<u>PHASE -3</u> Data Modelling & Relationships

In this phase of my Expense Tracker project, I focused on setting up the core data model in Salesforce. I created the custom objects, fields, relationships, layouts, and basic permissions needed for the system to function properly. Below, I have documented each step that I performed.

1.Creation of Custom Objects

The first step was to create two custom objects: ET Budget and ET Expense.

- **ET Budget:**
  This object is used to store budget information.
- **ET Expense:**
  This object is used to store each expense entry under a budget.

2. Creation of Fields

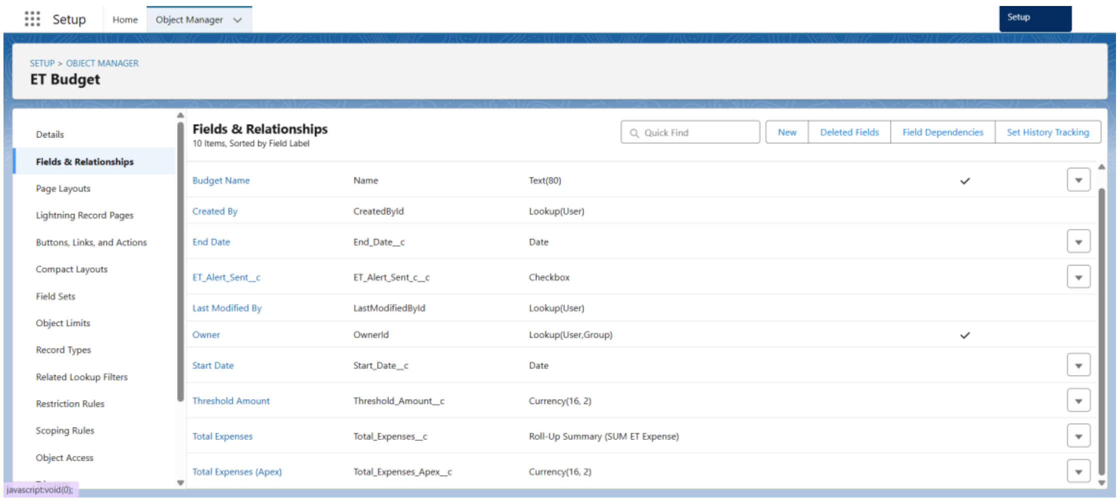
After creating the objects, I added the necessary custom fields.

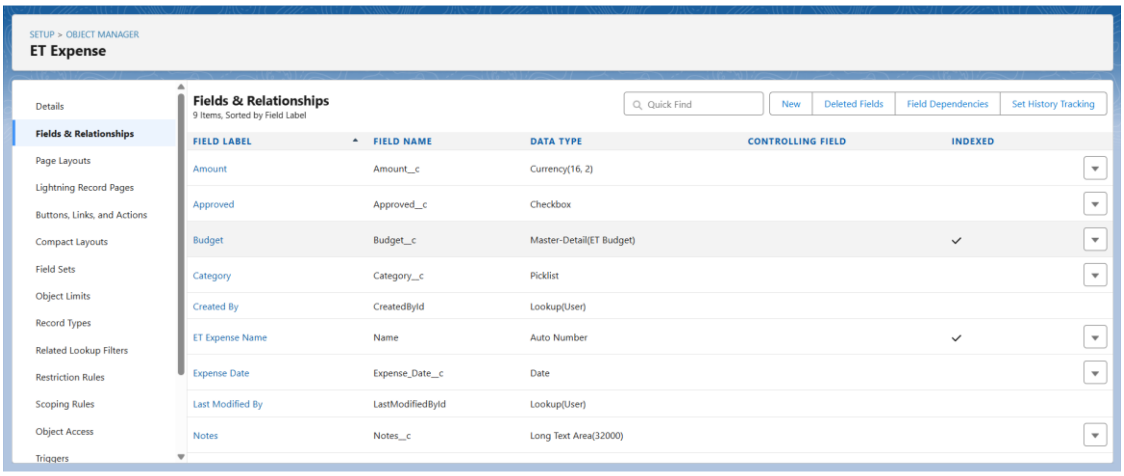
Fields on ET Budget

- Threshold Amount, Start Date, End Date, Total Expenses, Total Expenses (Apex),ET Alert Sent

Fields on ET Expense

- Amount, Expense Date, Category, Notes, Approved and Budget





3. Establishing Relationships

To link expenses with budgets, I created a **Master-Detail relationship** between *ET Expense* and *ET Budget*. This ensures that each expense is always tied to a budget and also allows roll-up summaries to work. The parent is ET Budget and the child is ET Expense.

4. Roll-Up Summary Field

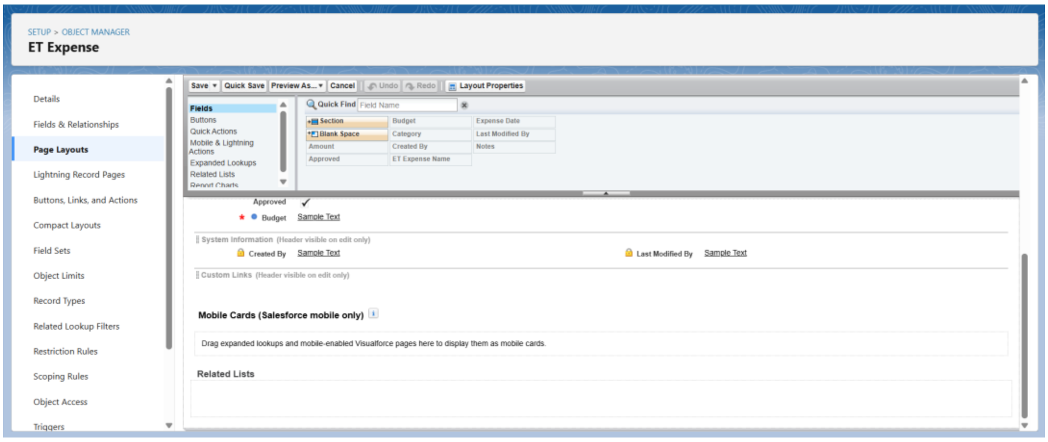
On the **ET Budget** object, I created a roll-up summary field:

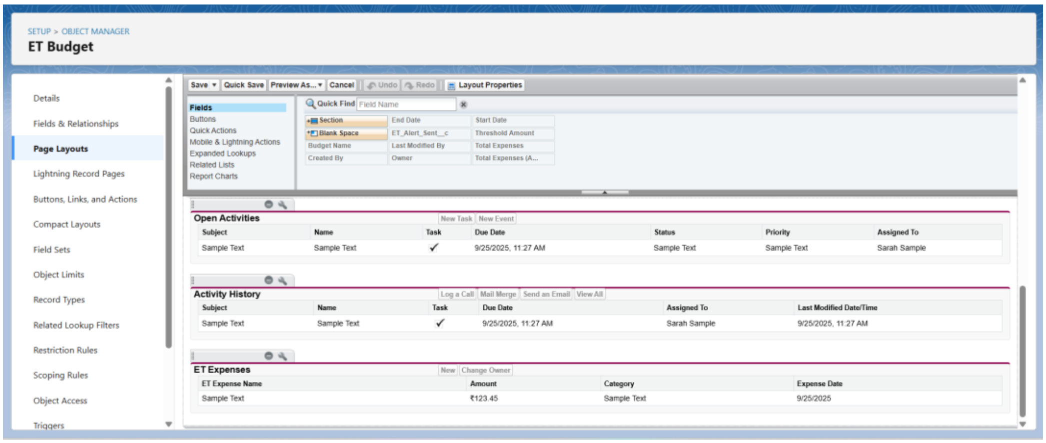
- **Total Expenses:** This field automatically sums up all the *Amount* values from the related ET Expense records.

5. Page Layouts

I customized the layouts for both objects.

- ET Expense Layout, ET Budget Layout





6. Field-Level Security and Page Layout Assignment

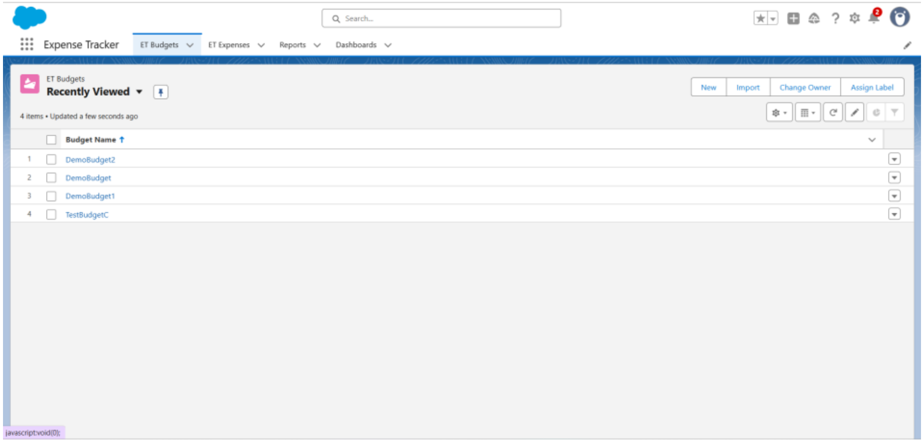
I configured field visibility for different profiles.

- **ET Manager Profile:** Full access to both ET Budget and ET Expense, including roll-up fields.
- **ET Employee Profile:** Read-only access to budgets, but permission to create and manage their own expenses.

7. Tabs and Lightning App

I created **Custom Tabs** for both ET Budget and ET Expense so they are easily accessible in the app. Then, I created a **Lightning App** called *expense-tracker*.

- The app includes navigation items for ET Budgets, ET Expenses, Reports, and Dashboards.
- The app was assigned to both manager and employee profiles.



8. Lightning Record Page

For ET Budget, I designed a **Lightning Record Page** with a header and tabs layout.

- In the header, I displayed important fields like Name, Threshold Amount and Total Expenses.
- In the Details tab, I placed the record details.
- In the Related tab, I added related lists for ET Expenses.

9. Profiles and Object Permissions

I updated the **profiles** to ensure proper access:

- **Managers** can create, read, update, and delete both budgets and expenses.
- **Employees** can create and manage their own expenses but only view budgets.

10. Org-Wide Defaults and Sharing

In the **Sharing Settings**, I set:

- **ET Budget:** Private.
- **ET Expense:** Controlled by Parent (because of master-detail relationship).