Phase 3: Data Modelling & Relationships

PROJECT TITLE:-

Expense On a Page: An expense approval & insight system.
Industry: Finance / Corporate Expense Management.
Target User: Employees, Managers, and Finance Teams.

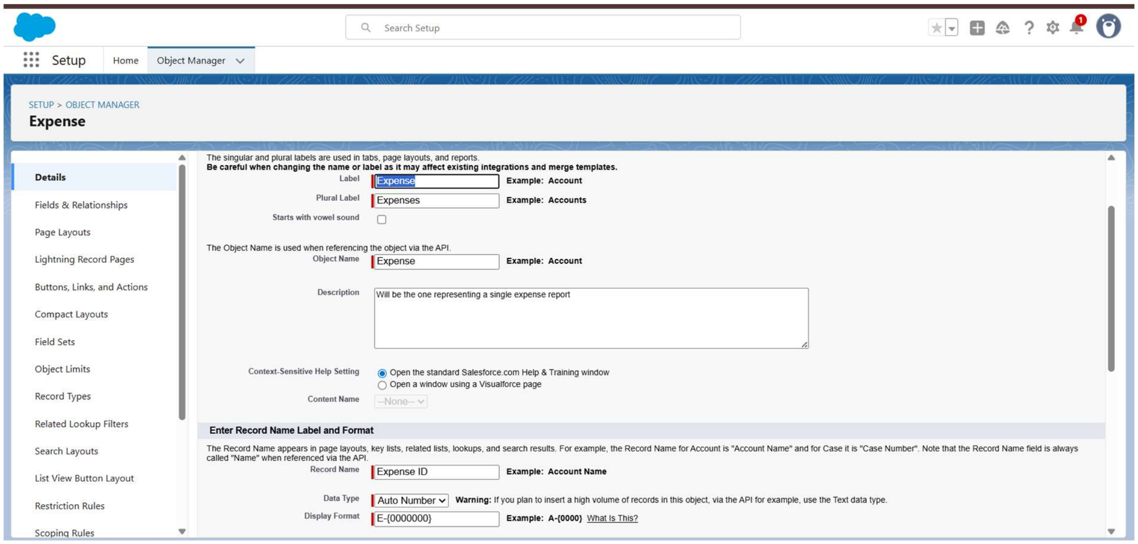
STANDARD & CUSTOM OBJECTS :-

***Standard Object*:**
The Project will be working mainly on the custom objects only, so the standard objects that are used are-

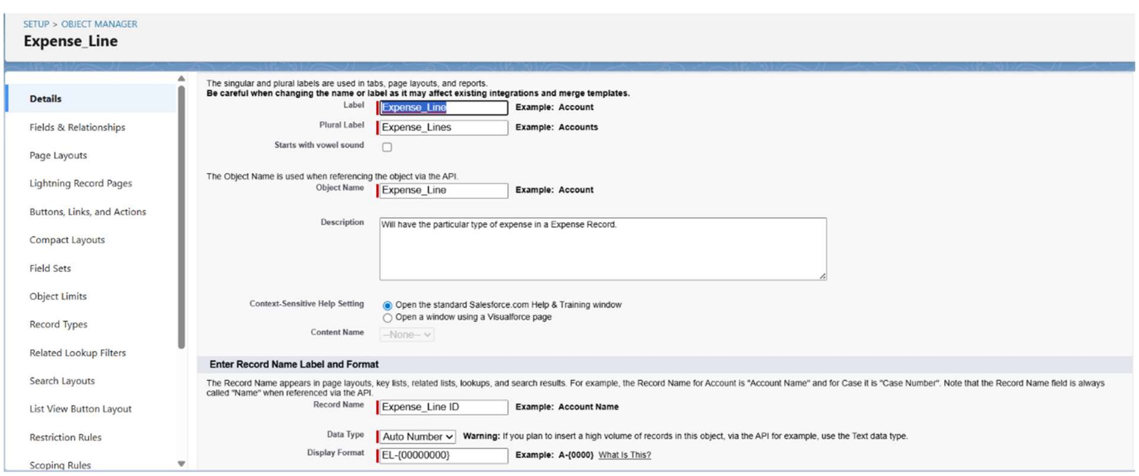
- User: Employees will be submitting the expense report.
  Managers will be approving the expense report if it is above 5000 rupees.
  Finance Team will be overlooking the all the reports and dashboard.
- Task: Auto-create a submit Receipts reminder if they are not submitted.
- Report/Dashboard: To overview the spending of the particular month.

Custom Object:
To represent a single expense report two Custom Objects are made-

- Expense (Parent Object)- It will be representing a single report (Eg – A trip to Mumbai)
  - *Label*: Expense
  - *Plural Label*: Expenses
  - *Object Name*: Expense
  - *Description:* Will be the one representing a single expense report
  - *Record Name:* Expense ID
  - *Record Type:* Auto Number
  - *Record Format:* E-{00000000}
  - *Starting Name:* 1
  - *Optional Features:* Allow Reports, Allow Activities, Track Field History enabled
  - *Search Status:* Allow Search enabled
  - *Object Creation Options:* Launch New Custom Tab Wizard after saving this custom object enabled.



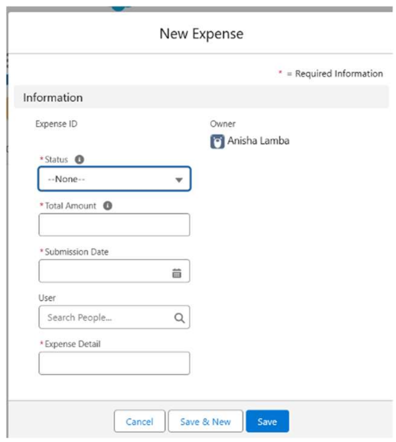
- Expense_Line (Child Object)- It will be representing the breakdown of the expense in a particular Expense Report (Eg- Taxi Fare, Hotel Bills).
    - *Label*: Expense_Line
    - *Plural Label*: Expense_Lines
    - *Object Name*: Expense_Line
    - *Description:* Will have the particular type of expense in an Expense Record.
    - *Record Name:* Expense_Line ID
    - *Record Type:* Auto Number
    - *Record Format:* EL-{00000000}
    - *Starting Name:* 1
    - *Optional Features:* Allow Reports, Allow Activities, Track Field History enabled
    - *Search Status:* Allow Search enabled
    - *Object Creation Options:* Launch New Custom Tab Wizard after saving this custom object enabled.



FIELDS:-

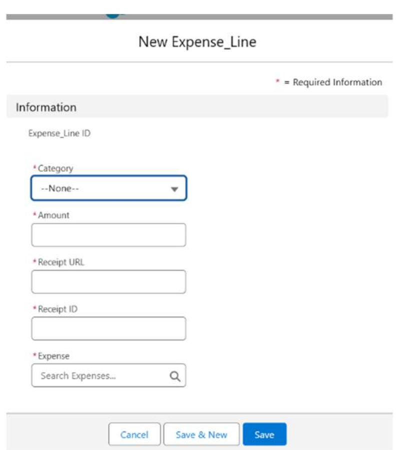
- Fields for ***Expense*** Custom Object:

FIELD	TYPE	USE
Status	Picklist	Tracks the life cycle of Expense.
Total Amount	Currency	The amount of money spent.
Submission Date	Date	The date on which the report is submitted.
Expense Detail	Text	Stores the reason for the expense.
Employee	Lookup(user)	To store whose report is that.



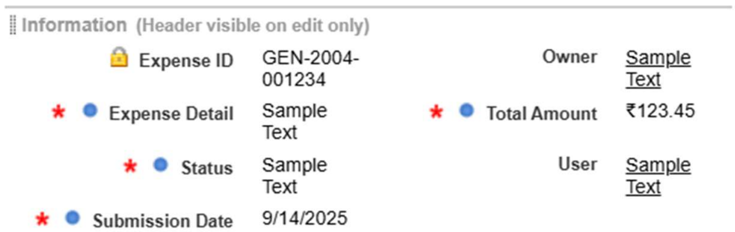
- Fields for ***Expense Line*** Custom Object:

FIELD	TYPE	USE
Category	Picklist	Shows the type of Expense.
Amount	Currency	The amount of money spent.
Receipt URL	URL	The link of the receipt of the spending
Receipt ID	Text	The ID of the receipt.
Expense(parent)	MDR(Expense)	To know from which expense report it is from

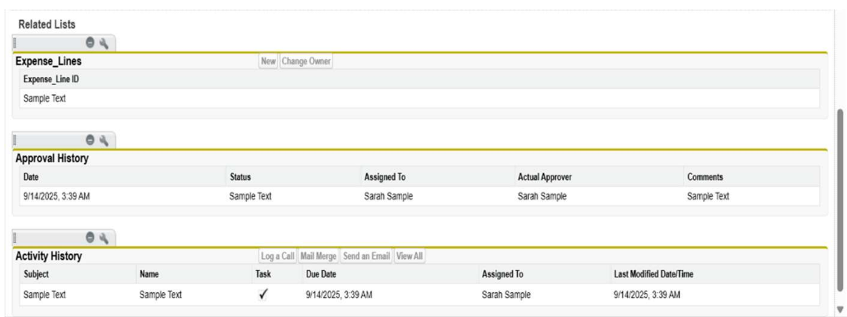


PAGE LAYOUT:-

- Making the Page Layout for the ***Expense__c object***-
  - Adding the top section of the record in the following pattern:
    Expense ID Owner
    Expense Detail Total Amount
    Status User
    Submission Date



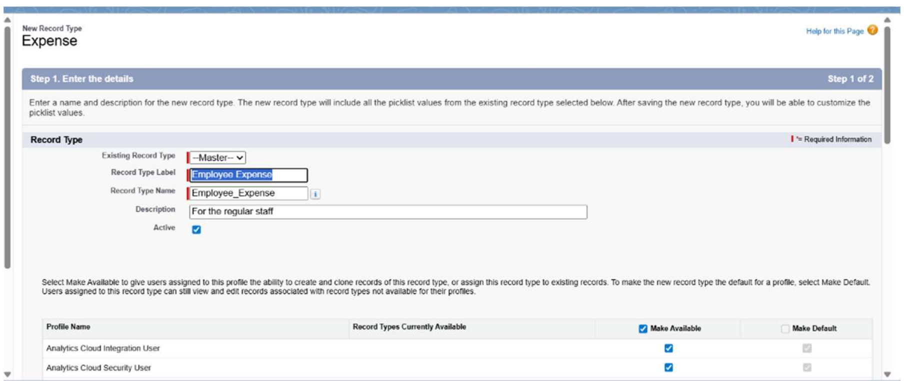
  - Adding the Related Lists in the following pattern:
    Expense_Lines
    Approval History
    Activity History



- Adding the page layout for the ***Expense_Line__c object-***
  - Adding the top section of the record in the following pattern:
    Expense_Line ID Receipt URL
    Category Receipt ID
    Amount Expense

RECORD TYPES:-

- *Expense__c Record Types:*
  - Employee Expense -> For regular staff.
    Existing Record Type: Master
    Record Type Label: Employee Expense
    Record Type Name: Employee_Expense
    Description: For the regular staff
    Activated
    Make it available for every one
    Layout: Expense Layout

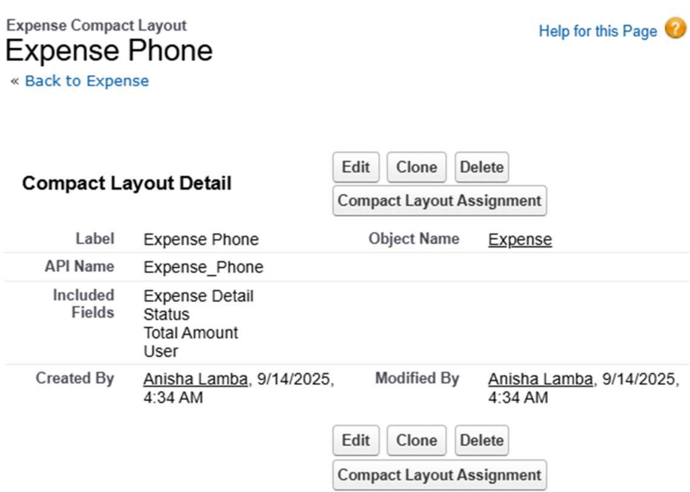


Will add few more in future if needed

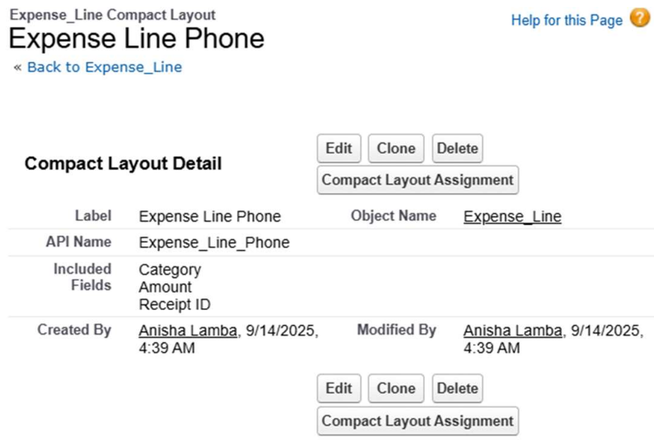
COMPACT LAYOUT:-

Making a compact layout for the Expense and Expense_Line custom objects so they are easily available for the employee working with a phone

- For the ***Expense__c object* ->** Expense Detail, Status, Total Amount, User



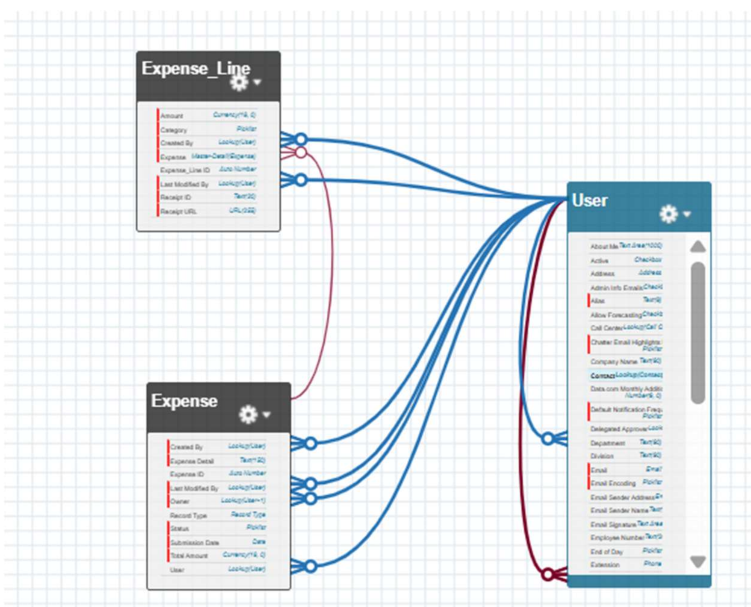
- For the ***Expense_Line__c object* ->** Category, Amount, Receipt_ID.



SCHEMA BUILDER:

Using the Schema Builder to

- Show the relationship between objects
- Know what type of relationship between the different objects.



LOOKUP VS MASTER-DETAIL VS HIERARCHICAL RELATIONSHIPS

Master-Detail Relationship: *Expense__c → Expense_Line__c*

- If Expense is deleted, all related Expense Lines are deleted.
- Allows roll-up of Amount to Expense.

Lookup Relationship: *Expense__c → User*

- Flexible, because deleting a User shouldn't delete Expenses.

Hierarchal Relationship:

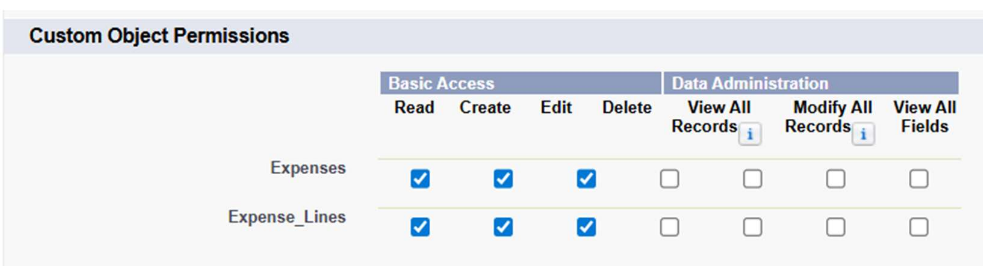
- Not needed

(Pending from Phase 2)

PROFILES:-

Expense User Profile-

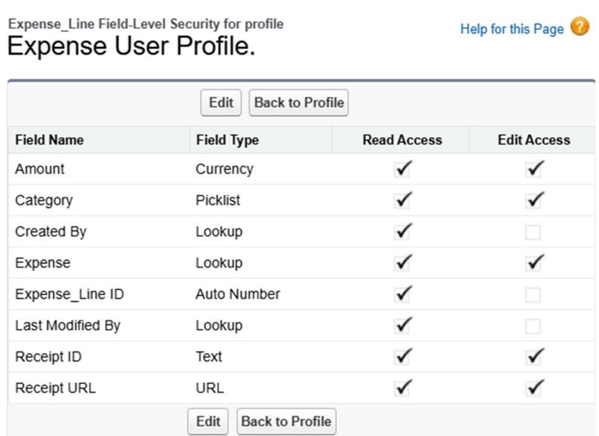
- Setting the object permission for the following object:
  - *Expense custom Object*- Read, Create, Edit (no Delete or change owner if desired).
  - *Expense_Line custom Object*- Read, Create, Edit.



Custom Object Permissions

	Basic Access				Data Administration		
	Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields
Expenses	✓	✓	✓				
Expense_Lines	✓	✓	✓				

- Ensuring that the Field Level Security Exposes Category, Amount, Receipt URL, Status.



Expense_Line Field-Level Security for profile
Expense User Profile.

Help for this Page

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Field Name	Field Type	Read Access	Edit Access
Amount	Currency	✓	✓
Category	Picklist	✓	✓
Created By	Lookup	✓	
Expense	Lookup	✓	✓
Expense_Line ID	Auto Number	✓	
Last Modified By	Lookup	✓	
Receipt ID	Text	✓	✓
Receipt URL	URL	✓	✓

Edit | Back to Profile

PERMISSION SETS:-

Expense Approver-

- Setting the Object Setting for the *Expense Custom Object*:
    - Giving Read, Edit, View All permission as required.

Object Permissions

Permission Name	Enabled
Read	☑
Create	☐
Edit	☑
Delete	☐
View All Records	☑
Modify All Records	☐
View All Fields	☐

OWD (ORGANIZATION WIDE DEFAULT):-

Changing the Sharing Setting of the Custom Objects-

- *Expense:* Private

Expense	Private	Private