Project Documentation: Expense Request Approval Process

1. Introduction

Managing expenses in an organization is a crucial process. Traditionally, employees submit requests for purchases, which are manually checked against budgets, approved or rejected by managers, and then communicated back. This manual approach is **time-consuming**, **error-prone**, and **inefficient**.

This project implements a **Salesforce Record-Triggered Flow** that automates the **approval/rejection process based on expense category and amount**, and sends an email to the requester using **Send Email action** (without using a template).

Objectives:

- Automate approvals for category-based expenses
- Notify requesters immediately via email
- Minimize manual intervention
- Keep the object and flow simple (Name, Amount, Category, Status)

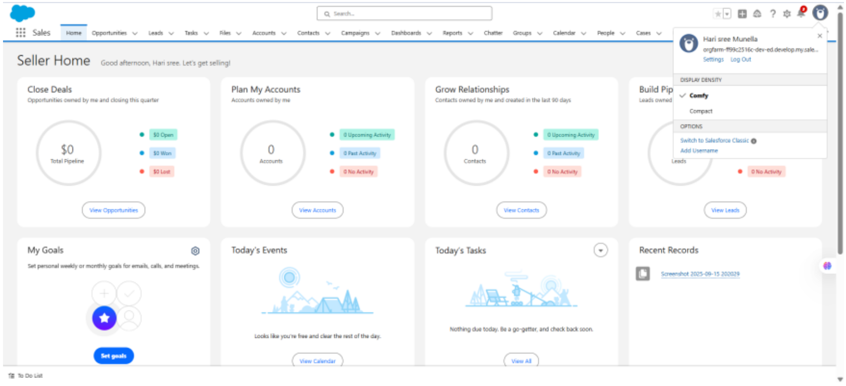
2. Salesforce Org Setup

Step 1: Sign Up / Login

- Go to https://trailhead.salesforce.com
- Login with your credentials, or create a **Developer Edition org** for testing

Step 2: Navigate to Setup

- Click **Gear Icon → Setup**
- Use **Quick Find → Object Manager** to create custom objects



Good afternoon, Hari sree. Let's get selling!

Opportunities owned by me and closing this quarter

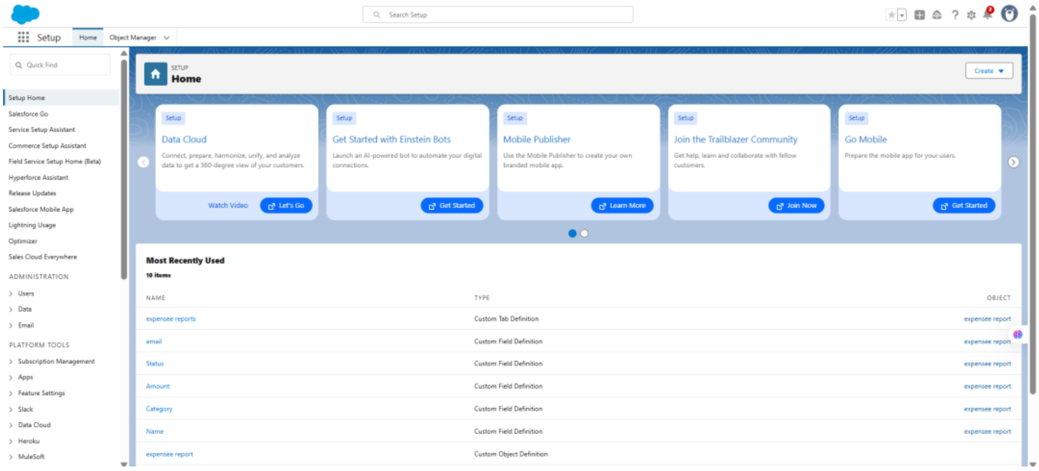
Accounts owned by me

Contacts owned by me and created in the last 90 days

Set personal weekly or monthly goals for emails, calls, and meetings.

Looks like you're free and clear the rest of the day.

Nothing due today. Be a go-getter, and check back soon.



Data Cloud

Connect, prepare, harmonize, unify, and analyze data to get a 360-degree view of your customers.

Get Started with Einstein Bots

Launch an AI-powered bot to automate your digital connections.

Mobile Publisher

Use the Mobile Publisher to create your own branded mobile app.

Join the Trailblazer Community

Get help, learn and collaborate with fellow customers.

Go Mobile

Prepare the mobile app for your users.

Most Recently Used

10 items

NAME	TYPE	OBJECT
expensee reports	Custom Tab Definition	expensee report
email	Custom Field Definition	expensee report
Status	Custom Field Definition	expensee report
Amount	Custom Field Definition	expensee report
Category	Custom Field Definition	expensee report
Name	Custom Field Definition	expensee report
expensee report	Custom Object Definition	

3. Create Custom Object: Expense_Report__c

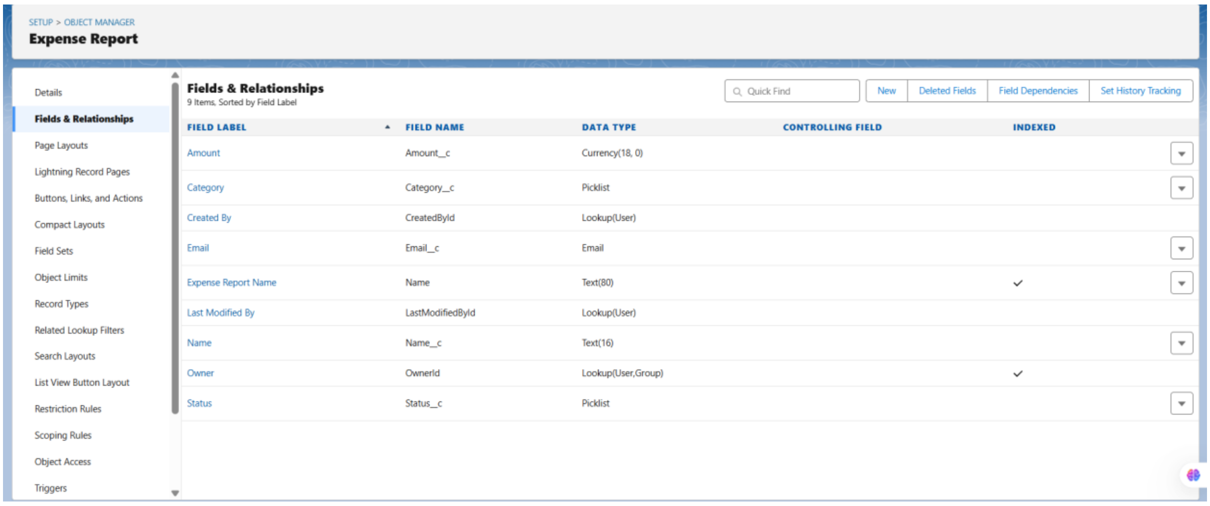
Steps:

1. In **Setup → Object Manager → Create → Custom Object**
2. Fill details:
    - Label: Expense Report
    - Plural Label: Expense Reports
    - Object Name: Expense_Report__c
    - Record Name: Name (Text)
3. Leave optional features unchecked for simplicity
4. Save object

Create Fields:

- **Amount__c**
    - Data Type: Currency
    - Label: Amount
    - Length & Decimal: 16, 2
- **Category**
    - Data Type: Picklist
    - Values: Veggies, Groceries, Clothing, Savings, Travel, Cosmetics
- **Status__c**
    - Data Type: Picklist

- Values: Submitted, Approved, Not Approved



SETUP > OBJECT MANAGER

Expense Report

Fields & Relationships

9 Items, Sorted by Field Label

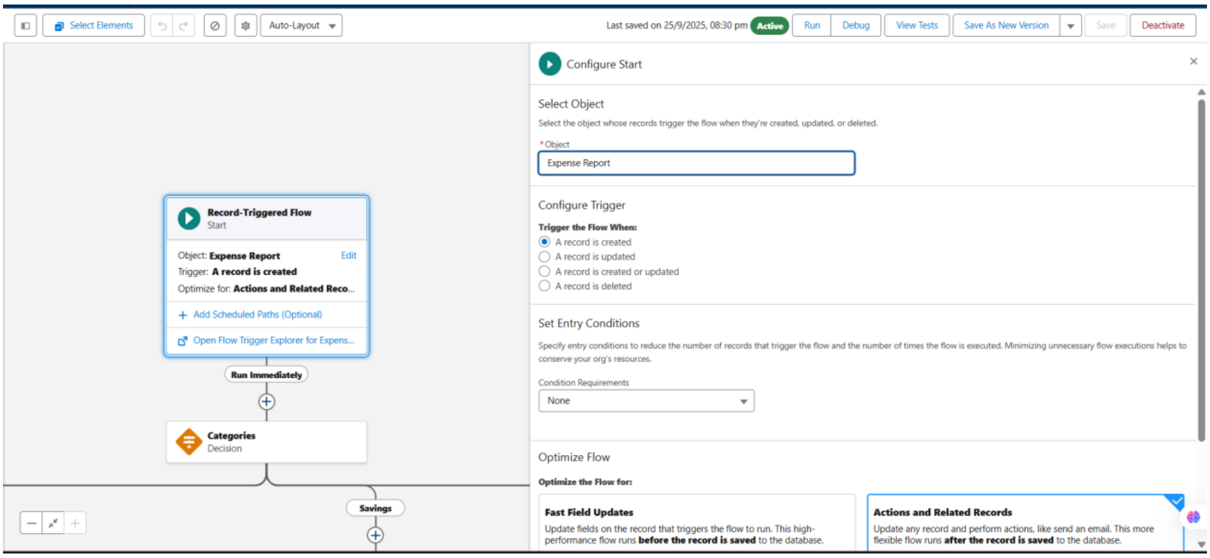
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Currency(18, 0)		
Category	Category__c	Picklist		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Expense Report Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(16)		
Owner	OwnerId	Lookup(User,Group)		✓
Status	Status__c	Picklist		

---

4. Build Record-Triggered Flow

Step 1: Go to Flow Builder

- Setup → Flow → New Flow → **Record-Triggered Flow**
- Object: Expense_Report__c
- Trigger: **When a record is created**
- Entry Condition: None (all new records trigger flow)
- Optimize for: Actions and Related Records
- Click **Done**



Last saved on 25/9/2025, 08:30 pm

Record-Triggered Flow
Start

Object: **Expense Report**
Trigger: **A record is created**
Optimize for: **Actions and Related Reco...**

Categories
Decision

Configure Start

Select Object

Select the object whose records trigger the flow when they're created, updated, or deleted.

* Object: Expense Report

Configure Trigger

Trigger the Flow When:

● A record is created
○ A record is updated
○ A record is created or updated
○ A record is deleted

Set Entry Conditions

Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

Condition Requirements: None

Optimize Flow

Optimize the Flow for:

Fast Field Updates
Update fields on the record that triggers the flow to run. This high-performance flow runs **before the record is saved** to the database.

Actions and Related Records ✓
Update any record and perform actions, like send an email. This more flexible flow runs **after the record is saved** to the database.

Step 2: Add Decision Element – Category + Amount

Element Name: Categories

Purpose: Directs flow based on Category and Amount

Outcomes:

In this Expense Request Approval Flow, each expense category is assigned a maximum allowable amount to determine automatic approval or rejection. For example, “Veggies” has a limit of ₹500, “Groceries” ₹2000, “Clothing” ₹4000, “Savings” ₹8000, “Travel” ₹6000, and “Cosmetics” ₹5000. When a request is submitted, the Flow evaluates both the category and the requested amount: if the amount is within the set limit, the Status field is updated to “Approved” and an approval email is sent to the requester; if the amount exceeds the limit, the Status is set to “Not Approved” and a rejection email is triggered. This structured approach ensures that all requests are handled consistently, minimizes manual intervention, and keeps users informed in real-time about the outcome of their expense requests.

Category	Maximum Amount	Status if ≤ Max	Status if > Max	Email Message if Approved	Email Message if Rejected
Veggies	500	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Veggies.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Veggies.”
Groceries	2000	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Groceries.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Groceries.”
Clothing	4000	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Clothing.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Clothing.”
Savings	8000	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Savings.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Savings.”
Travel	6000	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Travel.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Travel.”
Cosmetics	5000	Approved	Not Approved	“Your expense request of amount {!Amount__c} has been approved under Cosmetics.”	“Your expense request of amount {!Amount__c} exceeds the allowed budget for Cosmetics.”

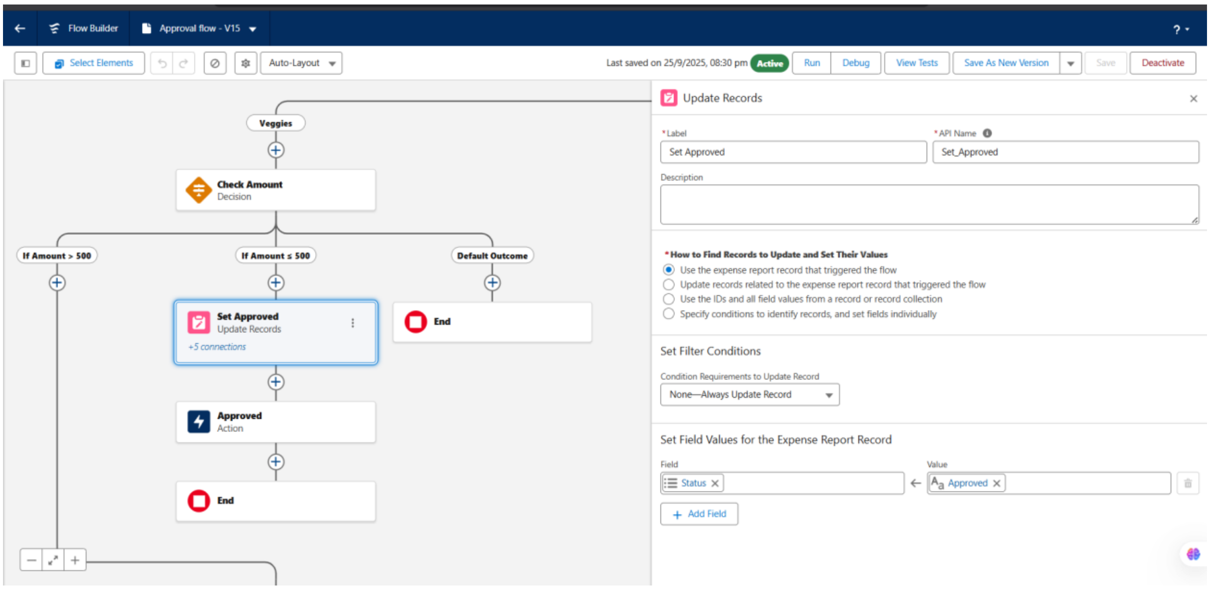
Notes:

- Default outcome handles unexpected categories
- Name outcomes descriptively (e.g., “Veggies – Approved”)

Step 3: Update Records Element

- Drag **Update Records** onto each branch (Approved/Rejected)
- Update **Status__c**:
  - Approved branch → Status__c = Approved
  - Rejected branch → Status__c = Not Approved

Important: Update occurs **before** sending the email to ensure correct status is included.



Last saved on 25/9/2025, 08:30 pm

Update Records

*Label: Set Approved

*API Name: Set_Approved

Description:

*How to Find Records to Update and Set Their Values

● Use the expense report record that triggered the flow

○ Update records related to the expense report record that triggered the flow

○ Use the IDs and all field values from a record or record collection

○ Specify conditions to identify records, and set fields individually

Set Filter Conditions

Condition Requirements to Update Record: None—Always Update Record

Set Field Values for the Expense Report Record

Field: Status ← Value: Approved

Step 4: Send Email Action (No Template)

- Drag **Action → Send Email** after Update Records
- Configuration:
  - **Recipient:** User email or a configured email field
  - **Subject:** Expense Request Status
  - **Body:** Use HTML in the action itself

Example for Approval:

<p>Hello, your expense request of amount {!Amount__c} has been approved under the {!Category} category.</p>

<p>You may proceed with your purchase.</p>

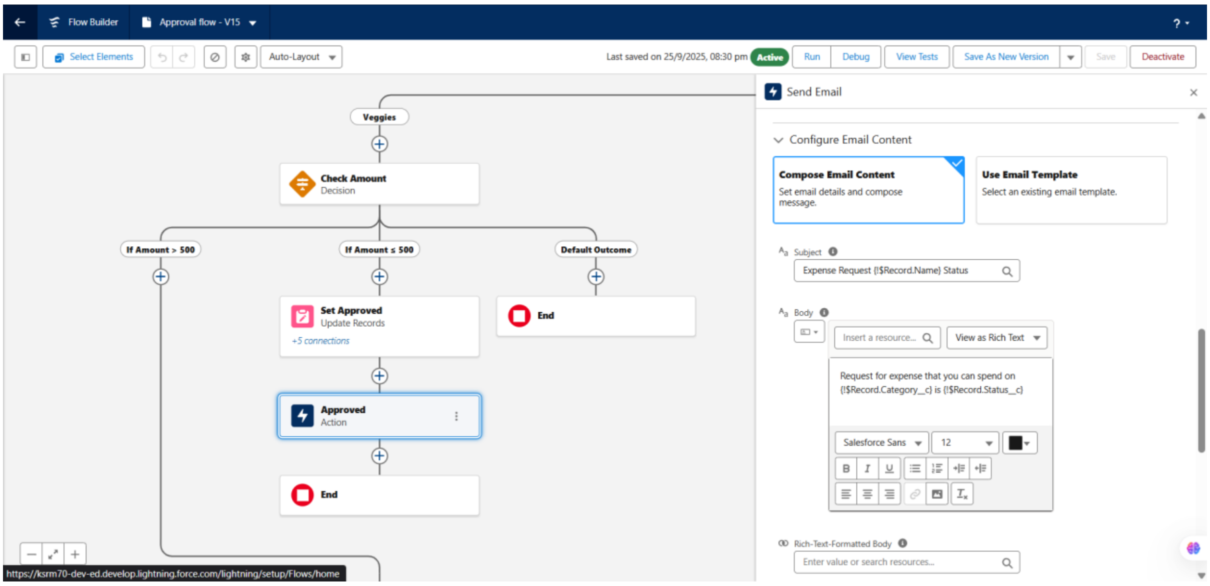
Example for Rejection:

<p>Hello, your expense request of amount {!Amount__c} exceeds the allowed budget for the {!Category} category.</p>

<p>Please review and adjust your request.</p>

Tips:

- Use merge fields directly in flow {!Amount__c}, {!Category}
- Email subject can also include merge fields if desired



Subject: Expense Request {!$Record.Name} Status

Body: Request for expense that you can spend on {!$Record.Category__c} is {!$Record.Status__c}

5. Testing

Step 1: Create Test Records

- Go to **Expense Reports → New**
- Enter different combinations of Category and Amount

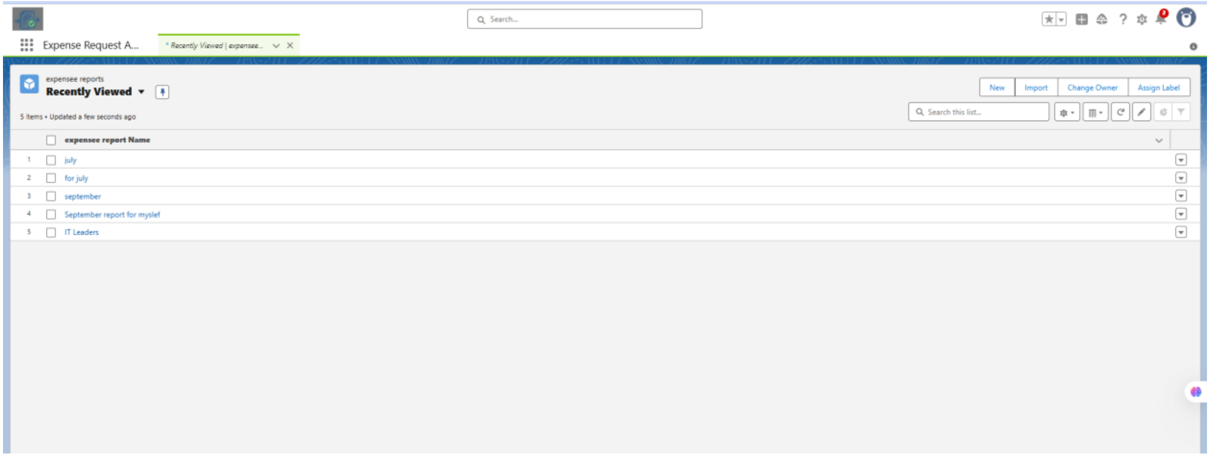
Step 2: Verify Flow Execution

Test Case	Category	Amount	Expected Status	Email Output
1	Veggies	450	Approved	"Amount 450 approved under Veggies."
2	Veggies	650	Not Approved	"Amount 650 exceeds allowed budget for Veggies."
3	Travel	6000	Approved	"Amount 6000 approved under Travel."

4	Travel	6100	Not Approved	“Amount 6100 exceeds allowed budget for Travel.”
5	Clothing	4000	Approved	“Amount 4000 approved under Clothing.”
6	Clothing	4500	Not Approved	“Amount 4500 exceeds allowed budget for Clothing.”

Edge Cases:

- Category blank → Default Outcome → Not Approved
- Amount = exact limit → Approved

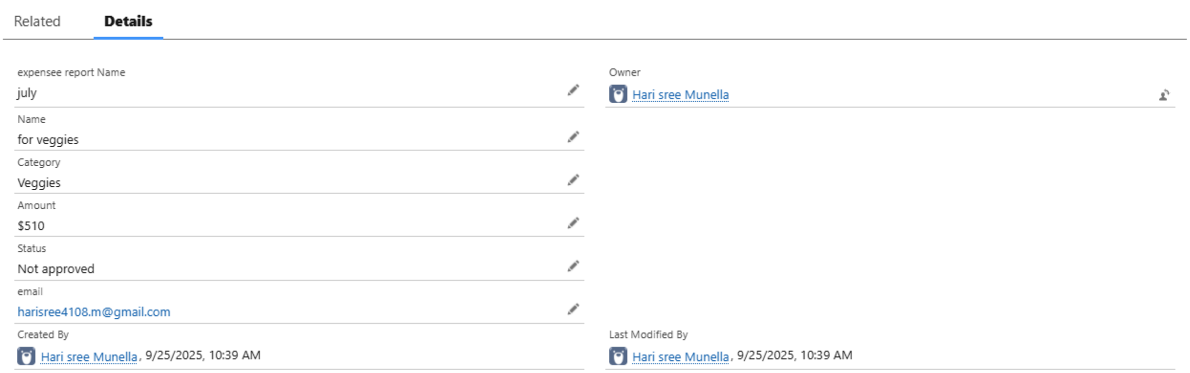


expensee reports

Recently Viewed

5 items • Updated a few seconds ago

	expensee report Name
1	july
2	for july
3	september
4	September report for myslef
5	IT Leaders



expensee report Name
july

Owner
Hari sree Munella

Name
for veggies

Category
Veggies

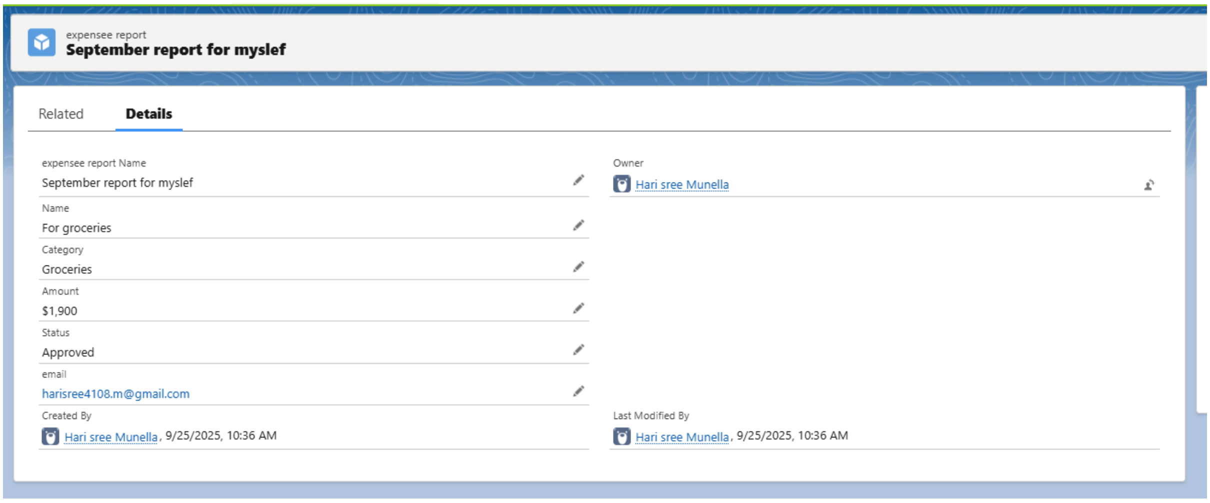
Amount
$510

Status
Not approved

email
harisree4108.m@gmail.com

Created By
Hari sree Munella, 9/25/2025, 10:39 AM

Last Modified By
Hari sree Munella, 9/25/2025, 10:39 AM



expensee report

September report for myslef

expensee report Name: September report for myslef

Owner: Hari sree Munella

Name: For groceries

Category: Groceries

Amount: $1,900

Status: Approved

email: harisree4108.m@gmail.com

Created By: Hari sree Munella, 9/25/2025, 10:36 AM

Last Modified By: Hari sree Munella, 9/25/2025, 10:36 AM

6. Error Handling

- **Status not updating:** Ensure Update Records element runs **before** Send Email
- **Email not received:** Check user email deliverability and spam folder
- **Merge fields blank:** Verify API names match {!Amount__c} and {!Category}
- **Unexpected category:** Default outcome prevents flow failure

7. Benefits

- Fully automated approval/rejection based on Category + Amount
- Instant email notification without templates
- Minimal user input (Name, Amount, Category)
- Scalable for future enhancements
- Reduces human error and improves efficiency

8. Future Enhancements

- Add Manager approval for high-value requests
- Conditional routing for different departments
- Include attachments (e.g., receipts)
- Create reporting dashboards
- Make flow mobile-friendly for submissions

9. Conclusion

This **full Category + Amount-based Expense Flow** automates approval/rejection and sends email notifications directly via **Send Email action**.

Key Highlights:

- Simple object: Name, Amount, Category, Status
- Flexible flow branching for multiple categories
- Emails dynamically generated based on outcome
- Error handling for robust execution
- Scalable, easy to maintain, ready for production