

Phase 3: Data Modeling & Relationships – CLMS Project

1. Standard & Custom Objects

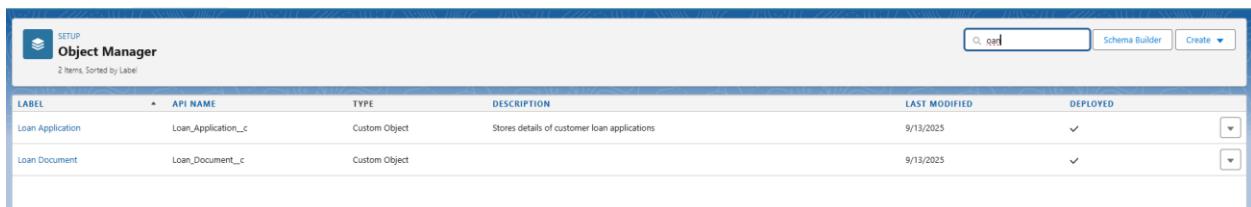
Standard Objects

- Account → Represents Borrowers (individual or corporate).
- Contact → Stores borrower contact details.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account	Standard Object			
Contact	Contact	Standard Object			

Custom Objects

- Loan Application → Loan request details (Loan Type, Amount, Tenure, Interest Rate, Status).
- EMI Schedule → Repayment installments (EMI Amount, Due Date, Status).
- Loan Documents → Loan-related documents (Proof of ID, Proof of Income, Collateral).
- Approval History → Loan approval/rejection trail (by Credit Manager and Finance Officer).



The screenshot shows the Salesforce Object Manager interface. At the top, there's a header with 'SETUP' and 'Object Manager'. Below it, a search bar contains 'carl' and buttons for 'Schema Builder' and 'Create'. The main area displays a table of objects:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Loan Application	Loan_Application__c	Custom Object	Stores details of customer loan applications	9/13/2025	✓
Loan Document	Loan_Document__c	Custom Object		9/13/2025	✓

2. Fields

Loan Application Fields

- Loan Number (Auto Number)

- Loan Type
- Loan Amount
- Loan Tenure (Months)
- Interest Rate
- EMI Amount
- Status (Pending, Approved, Rejected)
- Application Date
- Branch
- Loan Officer
- Customer (Account Lookup)
- Customer Name

Fields & Relationships 17 Items, Sorted by Field Label				
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Account	Account__c	Lookup(Account)		✓
Application Date	Application_Date__c	Date		
Branch	Branch__c	Lookup(Branch)		✓
Created By	CreatedBy	Lookup(User)		
Customer	Customer__c	Lookup(Contact)		✓
Customer Name	Customer_Name__c	Text(255)		
EMI Amount	EMI_Amount__c	Formula (Currency)		
Interest Rate	Interest_Rate__c	Percent(5, 2)		
Last Modified By	LastModifiedBy	Lookup(User)		
Loan Amount	Loan_Amount__c	Currency(18, 0)		
Loan Number (Text or Auto Number)	Name	Auto Number		✓
Loan Officer	Loan_Officer__c	Lookup(User)		✓

EMI Schedule Fields

- EMI Amount
- Due Date

- Payment Status

The screenshot shows the Salesforce Object Manager interface for the 'EMI Schedule' object. The left sidebar includes options like 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, and Scoping Rules. The main area displays the 'Fields & Relationships' section with 7 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Due Date	Due_Date__c	Date		
EMI Amount	EMI_Amount__c	Currency(16, 2)		
EMI Schedule Name	Name	Auto Number		
Last Modified By	LastModifiedById	Lookup(User)		
Loan Application	Loan_Application__c	Master-Detail(Loan Application)		
Payment Status	Payment_Status__c	Picklist		

Loan Documents Fields

- Loan Document Name
- Document Type
- Document Name
- Loan Application (Lookup)
- Created By

The screenshot shows the Salesforce Object Manager interface for the 'Loan Document' object. The left sidebar includes options like 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, and Scoping Rules. The main area displays the 'Fields & Relationships' section with 6 items, sorted by Field Label. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Document Name	Document_Name__c	Text(255)		
Document Type	Document_Type__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Loan Application	Loan_Application__c	Master-Detail(Loan Application)		
Loan Document Name	Name	Auto Number		

Approval History Fields

- Approver Role (Picklist: Credit Manager, Finance Officer)
- Decision (Picklist: Approved, Rejected, Pending)

- Date of Action (Date/Time)
- Comments (Text)
- Loan Application (Lookup)

Fields & Relationships				
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Approval History Name	Name	Auto Number		✓
Approver Role	Approver_Role__c	Picklist		▼
Comments	Comments__c	Long Text Area(32768)		▼
Created By	CreatedById	Lookup(User)		▼
Date of Action	Date_of_Action__c	Date/Time		▼
Decision	Decision__c	Picklist		▼
Last Modified By	LastModifiedById	Lookup(User)		▼
Loan Application	Loan_Application__c	Lookup(Loan Application)		✓
Owner	OwnerId	Lookup(User/Group)		✓

3. Record Types

- Personal Loan
- Business Loan
- Home Loan

Record Types				
RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY	
Loan Request (for Loan Officers)		✓	K Nikhilesh Reddy, 9/19/2023, 4:48 AM	▼
Loan Review		✓	K Nikhilesh Reddy, 9/13/2023, 4:57 AM	▼

Each record type has its own page layout and picklist values.

4. Page Layouts

- Loan Application Layout → Loan details + related lists (EMI, Documents, Approval History).
- EMI Schedule Layout → EMI Amount, Due Date, Status.
- Loan Documents Layout → Document Type, Document Name, Loan Application.
- Approval History Layout → Approver Role, Decision, Date of Action, Comments.

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Loan Application Layout	K.Nikhilesh Reddy, 9/12/2025, 5:05 AM	K.Nikhilesh Reddy, 9/19/2025, 4:40 AM
Loan Request Layout	K.Nikhilesh Reddy, 9/12/2025, 9:39 AM	K.Nikhilesh Reddy, 9/19/2025, 4:40 AM

5. Compact Layouts

- Loan Application Compact Layout → Loan Number, Customer Name, Loan Amount, Loan Type, Status, Application Date.
- EMI Schedule Compact Layout → EMI Amount, Due Date, Status.
- Loan Documents Compact Layout → Loan Document Name, Document Type, Loan Application, Created By.
- Approval History Compact Layout → Approver Role, Decision, Date of Action, Loan

Application.

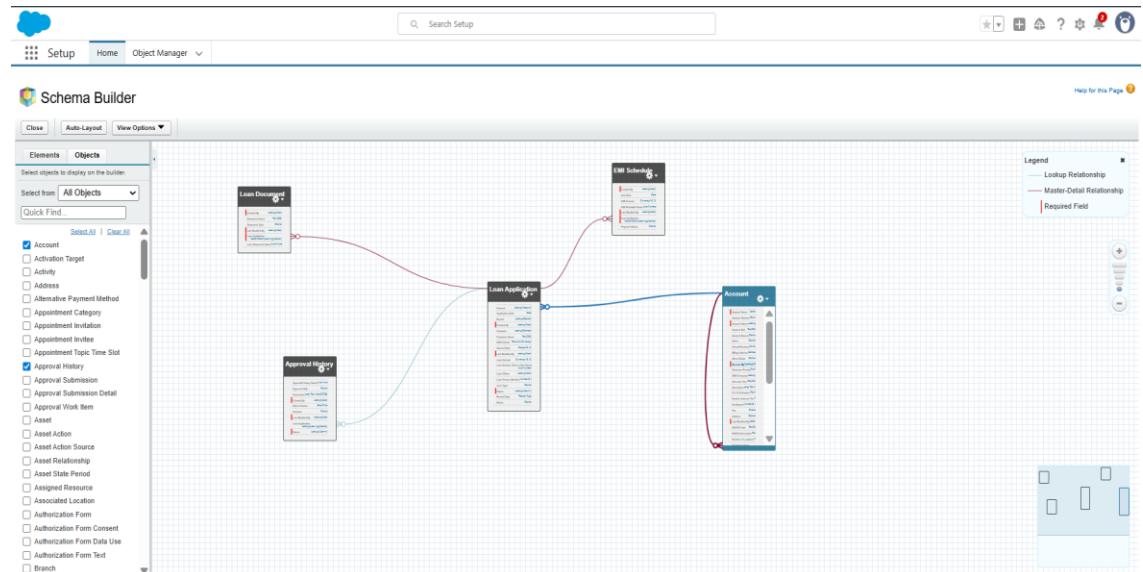
The screenshot shows the Salesforce Setup > Object Manager interface. The left sidebar has a 'Compact Layouts' section selected. The main area displays a table titled 'Compact Layouts' with one item listed:

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
System Default	SYSTEM		K Nikhil Reddy	9/19/2025, 4:19 AM

Buttons at the top right include 'Quick Find', 'New', and 'Compact Layout Assignment'.

6. Schema Builder

- Visual data model showing object relationships.
- Final schema:
 - Account → Loan Application (Lookup)
 - Loan Application → EMI Schedule (Master-Detail)
 - Loan Application → Loan Documents (Master-Detail)
 - Loan Application → Approval History (Lookup)



7. Lookup vs Master-Detail vs Hierarchical

- Lookup Relationship → Loose connection
Example: Loan Application → Approval History
 - Master-Detail Relationship → Strong parent-child
Example: Loan Application → EMI Schedule, Loan Application → Loan Documents
 - Hierarchical Relationship → Only for User object (Role Hierarchy)
CEO → Branch Manager → Credit Manager → Loan Officer → Finance Officer
-

8. Junction Objects

- Guarantor Mapping → Junction object for many-to-many:
 - Borrower (Account) ↔ Loan Application.
-

9. External Objects

- Credit Bureau Records (external object via Salesforce Connect).
 - Used to fetch credit scores or external financial history for loan evaluation.
-

📌 Final Data Model

Account (Borrower) | — Loan Application |— EMI Schedule (Master-Detail) |—
Loan Documents (Master-Detail) |— Approval History (Lookup)