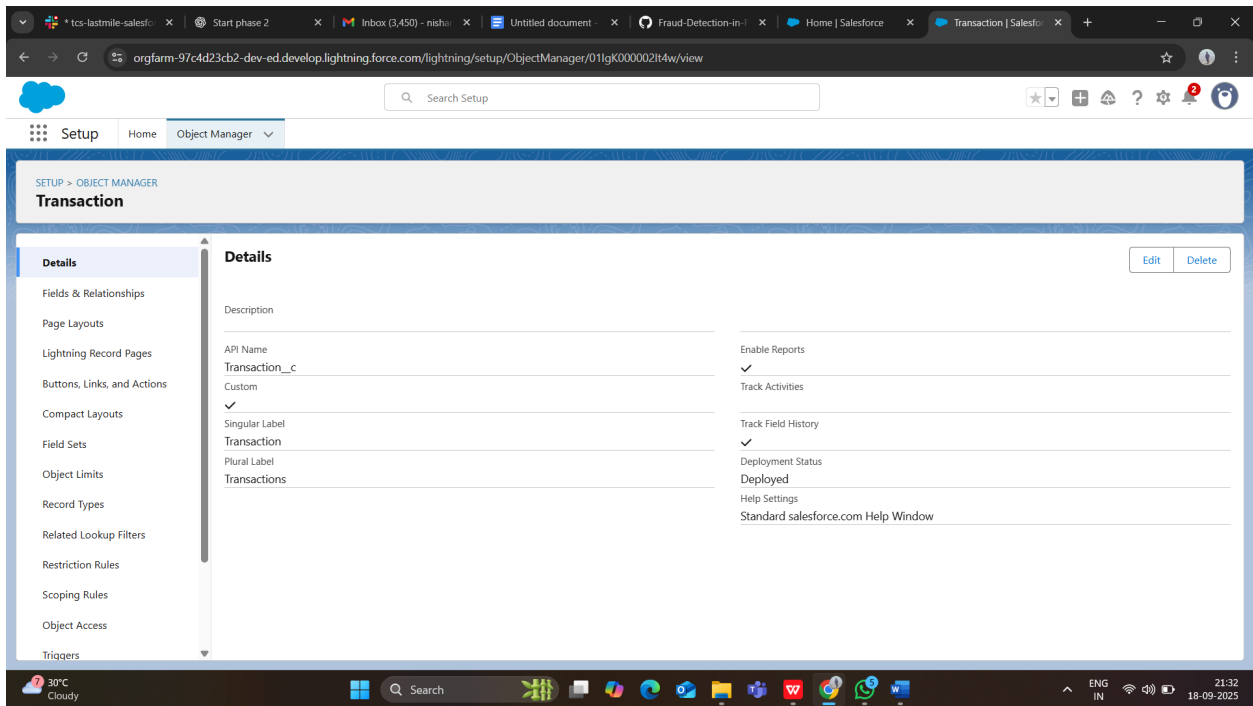


Phase 3: Data Modeling & Relationships

1. Standard & Custom Objects

- **Standard:**
 - **Account** (represents customer or business)
 - **Contact** (customer representatives).
- **Custom:**
 - **Transaction** (each financial activity).



- **Alert** (potential fraud case).

The screenshot shows the Salesforce Setup interface for an 'Alert' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts (selected), Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, and Object Access. The main content area is titled 'Alert' and includes a 'Details' section with the following fields: Description, API Name (Alert__c), Custom (checked), Singular Label (Alert), Plural Label (Alerts), Enable Reports (checked), Track Activities, Track Field History, Deployment Status (Deployed), Help Settings, and a link to the Standard salesforce.com Help Window. The top of the page shows the 'Setup' tab and a search bar. The bottom of the page shows the Windows taskbar with the time 21:33 and date 18-09-2025.

- **Case Transaction** (junction between Case & Transaction if needed).

The screenshot shows the Salesforce Setup interface for a 'Case Transaction' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, and Triggers. The main content area is titled 'Case Transaction' and includes a 'Details' section with the following fields: Description, API Name (Case_Transaction__c), Custom (checked), Singular Label (Case Transaction), Plural Label (Case Transactions), Enable Reports, Track Activities, Track Field History, Deployment Status (Deployed), Help Settings, and a link to the Standard salesforce.com Help Window. The top of the page shows the 'Setup' tab and a search bar. The bottom of the page shows the Windows taskbar with the time 21:34 and date 18-09-2025.

2. Fields

- **Transaction:** Amount, Date, Location, Channel (ATM, Online, POS), Status (Approved/Declined).

The screenshot shows the Salesforce Setup interface for the 'Transaction' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, and Triggers. The main content area is titled 'Transaction Field' and 'Transaction Id'. It includes a 'Back to Transaction' link and two tabs: 'Set Field-Level Security' and 'View Field Accessibility'. Below these is a 'Field Information' table.

Field Label	Transaction Id	Field Name	Name
Data Type	Auto Number		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Display Format	Id-0000		

- **Alert:** Risk Score, Alert Type (Suspicious Login, Unusual Transaction), Alert Status (Open, Investigating, Closed).

Screenshot of the Salesforce Setup page for the 'Alert' object. The browser address bar shows the URL: `orgfarm-97c4d23cb2-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgK000002Km49/FieldsAndRelationships/Name/view`. The page title is 'Alert'. The left sidebar shows the 'Fields & Relationships' section selected. The main content area displays the 'Alert ID' field information. The field is labeled 'Alert ID' and is an 'Auto Number' type. The 'Field Information' table shows the following details:

Field Label	Alert ID	Field Name	Name
Data Type	Auto Number		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Display Format	AL-0000		

- **Case Transaction (junction):** Links Case with one or more Transactions.

Screenshot of the Salesforce Setup page for the 'Case Transaction' object. The browser address bar shows the URL: `orgfarm-97c4d23cb2-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01lgK000002Km49/FieldsAndRelationships/00NgK000001qIS9S/view`. The page title is 'Case Transaction'. The left sidebar shows the 'Fields & Relationships' section selected. The main content area displays the 'Case Transaction Custom Field Transaction' field information. The field is labeled 'Transaction' and is a 'Master-Detail' type. The 'Field Information' table shows the following details:

Field Label	Transaction	Object Name	Case Transaction
Field Name	Transaction	Data Type	Master-Detail
API Name	Transaction_c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Nishant Deshmukh, 9/18/2025, 4:04 AM	Modified By	Nishant Deshmukh, 9/18/2025, 4:04 AM

The 'Master-Detail Options' section shows the following details:

Related To	Transaction	Child Relationship Name	Case_Transactions
Related List Label	Case Transactions		
Sharing Setting	Read/Write: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.		
Reparentable Master Detail	<input type="checkbox"/>		

3. Record Types

- **Transaction** → “Domestic Transaction” vs “International Transaction.”
 - **Alert** → “High Risk” vs “Medium Risk” vs “Low Risk.”
-

4. Page Layouts

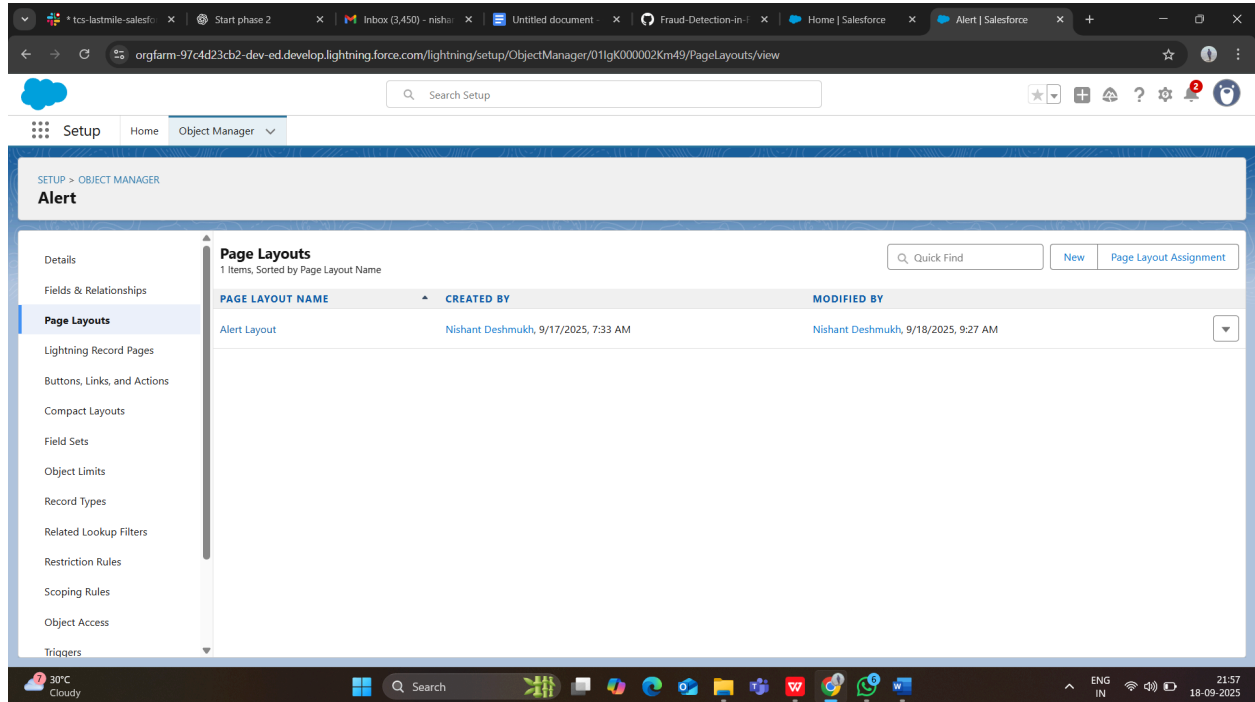
- **Transaction page** → shows related customer, alerts, and cases.

The screenshot shows the Salesforce Setup interface for the 'Transaction' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, and Triggers. The main content area is titled 'Transaction' and 'Page Layouts', showing '1 Items, Sorted by Page Layout Name'. A table lists the page layouts:

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Transaction Layout	Nishant Deshmukh, 9/16/2025, 8:15 AM	Nishant Deshmukh, 9/18/2025, 4:04 AM

The bottom of the image shows a Windows taskbar with the date and time as 21:58 on 18-09-2025.

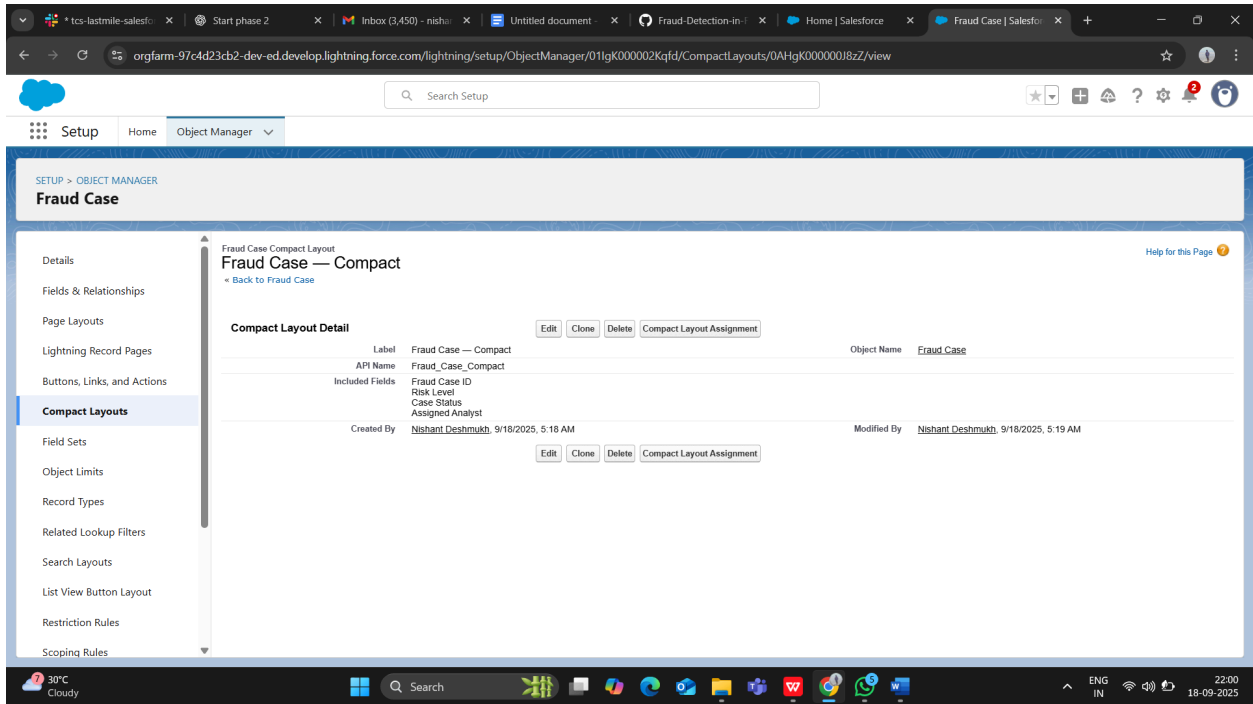
- **Alert page** → shows related transactions and assigned fraud analyst.



- **Case page** → shows linked alerts and transactions.

5. Compact Layouts

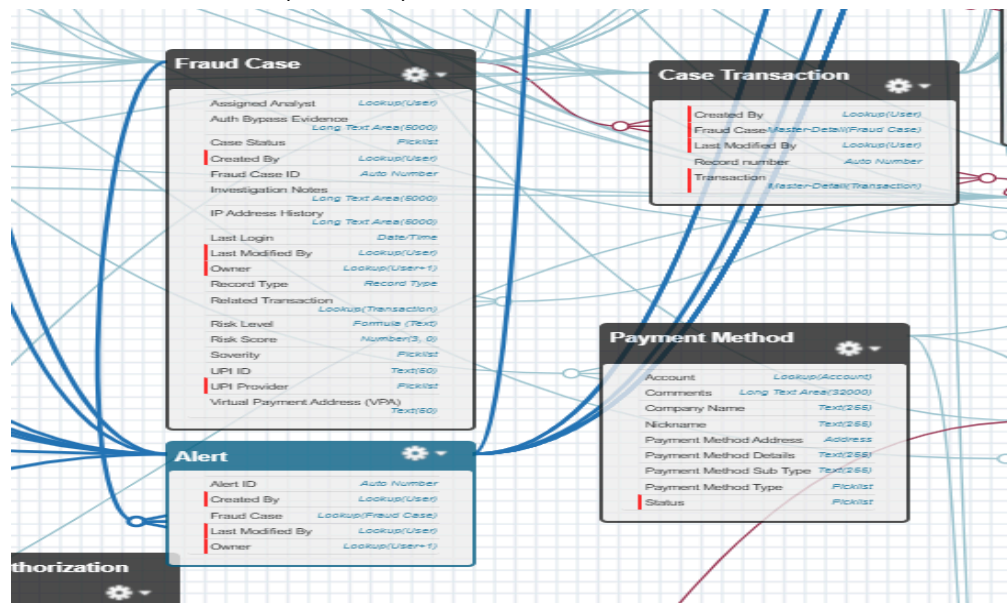
- **Mobile (Transaction):** Amount, Date, Status.
- **Mobile (Alert):** Alert Type, Risk Score, Status.



6. Schema Builder

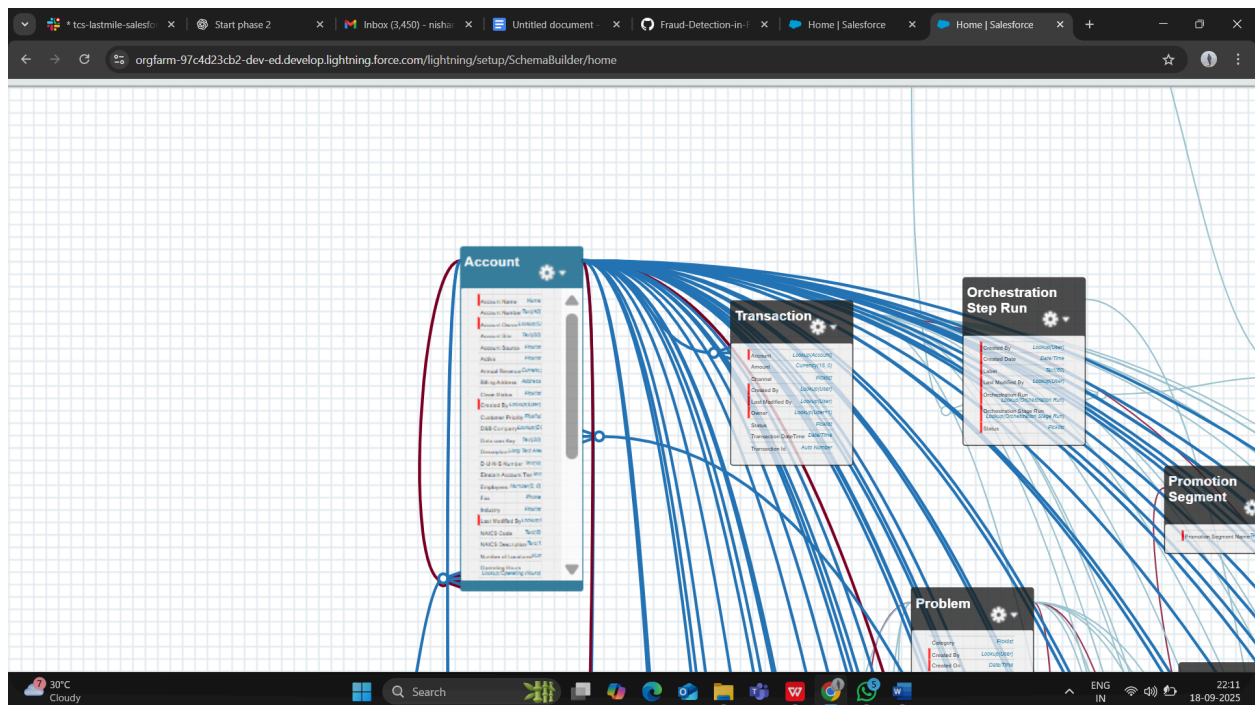
- Use **Schema Builder** to visually design:
 - Account → Transaction (Lookup).
 - Transaction → Alert (Lookup).

- Case ↔ Transaction (Junction).



7. Lookup vs Master-Detail vs Hierarchical

- Account ↔ Transaction → Lookup (transactions don't own accounts, but reference them).



- **Transaction ↔ Alert → Lookup** (one transaction may trigger multiple alerts).
-

8. Junction Objects

- **Case Transaction:**
 - Used when one Case contains multiple suspicious Transactions.
 - Enables many-to-many relationship.
-

9. External Objects

- If fraud detection system integrates with **external banking/credit systems**, use **External Objects** (via Salesforce Connect) to bring in real-time **transaction logs**, **blacklist databases**, or **KYC data** without storing them directly in Salesforce.