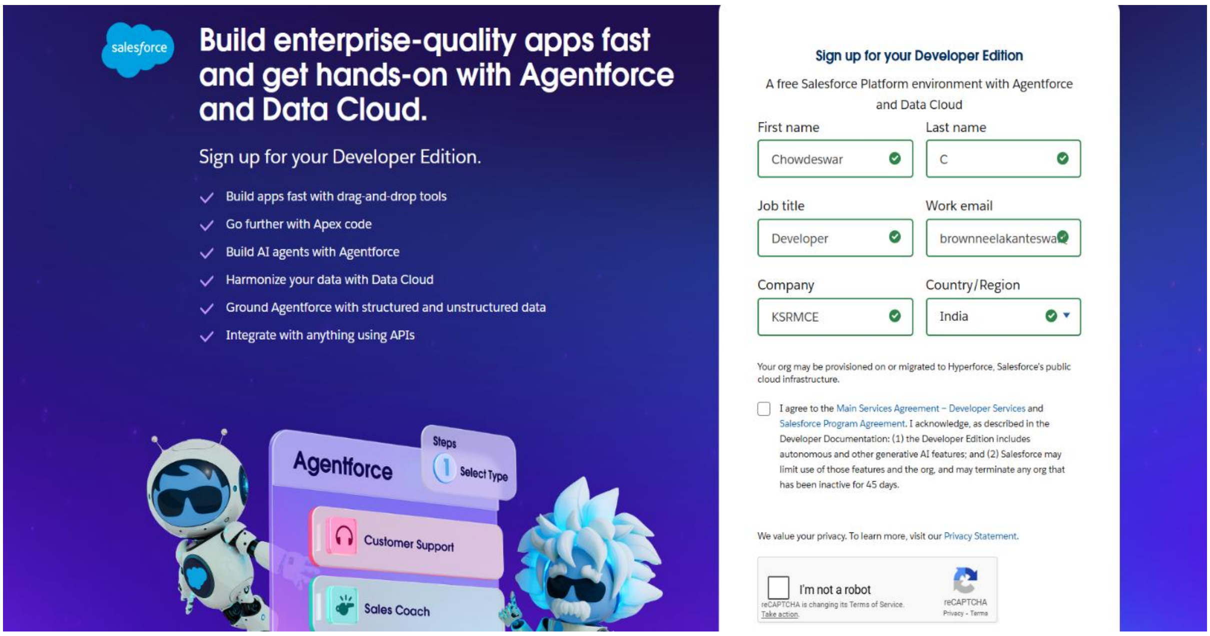
Industry Use Case:
Used by small and medium-sized businesses to centralize customer contact information, improve communication tracking, and enhance sales operations.

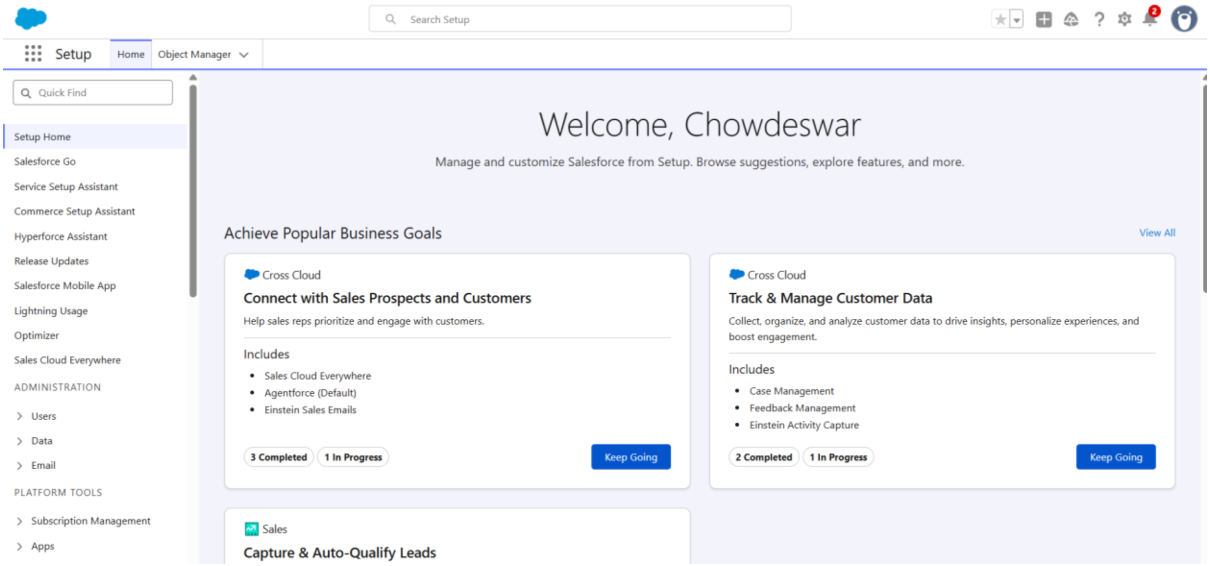
Phase 2 – Org Setup & Configuration

- **Salesforce Edition:** Developer Edition
- **Company Profile:** Simple Contact CRM Pvt Ltd.
- **Business Hours:** Mon–Fri (9:00 AM – 6:00 PM)
- **Users Created:** Admin and Contact Manager
- **Login Access Policies:** Limited to internal users

Step 1: Log in to Salesforce Developer Edition

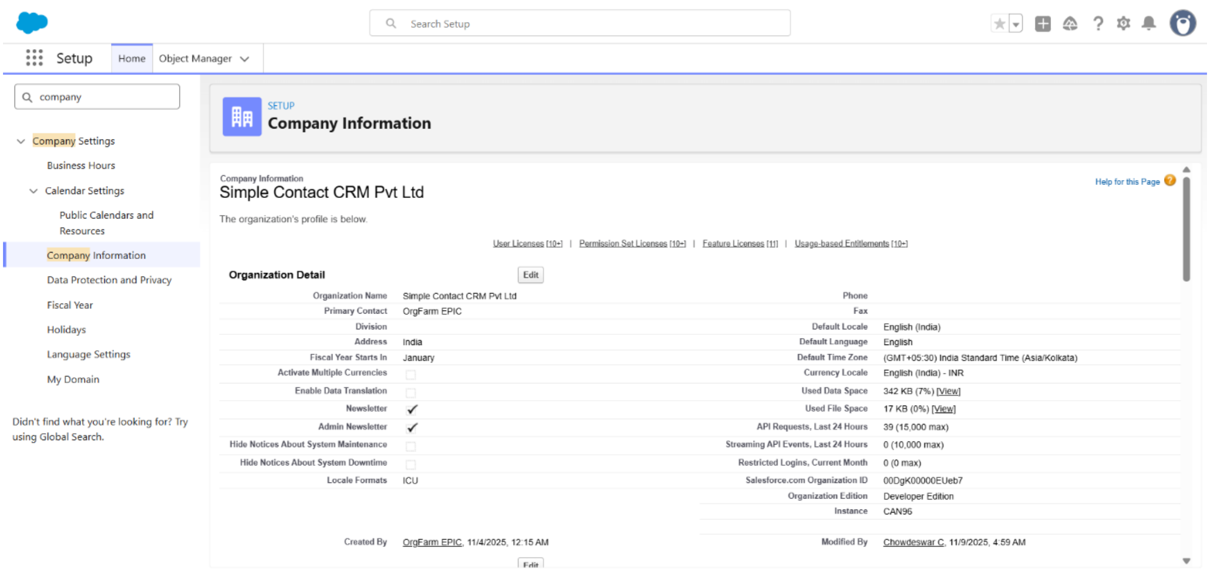
1. Go to **https://developer.salesforce.com/signup**
2. Fill in your details → click **Sign Me Up**
3. Check your email → click the verification link → set a **password**.
4. Now open your **Developer Org** at
   https://login.salesforce.com
5. Log in using your email and password.
   You'll enter your Salesforce **Lightning Experience** home page.





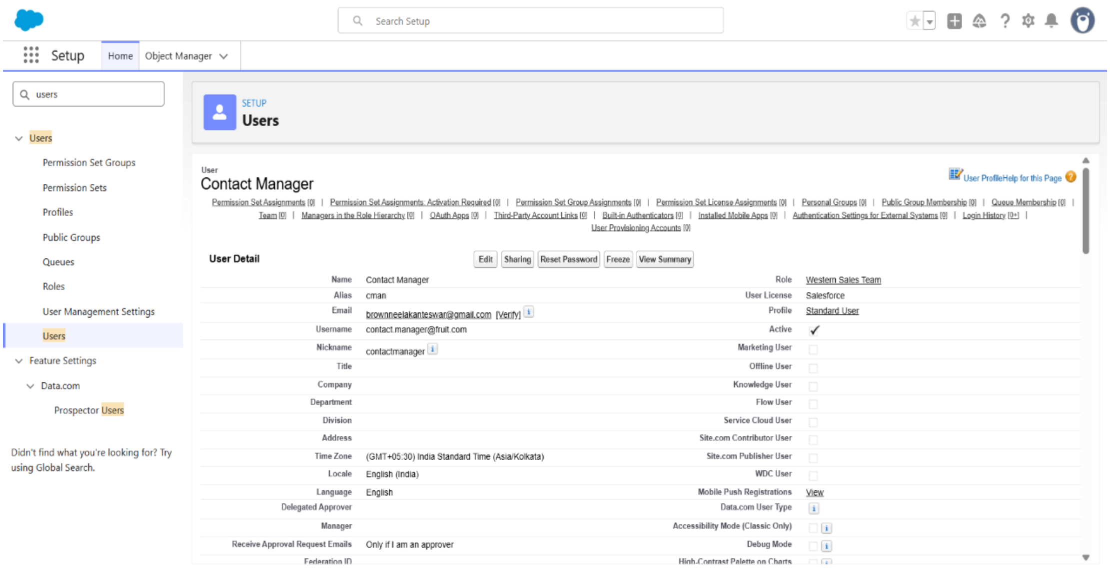
Step 2: Company Setup

1. Click the **gear icon** → **Setup**.
2. In Quick Find, type **Company Information**.
3. Click **Edit** → set:
   - o Company Name: `Simple Contact CRM Pvt Ltd`
   - o Default Locale: `English (India)`
   - o Time Zone: `Asia/Kolkata`
4. Click **Save**.



Step 3: Create Users

1. In Setup → Search "Users" → **Users** → **New User**.
2. Create:
    - Name: *Contact Manager*
    - Email: your secondary email
    - Role: *Sales Executive*
    - Profile: *Standard User*
3. Click **Save**.



Phase 3 – Data Modeling & Relationships

Standard Objects Used:

- **Contact** (standard object)

Custom Objects Created:

- **Company** – to store organization details related to contacts.

Fields Created on Company:

Field Label	Data Type	Description
Company Name	Text	Name of the company
Industry	Picklist	Type of business (IT, Manufacturing, etc.)
Location	Text	Company address

Relationships:

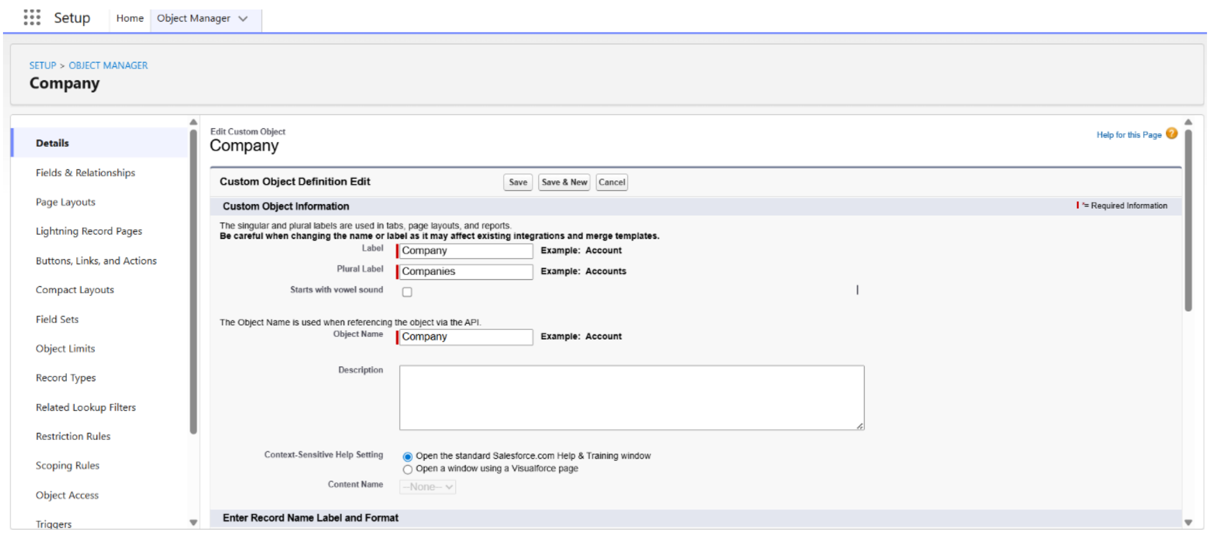
- Lookup relationship between **Contact** and **Company** objects (Each contact belongs to one company).

Page Layouts:

Customized **Contact Layout** to show Company, Email, and Phone fields together for better usability.

Step 1: Create Custom Object – Company

1. In Setup → Search "Object Manager" → **Create** → **Custom Object**
2. Fill details:
   - Label: `Company`
   - Plural Label: `Companies`
   - Record Name: `Company Name`
3. Check "Allow Reports" and "Track Activities."
4. Click **Save**.

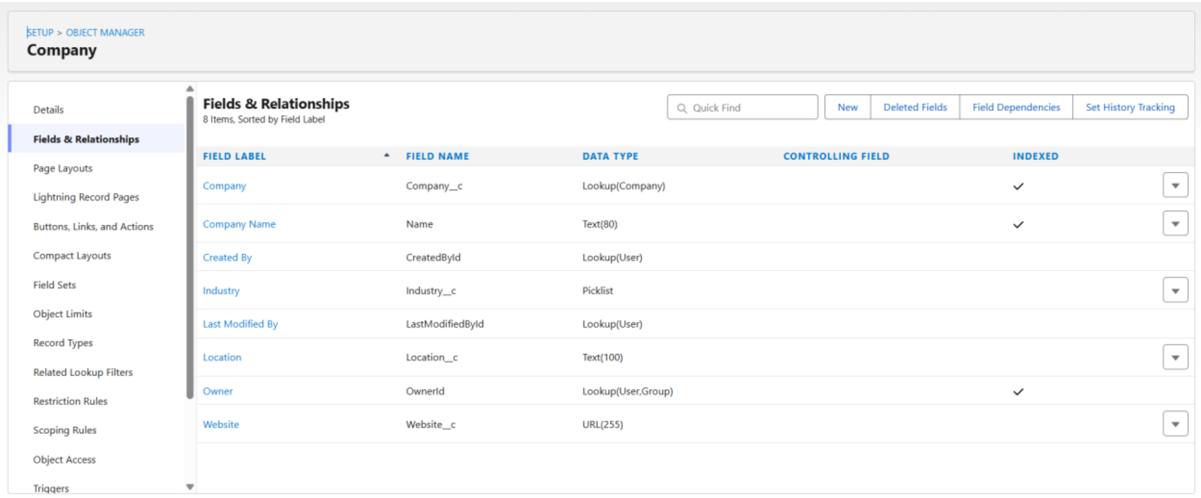


Step 2: Add Custom Fields to Company

Go to **Object Manager** → **Company** → **Fields & Relationships** → **New**
Create the following fields:

Field Label	Type	Example Values
Industry	Picklist	IT, Manufacturing, Education
Location	Text	Chennai, Mumbai
Website	URL	www.company.com

Click **Save** after each field.



Step 3: Create Relationship Between Contact and Company

1. Open **Object Manager** → **Contact** → **Fields & Relationships** → **New**.
2. Choose **Lookup Relationship**.
3. Related To: **Company**.
4. Field Label: `Company`.
5. Save.
   Now, every contact can be linked to one company.

Phase 4 – Process Automation (Admin)

Validation Rule:

Name: Validate_Email
Description: Ensures that email field contains "@".
Formula:

```
NOT(CONTAINS(Email, "@"))
```

Error Message: "Please enter a valid email address."

Flow:

Name: Auto Create Company
Type: Record-Triggered Flow
Use Case: When a contact is created and no company exists with the given name, automatically create a new Company record.

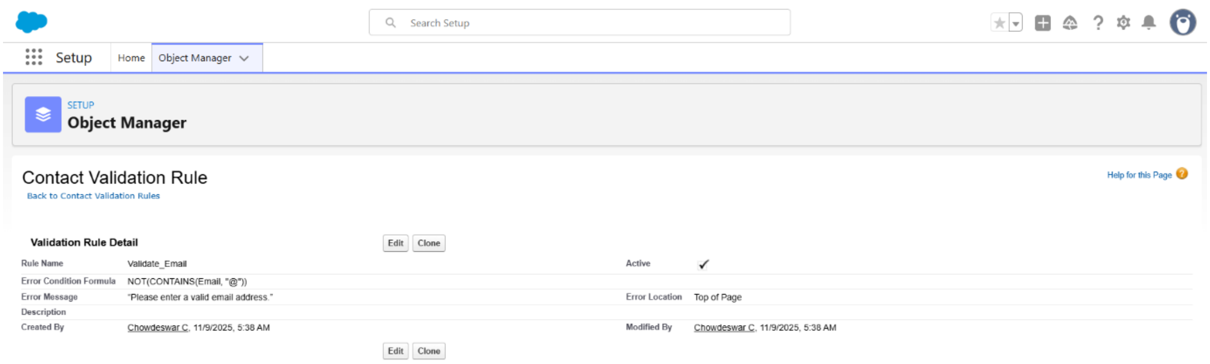
Email Alert:

Triggered when a new Contact is created — sends a welcome email to the contact's email address (for demonstration).

Step 1: Create a Validation Rule

Purpose: Ensure valid email format.

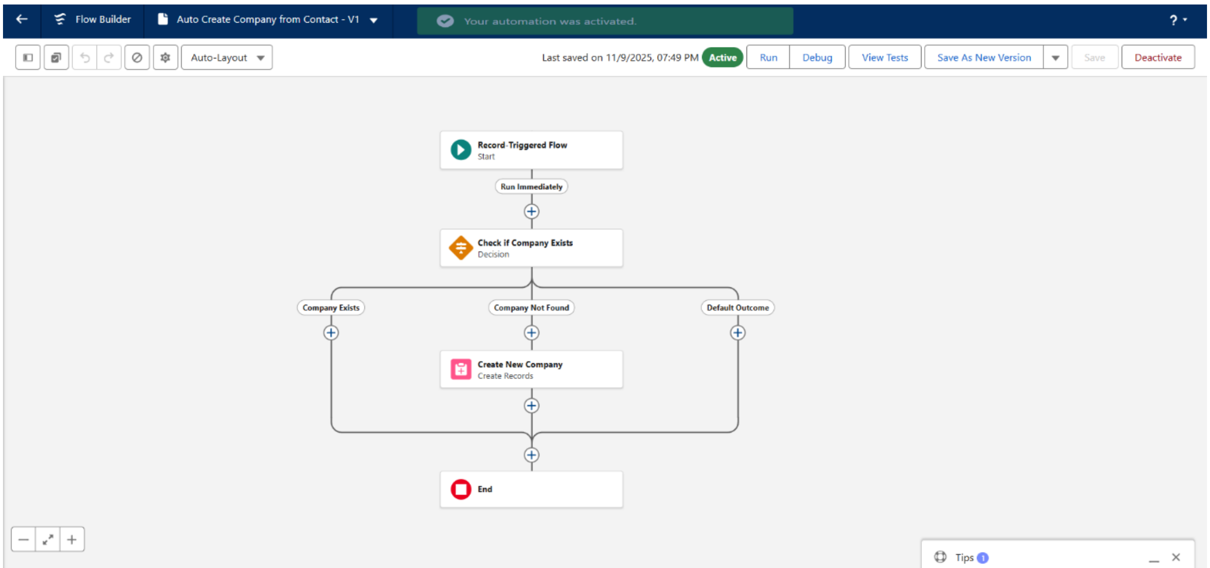
1. Go to **Object Manager → Contact → Validation Rules → New**.
2. Name: `Validate_Email`.
3. Formula:
4. `NOT(CONTAINS(Email, "@"))`
5. Error Message: “Please enter a valid email address.”
6. Save and Activate.



Step 2: Create Flow – Auto Create Company

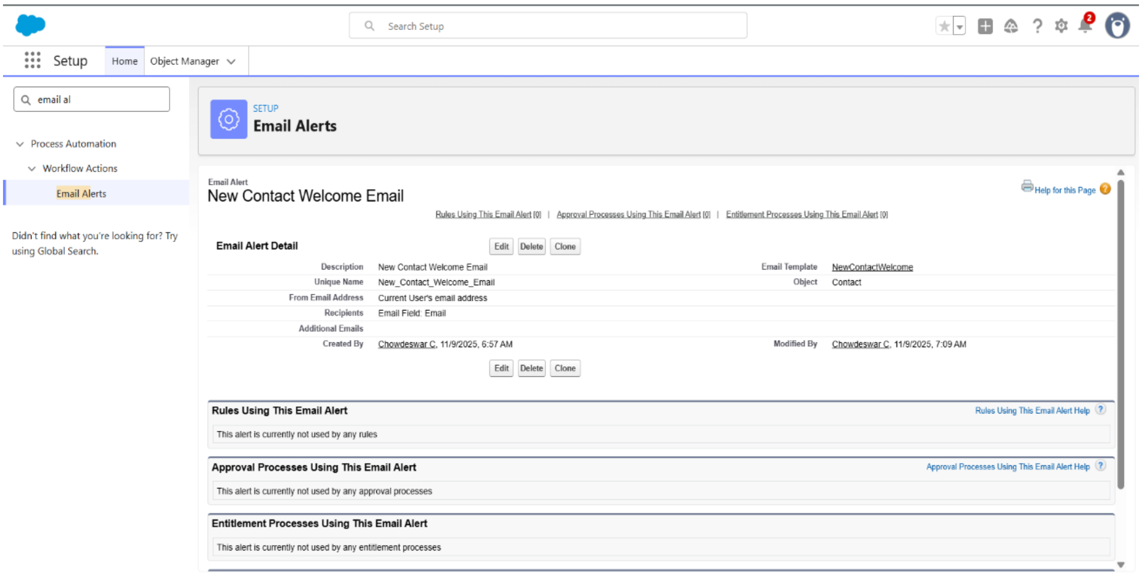
Goal: When a new Contact is created and the specified Company doesn’t exist, create it automatically.

1. Setup → Search **Flows** → **New Flow** → Select **Record-Triggered Flow**.
2. Object: `Contact`
   - Trigger: When record is created.
3. Add an **Action Element** → Create Records → “New Company”.
4. Set Condition: If Company field is blank.
5. Map fields:
   - Company Name = Contact.LastName + “ Org”
6. Save as: `Auto Create Company Flow`.
7. Activate it.



Step 3: Create Email Alert

1. Setup → Search **Email Alerts** → New Email Template.
2. Template Name: `NewContactWelcome`.
3. Subject: “Welcome, {!Contact.FirstName}!”
4. Body: “We’re glad to have you in our CRM.”
5. Save.
6. Create **Workflow Rule** or **Flow Action** to send email on contact creation.



Phase 5 – Apex Programming (Developer) *(Optional but adds value)*

Trigger:

Name: ContactTrigger
Description: Automatically assigns "General" as Company if no company is linked.

```
CODE:

trigger ContactTrigger on Contact (before insert) {
    for(Contact c : Trigger.new){
        if(c.AccountId == null){
            Account acc = [SELECT Id FROM Account WHERE Name='General' 
LIMIT 1];
            c.AccountId = acc.Id;
        }
    }
}
```

Phase 6 – User Interface Development

Lightning App Builder:

Created a **Custom App** named *Contact Management App* with tabs for:

- Contacts
- Companies
- Reports

Record Page:

Customized **Contact Record Page** using Lightning App Builder to show:

- Contact Details component
- Related Company component
- Activity Timeline

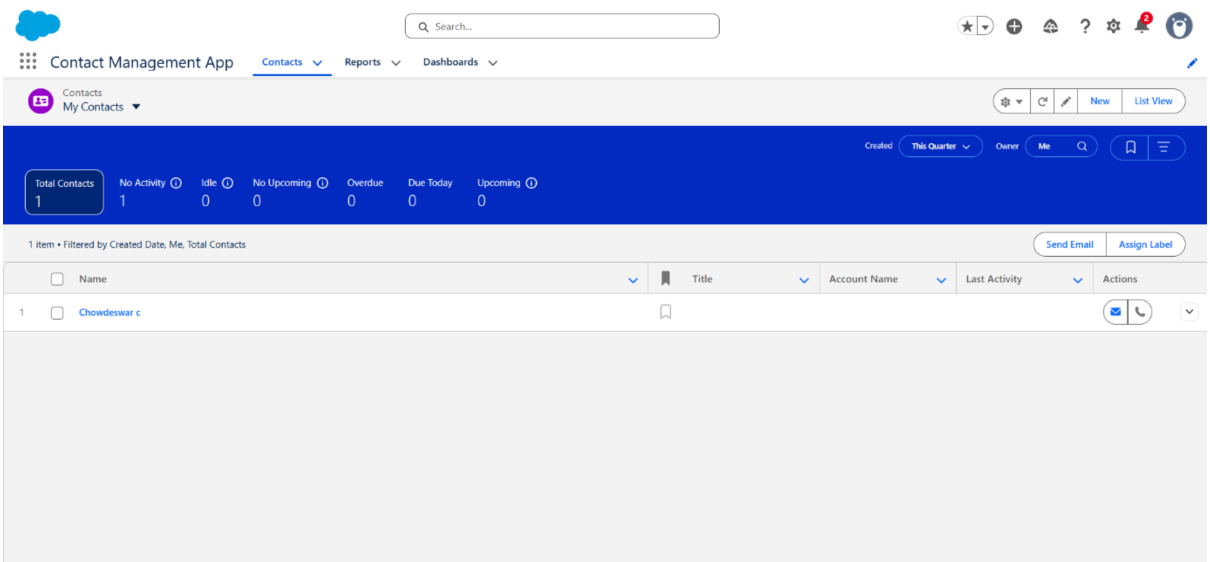
Home Page:

Added a dashboard component showing total contacts per company.

Step : Build Lightning App

1. Click the **App Launcher (9 dots) → View All → App Manager → New Lightning App**.
2. App Name: `Contact Management App`.
3. Add Tabs:
   - Contacts
   - Companies

   - Reports
4. Assign to all profiles.
5. Save & Finish.



Phase 7: Integration

No integrations used in this project (allowed for simple projects).
Write:

This project does not involve external API integration.

Phase 8 – Data Management & Deployment

Data Import Wizard:

Used to import sample contact data from a CSV file.

Data Export:

Enabled weekly data backup schedule.

Duplicate Rules:

Set up a duplicate rule for Email to prevent duplicate contacts.

Step — Import Sample Data

Data Import Wizard → Upload CSV for:

- Contacts
- Companies

Step 12 — Setup Data Export (Weekly Backup)

Setup → Data Export → Schedule Weekly Export.

Phase 9 – Reporting, Dashboards & Security Review

Reports:

- **Report Name:** Contacts by Company
- **Type:** Summary
- **Purpose:** Show total contacts grouped by company

Dashboard:

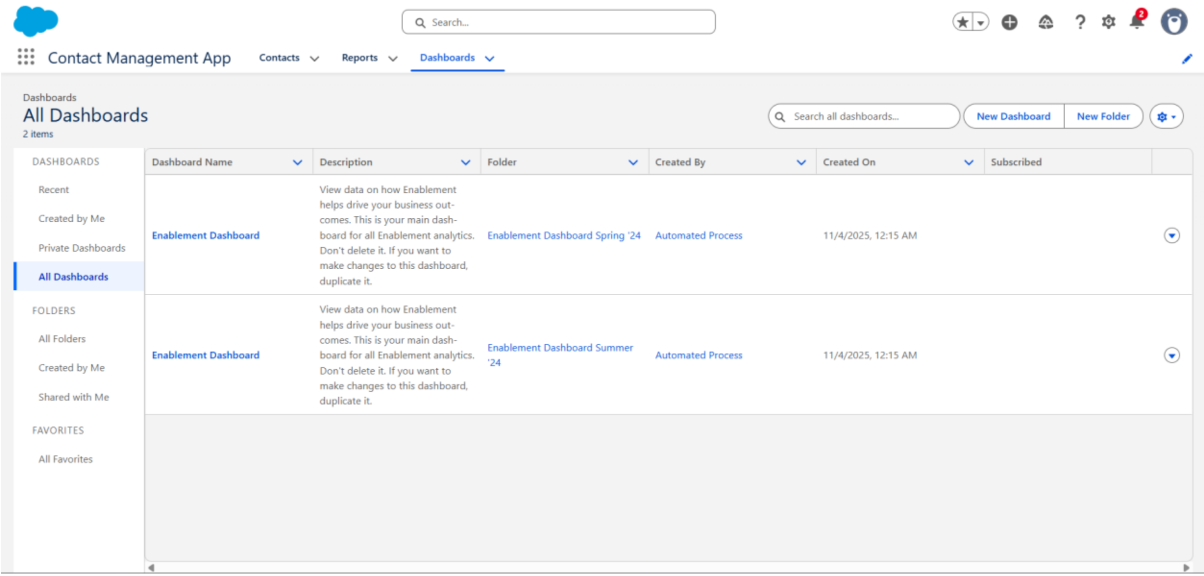
- **Dashboard Name:** Contact Overview Dashboard
- Components:
    - Total Contacts (metric)
    - Contacts by Company (bar chart)

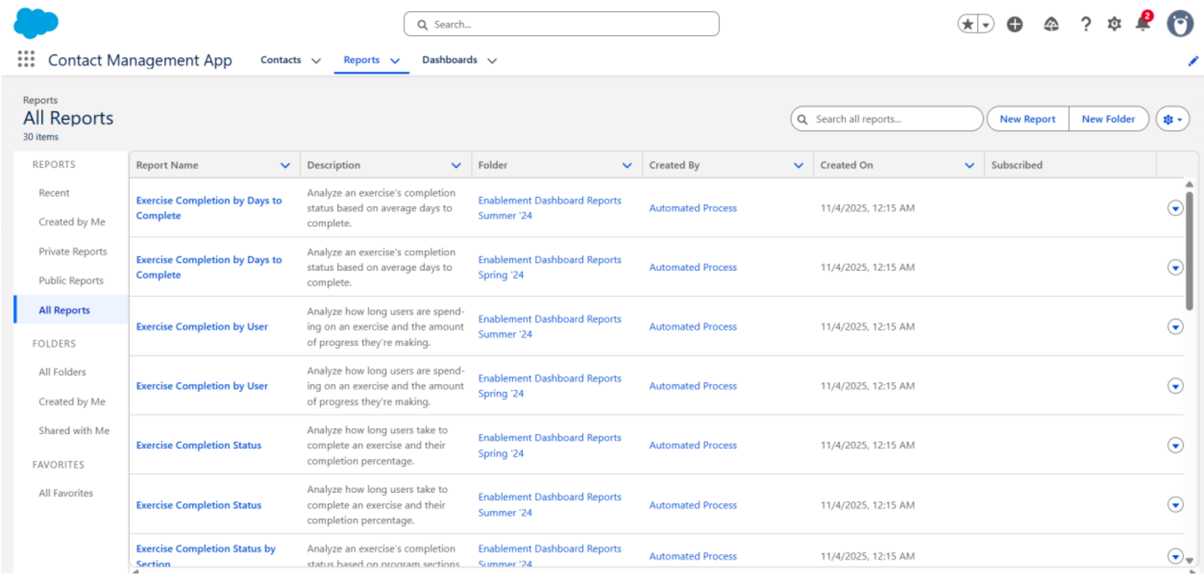
Security Setup:

Security Feature	Description
Profiles	“Contact Manager” profile with CRUD access
Roles	Manager > Executive hierarchy
FLS	Restricted email edits for non-admins
Sharing Rules	Contacts visible only to same role users

Step 1: Create Report and Dashboard

1. **Reports → New Report → Contacts with Companies**
    - Group by Company Name
    - Add columns: Name, Email, Phone
    - Save as: `Contacts by Company`.
2. Go to **Dashboards → New Dashboard → Contact Overview Dashboard**
    - Component 1: Bar chart → Contacts by Company
    - Component 2: Metric → Total Contacts
3. Save & View Dashboard.





Step 2: Security Settings

1. Setup → **Profiles** → **Contact Manager Profile** → Object Permissions:
   - Read/Create/Edit for Contact
   - Read for Company
2. Setup → **Roles**
   - Manager → Sales Executive hierarchy
3. Setup → **Sharing Settings**
   - Contacts: Controlled by Role Hierarchy

Phase 10 – Quality Assurance Testing

Test Case	Input	Expected Output	Actual Output	Status
Create Contact	Name + Email	Contact saved successfully	As expected	Passed
Invalid Email	Missing “@”	Error message displayed	As expected	Passed
Auto Company Creation	Contact with new company name	Company auto-created	As expected	Passed
Duplicate Email	Same email repeated	Duplicate prevented	As expected	Passed

Step: Test Everything

1. Create a new Contact:
   - Name: Ramesh Kumar
   - Email: `ramesh@example.com`
   - Company: *TechNova*
2. Observe:
   - If company *TechNova* doesn’t exist → auto-created
   - Invalid email → error
   - Duplicate email → blocked

Output Email: