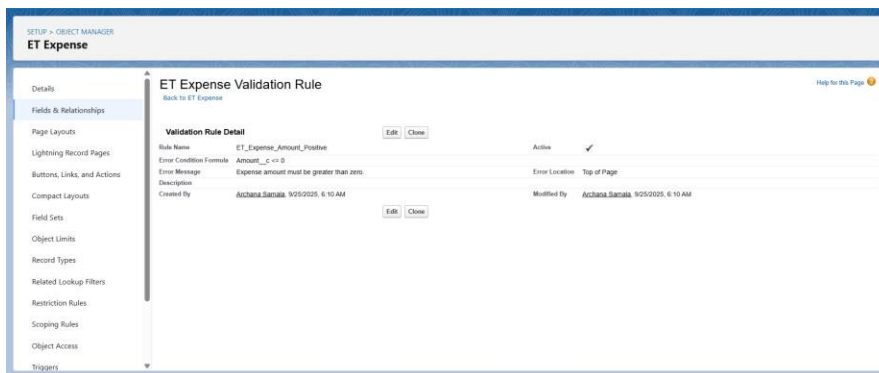# Process Automation (Admin)

In this phase of the **Expense Tracker** project, I implemented automation features in Salesforce to reduce manual effort, enforce data integrity, and streamline expense management. The focus was on validation, automated notifications, and expense approval control. The steps performed are outlined below.

1. Validation Rule — Expense Amount Must Be Greater Than Zero

To prevent invalid expense entries, I created a validation rule on the **ET Expense** object:
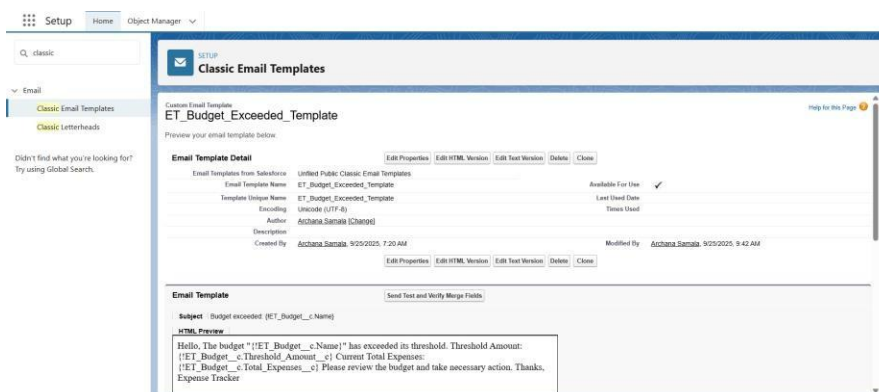
- Users cannot enter an expense with an amount of zero or less.

- If attempted, Salesforce displays an error message and prevents the record from being saved.

- This ensures data accuracy and maintains clean records.

2. Email Template — Budget Exceeded Notification

I designed an email template to notify budget owners when expenses exceed the defined threshold:
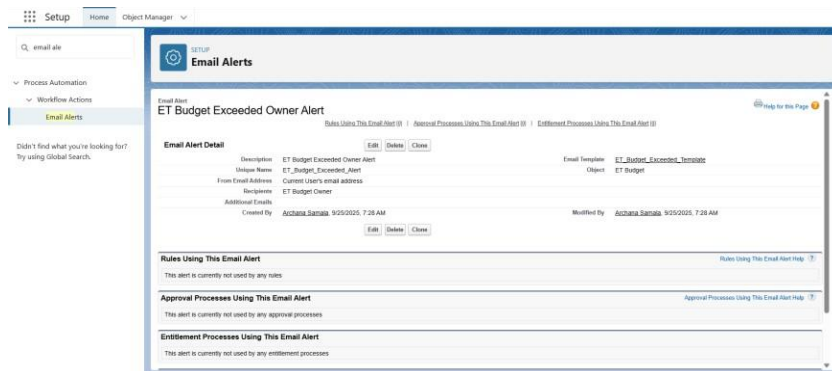
- Created under **Classic Email Templates** for easy reference in automated processes.

- This template standardizes communication and ensures timely notifications.

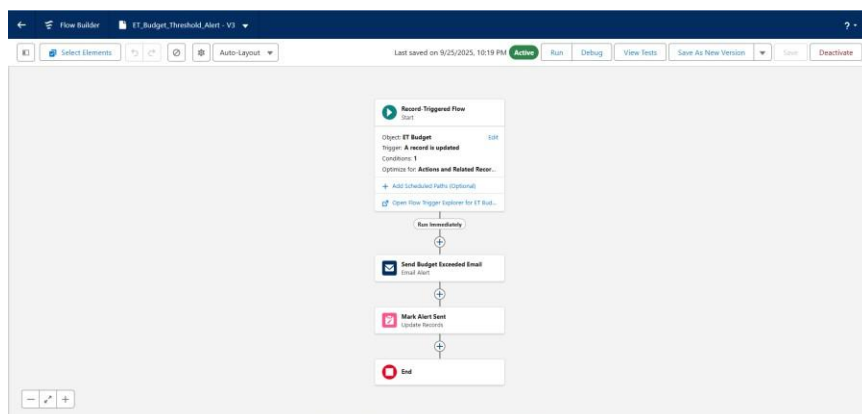## 3. Email Alert — Triggering the Notification

An **email alert** was set up using the above template:

- The alert serves as the action Salesforce triggers whenever specific conditions in the flow are met.

- Automates communication without requiring manual intervention.

4. Record-Triggered Flow — Sending Email on Budget Threshold Breach

- A **Record-Triggered Flow** was built on the **ET Budget** object.

- The flow monitors the total expenses against the budget threshold.

- When expenses exceed the limit, the flow automatically sends an email alert to the budget owner.

- This ensures timely notifications and eliminates manual tracking of overspending.
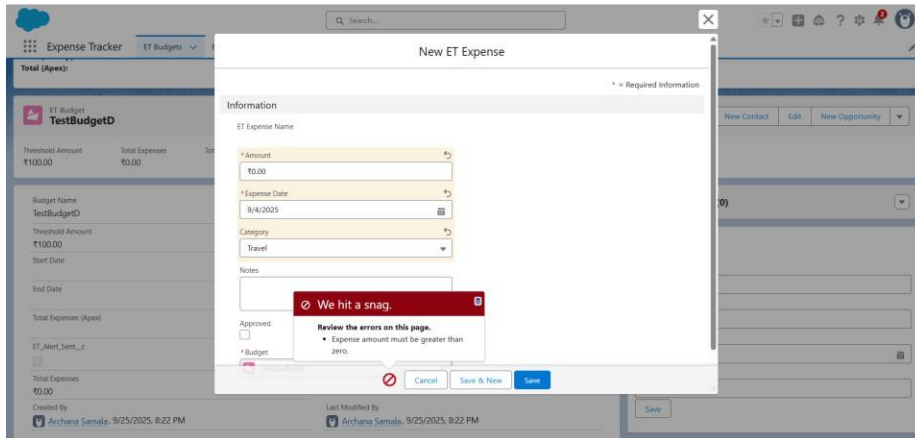

5. Approval Process — Manager Approval for High Expenses

- An **approval process** was configured to control high-value expenses:
  - Any expense greater than 500 automatically requires manager approval.
  - The record is locked until the manager approves or rejects it.
- This adds governance and accountability to the expense management system.

6. Testing the Automations

Validation Rule Test:

- Attempted to create an expense with amount = 0.

- Salesforce blocked the record and displayed the error message.

Email Flow Test:

- Created a budget with a threshold of 100 and added expenses totaling 300.

- The budget owner immediately received the "Budget Exceeded" email.