

Project Title: Loan & Credit Approval System

Phase: 1

❖ Problem Statement:

In the financial sector, loan processing and credit approval are often delayed due to manual procedures, paper-based applications, and inefficient communication between applicants, loan officers, and managers. This leads to:

- Time-consuming approval cycles.
- High chances of human error in eligibility and credit checks.
- Lack of transparency for applicants regarding application status.
- Limited tracking of loan disbursement and repayment details.
- Absence of centralized dashboards for management reporting and decision-making.

The Loan & Credit Approval System aims to address these challenges by building a Salesforce-based application that:

- Enables applicants to submit loan requests digitally.
- Performs automated eligibility and credit checks.
- Tracks loan disbursements and repayments.
- Provides interactive dashboards and reports for managers to monitor overall loan operations.

❖ Problem Understanding & Industry Analysis

This phase focuses on analyzing the loan management process, identifying stakeholders, and aligning the solution with industry standards. The key activities include:

- **Requirement Gathering** – Collect and document both functional and non-functional requirements of the Loan & Credit Approval System.
- **Stakeholder Analysis** – Identify key stakeholders such as Loan Officers, Branch Managers, Admins, and Applicants, and define their roles and expectations.
- **Business Process Mapping** – Map the complete loan lifecycle, covering application submission, credit checks, approvals, disbursements, and repayments.
- **Industry Specific Use Case Analysis** – Study existing practices in the banking and finance industry to align the system with real-world workflows.
- **AppExchange Exploration** – Explore Salesforce AppExchange solutions related to loan management to identify potential integrations or enhancements.

Phase-2: Org Setup & Configuration

1. Salesforce Editions:

- Used Developer Edition Org (free).
 - Includes custom objects, Flows, Apex, Approval Processes, and Lightning components.
 - Sandbox not available in Developer Edition, so work is done directly in Dev O.
-

2. Company Profile Setup:

- Navigated to Setup → Company Information.
- Updated organization name to “Loan & Credit Approval System”.
- Adjusted:
 - Currency → INR
 - Locale → India
 - Timezone → IST
- This ensures reports and currency fields reflect correct region settings.

The screenshot shows the Salesforce Setup interface. At the top, there's a navigation bar with icons for Home, Object Manager, and a search bar labeled "Search Setup". Below this is a sidebar with sections like "Company Settings" (Business Hours, Calendar Settings), "Data Protection and Privacy", "Fiscal Year", "Holidays", "Language Settings", and "My Domain". A message at the bottom of the sidebar says "Didn't find what you're looking for? Try using Global Search." The main content area is titled "Company Information" and shows the "Loan & Credit Approval System" profile. It includes tabs for "User Licenses [10+]", "Permission Set Licenses [10+]", "Feature Licenses [11]", and "Usage-based Entitlements [10-]". The "Organization Detail" section contains the following data:

Organization Name	Phone
Primary Contact	OrgFarm EPIC
Division	Default Locale
Address	English (United States)
Fiscal Year Starts In	Default Language
January	English
Activate Multiple Currencies	Default Time Zone
<input type="checkbox"/>	(GMT-07:00) Pacific Daylight Time (America/Los_Angeles)
Enable Data Translation	Currency Locale
<input type="checkbox"/>	English (United States) - USD
Newsletter	Used Data Space
<input checked="" type="checkbox"/>	342 KB (7%) [View]
Admin Newsletter	Used File Space
<input checked="" type="checkbox"/>	17 KB (0%) [View]
	API Requests, Last 24 Hours
	39 (15,000 max)

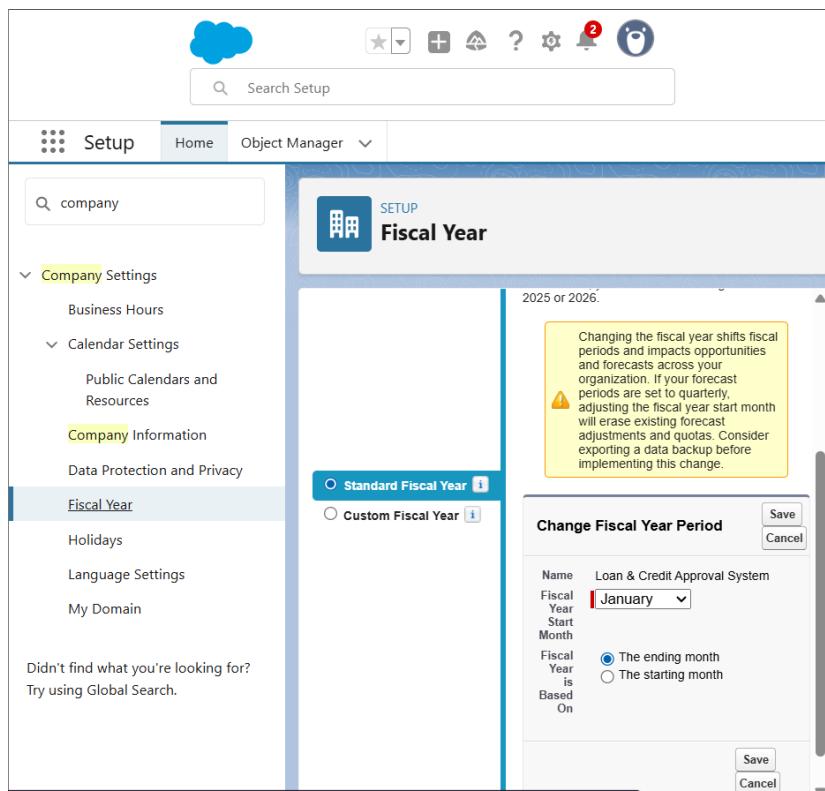
3. Business Hours & Holidays:

- Defined Bank Working Hours: Monday–Friday, 9 AM–6 PM.
- Added key holidays (e.g., Dussehra, Diwali).

The screenshot shows the Salesforce Setup interface. The left sidebar is titled "Company Settings" and includes sections for Business Hours, Calendar Settings, Company Information, Data Protection and Privacy, Fiscal Year, Holidays, Language Settings, and My Domain. The "Business Hours" section is currently selected. The main content area is titled "Business Hours" and "Organization Business Hours". It displays a table of business hours with two entries: "Bank Working Hours" and "Default". Both entries have the time zone "(GMT-07:00) Pacific Daylight Time (America/Los_Angeles)". The "Default" entry is checked. Navigation links A through Z and an "Other" link are at the top of the table. A "Help for this Page" link is in the top right corner.

The screenshot shows the Salesforce Setup interface. The left sidebar is titled "Company Settings" and includes sections for Business Hours, Calendar Settings, Company Information, Data Protection and Privacy, Fiscal Year, Holidays, Language Settings, and My Domain. The "Holidays" section is currently selected. The main content area is titled "Holidays". It displays a table of holidays with two entries: "Diwali" and "Dussehra". Both entries are listed as "10/20/2025 All Day". A "New" button is at the top right of the table. Below the table is a section titled "Elapsed Holidays" which states "No records to display". A "Help for this Page" link is in the top right corner. A note at the bottom of the page says: "Holidays are dates and times at which business hours are suspended. Business hours are the days and hours that your support team is available."

4. Fiscal Year Settings: (Default: Start from January)



5. User Setup & Licenses:

- Created 3 test users for role-based testing:
 - Admin User – Full access.
 - Branch Manager – Mid-level access, approval authority.
 - Loan Officer – Creates and manages applications.
- Assigned Standard User licenses and mapped them to roles.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Admin_Project	am	sankishamoni2001155@agentforce.com	Admin	<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	Chatter_Editor	Chatter	chatty00000000000000000000000000000000@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	CEPIC_OrgTeam	CEPIC	rest_acces00000000000000000000000000000000@orgteam.salesforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	Manager_Branch	bmanra	discrement002149@gmail.com	Branch Manager	<input checked="" type="checkbox"/>	Branch Manager Profile
<input type="checkbox"/>	Officer_Loan	loff	discrement1609@gmail.com	Loan Officer	<input checked="" type="checkbox"/>	Loan Officer Profile
<input type="checkbox"/>	User_Integration	integ	integration00000000000000000000000000000000@chuan.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity00000000000000000000000000000000@chuan.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

6. Profiles:

- Customized profiles for different roles:
 - Loan Officer Profile → CRUD on Loan Application & Payment objects, Read-only on Credit Check.
 - Branch Manager Profile → Read/Edit/View All on Loan Applications, Read/Edit on Payments and Credit Checks.
 - Admin Profile → Full system access.
- Profiles define baseline permissions for objects and fields.
 - Admin (Custom Profile):

Action	Profile Name	User License	Custom
<input type="checkbox"/>	Admin_Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Analytics_Cloud_Integratio...	Analytics Cloud Integ...	<input type="checkbox"/>
<input type="checkbox"/>	Analytics_Cloud_Security_...	Analytics Cloud Integ...	<input type="checkbox"/>
<input type="checkbox"/>	Anypoint_Integration	Identity	<input type="checkbox"/>
<input type="checkbox"/>	Authenticated_Website	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/>	Authenticated_Website	Authenticated Website	<input type="checkbox"/>

ii. Branch Manager Profile (Custom Profile):

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes a cloud icon, a search bar labeled "Search Setup", and various navigation icons.
- Top Navigation:** Shows "Setup" as the active tab, along with "Home" and "Object Manager".
- Left Sidebar:** Under "Users", the "Profiles" tab is selected. A message says "Didn't find what you're looking for? Try using Global Search."
- Central Content:** The title is "Profiles" under "SETUP Profiles". It includes a "Help for this Page" link and a "Print" icon.
- Table:** Displays a list of profiles with columns: Action, Profile Name, User License, and Custom. One row is selected, showing "Edit | Del |..." for "Branch Manager Profile", "External Apps Login" checked, and "Salesforce" checked.

iii. Loan Officer Profile (Custom Profile):

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes a cloud icon, a search bar labeled "Search Setup", and various navigation icons.
- Top Navigation:** Shows "Setup" as the active tab, along with "Home" and "Object Manager".
- Left Sidebar:** Under "Users", the "Profiles" tab is selected. A message says "Didn't find what you're looking for? Try using Global Search."
- Central Content:** The title is "Profiles" under "SETUP Profiles". It includes a "Help for this Page" link and a "Print" icon.
- Table:** Displays a list of profiles with columns: Action, Profile Name, User License, and Custom. One row is selected, showing "Edit | Del |..." for "Loan Officer Profile", "Salesforce" checked, and "Custom" checked.

7. Roles:

- Established role hierarchy:
 - Admin → Branch Manager → Loan Officer
- This ensures managers see subordinate records automatically, important for loan supervision

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes a cloud icon, user navigation (Profile, Logout), and a search bar labeled "Search Setup".
- Navigation Bar:** Shows "Setup" as the active tab, along with "Home" and "Object Manager".
- Left Sidebar:** A sidebar titled "roles" with sections for "Users" (selected), "Feature Settings", "Sales", "Service", and "Case Teams". Under "Sales", there are links to "Contact Roles on Contracts" and "Contact Roles on Opportunities". Under "Service", there are links to "Case Team Roles" and "Contact Roles on Cases".
- Main Content Area:** Titled "Creating the Role Hierarchy" with a "Help for this Page" link. It displays a hierarchical tree of roles under "Your Organization's Role Hierarchy".
 - Root node: "Loan & Credit Approval System" (with "Add Role" option)
 - Child node: "Admin" (with "Edit | Del | Assign" options and "Add Role" option)
 - Child node: "Branch Manager" (with "Edit | Del | Assign" options and "Add Role" option)
 - Child node: "Loan Officer" (with "Edit | Del | Assign" options and "Add Role" option)
 - Child node: "CEO" (with "Edit | Del | Assign" options and "Add Role" option)
- Footer:** A message stating "Didn't find what you're looking for? Try using Global Search."

8. Permission Sets:

The screenshot shows the Salesforce Setup interface. In the top navigation bar, the 'Setup' tab is selected. A search bar contains the text 'permi'. The left sidebar has sections for 'Users' (Permission Set Groups, Permission Sets), 'Custom Code' (Custom Permissions), and a global search section. The main content area is titled 'Permission Sets' and displays a table of existing permission sets. The table includes columns for Action, Permission Set Name, Description, and License. One row is visible: 'Loan Approval Access' (Description) under the 'Salesforce' license. Navigation controls at the bottom show 1-1 of 1, 0 Selected, Previous, Next, and Page 1 of 1.

Action	Permission Set Name	Description	License
<input type="checkbox"/> Del Clone	Loan Approval Access		Salesforce

9. OWD:

Configured Sharing Settings:

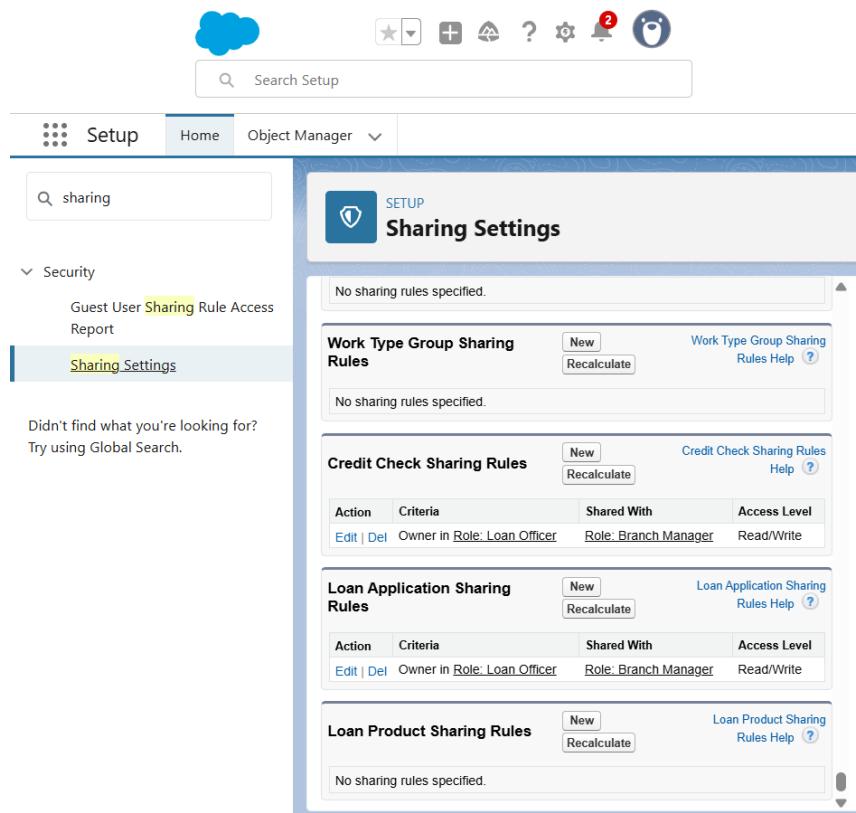
- Loan Application = Private
- Payment = Controlled by Parent (Loan Application)
- Credit Check = Private

The screenshot shows the Salesforce Setup interface with the 'Sharing' search term entered in the global search bar. The 'Sharing Settings' section is selected under the 'Security' category. A table lists the sharing settings for various objects:

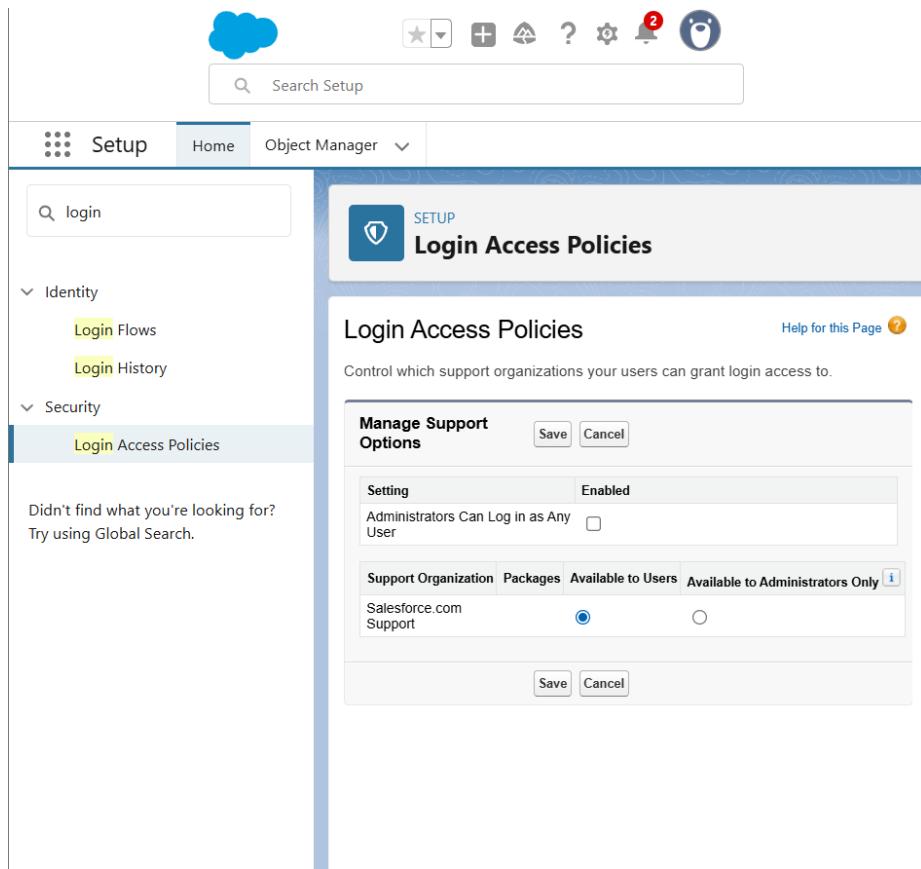
Object	Work Type	Sharing Rule	Controlled By
Work Type	Private	Private	✓
Work Type Group	Public Read/Write	Private	✓
Credit Check	Public Read/Write	Private	✓
Loan Application	Public Read/Write	Private	✓
Loan Product	Public Read/Write	Private	✓
Payment	Controlled by Parent	Controlled by Parent	✓

10.Sharing Rules:

- Implemented role-based sharing:
 - LoanOfficer_to_BranchManager → shares Loan Applications owned by Loan Officers with their Branch Managers (Read/Write).
 - CreditCheck_to_BranchManager → shares Credit Checks owned by Loan Officers with Branch Managers (Read/Write).
- Payments inherit access from Loan Applications (no separate sharing rule needed).



11. Login Access Policies (Default- No changes made)



12. Dev Org Setup

- **Action Taken:** Used a Salesforce Developer Org for the entire project development.
- **Purpose:** Provides a full-featured environment to configure objects, automation, Apex, and Lightning components.

13. Sandbox Usage (Not Implemented)

- **Reason:** Project was developed directly in the Developer Org; no separate sandbox environment was used.

14. Deployment Basics

- **Action Taken:** Integrated the Salesforce Org with VS Code using Salesforce SFDX.

- **Purpose:**
 - Enables version control and metadata management.
 - Allows pushing Apex classes, triggers, and Lightning components from local VS Code environment to Salesforce Org.
-

Phase – 3: Data Modeling & Relationships

1. Standard & Custom Objects

- Standard Objects: Contact, User (used for Applicant and Approver).
- Custom Objects created:
 - Loan_Application__c → core loan records.
 - Loan_Product__c → loan catalog with product-specific rules.
 - Payment__c → EMI schedules & repayments.
 - Credit_Check__c → stores applicant's credit verification results.

Object Manager						
Label	API Name	Type	Description	Last Modified	Deployed	Actions
Loan Application	Loan_Application__c	Custom Object	Stores all loan applications submitted by applicants, including details of amount, tenure, status, and approvals.	9/13/2025	✓	<button>▼</button>
Loan Product	Loan_Product__c	Custom Object	Catalog of available loan products, with eligibility and limit details.	9/13/2025	✓	<button>▼</button>

Object Manager						
Label	API Name	Type	Description	Last Modified	Deployed	Actions
Credit Check	Credit_Check__c	Custom Object	Stores results of credit checks (manual or via external API) for a loan application.	9/13/2025	✓	<button>▼</button>
Credit Memo	CreditMemo	Standard Object				
Credit Memo Invoice Application	CreditMemolnApplication	Standard Object				
Credit Memo Line	CreditMemoline	Standard Object				
Web Cart Credit	WebCartCredit	Standard Object				

2. Fields

- Defined key fields for each object (Loan Amount, Tenure, Interest Rate, Credit Score, Status, etc.).
- Used Currency, Number, Date, Picklist, Lookup field types.
- Example: Loan_Application__c includes fields for Applicant (Lookup to Contact), Approved By (Lookup to User), and Status (Picklist).

i. Loan Application:

The screenshot shows the Salesforce Setup interface with the following details:

SETUP > OBJECT MANAGER
Loan Application

Fields & Relationships
16 items. Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Annual Interest Rate	Annual_Interest_Rate__c	Percent(18, 0)		
Applicant	Applicant__c	Lookup(Contact)		✓
Approval Date	Approval_Date__c	Date		
Approved By	Approved_By__c	Lookup(User)		✓
Created By	CreatedById	Lookup(User)		
Credit Score	Credit_Score__c	Number(3, 0)		
Disbursement Date	Disbursement_Date__c	Date		
Eligibility Result	Eligibility_Result__c	Text(255)		
Last Modified By	LastModifiedById	Lookup(User)		

Loan Amount	Loan_Amount__c	Currency(16, 2)	
Loan Application Name	Name	Auto Number	✓
Loan Type	Loan_Type__c	Picklist	
Monthly EMI	Monthly_EMI__c	Currency(16, 2)	
Owner	OwnerId	Lookup(User,Group)	✓
Status	Status__c	Picklist	
Tenure(Months)	Tenure_Months__c	Number(3, 0)	

ii. Loan product:

The screenshot shows the Salesforce Setup interface with the following details:

SETUP > OBJECT MANAGER
Loan Product

Fields & Relationships
8 items. Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Interest Rate	Interest_Rate__c	Number(5, 2)		
Last Modified By	LastModifiedBy	Lookup(User)		
Loan Product Name	Name	Text(80)		✓
Maximum Amount	Maximum_Amount__c	Currency(16, 2)		
Maximum Tenure(Months)	Maximum_Tenure_Months__c	Number(3, 0)		
Minimum Credit Score	Minimum_Credit_Score__c	Number(3, 0)		
Owner	OwnerId	Lookup(User,Group)	✓	

iii. Payment:



SETUP > OBJECT MANAGER
Payment

Details	Fields & Relationships				
	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount	Amount_c	Currency(16, 2)		
Created By	Created By	CreatedById	Lookup(User)		
Due Date	Due Date	Due_Date_c	Date		
Last Modified By	Last Modified By	LastModifiedById	Lookup(User)		
Loan Application	Loan Application	Loan_Application__c	Master-Detail(Loan Application)	✓	
Paid	Paid	Paid_c	Checkbox		
Paid Date	Paid Date	Paid_Date_c	Date		
Payment Name	Payment Name	Name	Auto Number	✓	

iv. Credit Check:



SETUP > OBJECT MANAGER
Credit Check

Details	Fields & Relationships				
	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Checked Date	Checked Date	Checked_Date__c	Date/Time		
Created By	Created By	CreatedById	Lookup(User)		
Credit Check Name	Credit Check Name	Name	Auto Number	✓	
Last Modified By	Last Modified By	LastModifiedById	Lookup(User)		
Loan Application	Loan Application	Loan_Application__c	Lookup(Loan Application)	✓	
Owner	Owner	OwnerId	Lookup(User,Group)	✓	
Score	Score	Score_c	Number(3, 0)		
Source	Source	Source_c	Text(255)		

3. Record Types (Optional)

4. Page Layouts

- Customized layouts for usability:
 - Loan Application layout includes related lists (Payments, Credit Checks, Files).
 - Branch Manager sees approval fields (Approved By, Approval Date).
 - Loan Officer sees application and credit verification fields.

The screenshot shows the Salesforce Setup interface for the 'Loan Application' object. The left sidebar has 'Page Layouts' selected under the 'Object Manager' category. The main area displays a table of page layouts:

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Branch Manager Layout	Project Admin, 9/14/2025, 7:32 AM	Project Admin, 9/14/2025, 7:34 AM
Loan Application Layout	Project Admin, 9/13/2025, 7:30 AM	Project Admin, 9/13/2025, 9:09 AM
Loan Officer Layout	Project Admin, 9/14/2025, 7:28 AM	Project Admin, 9/14/2025, 7:31 AM

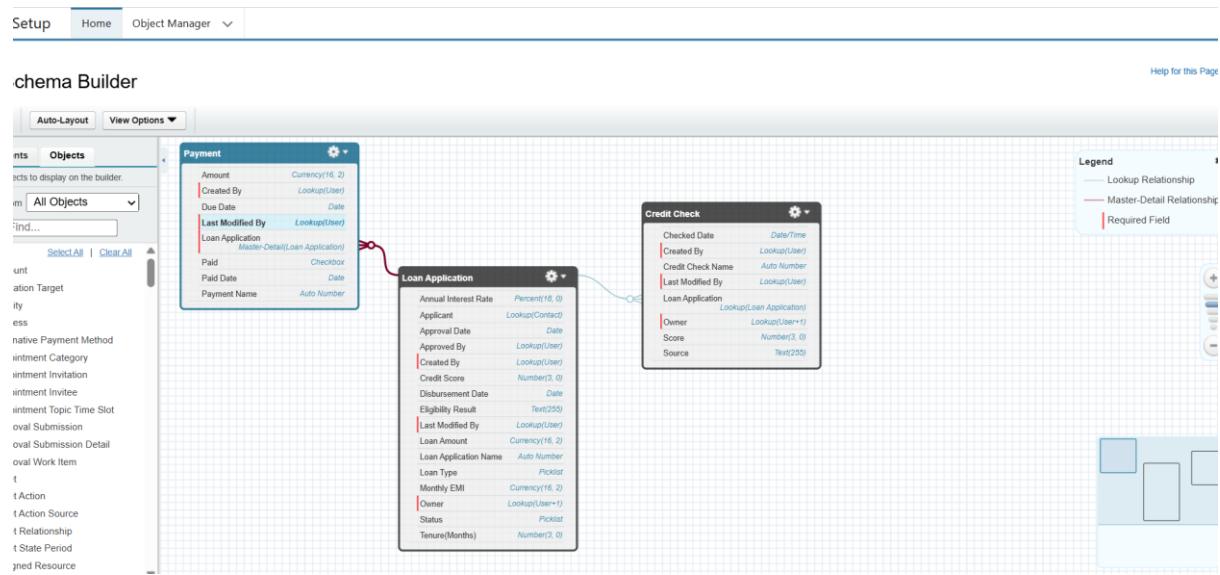
5. Compact Layouts

The screenshot shows the Salesforce Setup interface for the 'Loan Application' object. The left sidebar has 'Compact Layouts' selected under the 'Object Manager' category. The main area displays a table of compact layouts:

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Loan Application Compact	Loan_Application_Compact	✓	Project Admin	9/14/2025, 7:42 AM
System Default	SYSTEM			

6. Schema Builder

- Used Schema Builder to visualize object relationships.
- Provided a clear ERD (Entity Relationship Diagram) for Loan Application → Payment (Master-Detail), Loan Application → Credit Check (Lookup).



7. Lookup vs Master-Detail vs Hierarchical Relationships

- Master-Detail: Loan Application → Payment (Payments deleted when Loan Application deleted).
- Lookup: Loan Application → Credit Check (independent but linked).
- Hierarchical: Not used (only applies to User object).

8. Junction Objects (Not required in current model)

9. External Objects (Not required in current model)

Phase - 4: Process Automation (Admin)

1. Validation Rules:

- **Rules Created:**

- **Interest Rate Positive** – ensures annual interest rate > 0.
- **Loan Amount Positive** – ensures loan amount > 0.
- **Tenure Within Limits** – ensures tenure > 0 and \leq 360 months.

- **Purpose:** Prevents invalid loan records from being saved

The screenshot shows the Salesforce Object Manager interface. At the top, there's a navigation bar with icons for Home, Object Manager, and a search bar labeled "Search Setup". Below the navigation bar, the main area has a header titled "Object Manager" with a "SETUP" button. The main content area is titled "Loan Application Validation Rule". It displays a table with the following data:

Validation Rule Detail		Edit	Clone
Rule Name	Loan_Amount_Positive	Active	<input checked="" type="checkbox"/>
Error Condition Formula	Loan_Amount__c <= 0	Error Location	Loan Amount
Error Message	Loan amount must be greater than zero.		
Description			
Created By	Project Admin	Modified By	Project Admin
	Edit	Clone	

The screenshot shows the Salesforce Setup interface with the following details:

Object Manager

Loan Application Validation Rule

Validation Rule Detail

Validation Rule Detail		Edit	Clone
Rule Name	Tenure_Within_Limits	Active	<input checked="" type="checkbox"/>
Error Condition Formula	OR(Tenure_Months__c <= 0, Tenure_Months__c > 360)		
Error Message	Tenure must be greater than 0 and cannot exceed 360 months.	Error Location	Tenure(Months)
Description			
Created By	Project Admin, 9/19/2025, 1:36 AM	Modified By	Project Admin, 9/19/2025, 1:36 AM

[Edit](#) [Clone](#)

The screenshot shows the Salesforce Setup interface with the following details:

Object Manager

Loan Application Validation Rule

Validation Rule Detail

Validation Rule Detail		Edit	Clone
Rule Name	Interest_Rate_Positive	Active	<input checked="" type="checkbox"/>
Error Condition Formula	Annual_Interest_Rate__c <= 0		
Error Message	Annual interest rate must be greater than 0.	Error Location	Annual Interest Rate
Description			
Created By	Project Admin, 9/19/2025, 2:44 AM	Modified By	Project Admin, 9/19/2025, 2:44 AM

[Edit](#) [Clone](#)

The screenshot shows the Salesforce Setup interface for the 'Loan Application' object. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area displays the 'Validation Rules' section, which contains three rules:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Interest_Rate_Positive	Annual Interest Rate	Annual interest rate must be greater than 0.	✓	Project Admin, 9/19/2025, 2:44 AM
Loan_Amount_Positive	Loan Amount	Loan amount must be greater than zero.	✓	Project Admin, 9/19/2025, 12:00 AM
Tenure_Within_Limits	Tenure(Months)	Tenure must be greater than 0 and cannot exceed 360 months.	✓	Project Admin, 9/19/2025, 1:36 AM

2. WorkFlow:

- **Rule Name:** Loan Status Under Review Notification
- **Criteria:** Loan Application status = “Under Review”
- **Evaluation:** When a record is created or edited to meet criteria.
- **Actions:**
 - **Email Alert:** Sends Pending Approval notification.
 - **Field Update:** Pending Review checkbox automatically enabled.

The screenshot shows the Salesforce Setup interface. The left sidebar has 'Process Automation' expanded, with 'Workflow Actions' selected. Under 'Workflow Actions', 'Workflow Rules' is highlighted. The main content area is titled 'Workflow Rules' and shows a 'Workflow Rule Detail' for 'Loan_Status_UnderReview_Notification'. The rule is active, triggered by 'Loan Application: Status EQUALS Under Review', and sends an 'Email Alert' to 'Branch Manager' when a record is created or edited. It was created by 'Project Admin' on 9/21/2025 at 8:33 PM.

Workflow Rule Detail

Rule Name	Object	Evalution Criteria
Loan_Status_UnderReview_Notification	Loan Application	Evaluate the rule when a record is created, and any time it's edited to subsequently meet criteria

Description: When a loan application status is set to Under Review, trigger email notification to the Branch Manager for approval.

Rule Criteria: Loan Application: Status EQUALS Under Review

Created By: Project Admin, 9/21/2025, 8:33 PM Modified By: Project Admin, 9/21/2025, 8:33 PM

The screenshot shows the same Salesforce Setup interface as the first one, but the 'Workflow Actions' tab is selected in the left sidebar. The main content area shows the 'Workflow Actions' section of the 'Workflow Rules' page. It lists immediate workflow actions: an Email Alert for 'Pending Approval Email Alert' and a Field Update for 'Loan Status'. A note indicates that no time-dependent workflow actions have been added yet.

Workflow Actions

Type	Description
Email Alert	Pending Approval Email Alert
Field Update	Loan Status

Time-Dependent Workflow Actions [See an example](#)

No workflow actions have been added. Before adding a workflow action, you must have at least one time trigger defined.

Setup Home Object Manager

Q workflow

Process Automation

Workflow Actions

- Email Alerts
- Field Updates
- Outbound Messages
- Send Actions
- Tasks

Workflow Rules

All Workflow Rules

Go with the flow! With Flow Builder, the future of low-code automation, you can do everything you do with workflow rules — and more! Salesforce plans to retire workflow rules and recommends building automation in Flow Builder.

Tell Me More | Migrate your workflow rules to flows

Configure your organization's workflow by creating workflow rules. Each workflow rule consists of:

- Criteria that cause the workflow rule to run.
- Immediate actions that execute when a record matches the criteria. For example, Salesforce can automatically send an email that notifies the account team when a new high-value opportunity is created.
- Time-dependent actions that queue when a record matches the criteria, and execute according to time triggers. For example, Salesforce can automatically send an email reminder to the account team if a high-value opportunity is still open ten days before the close date.

View: All Workflow Rules Create New View

Action	Rule Name	Description	Object	Active
Edit Delete	Loan_Status_UnderReview_Notification	When a loan application status is set to Under Review, trigger email notification to the Branch Manager for approval.	Loan Application	<input checked="" type="checkbox"/>

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other All

6%

Status

Under Review

Credit Score

Eligibility Result

Disbursement Date

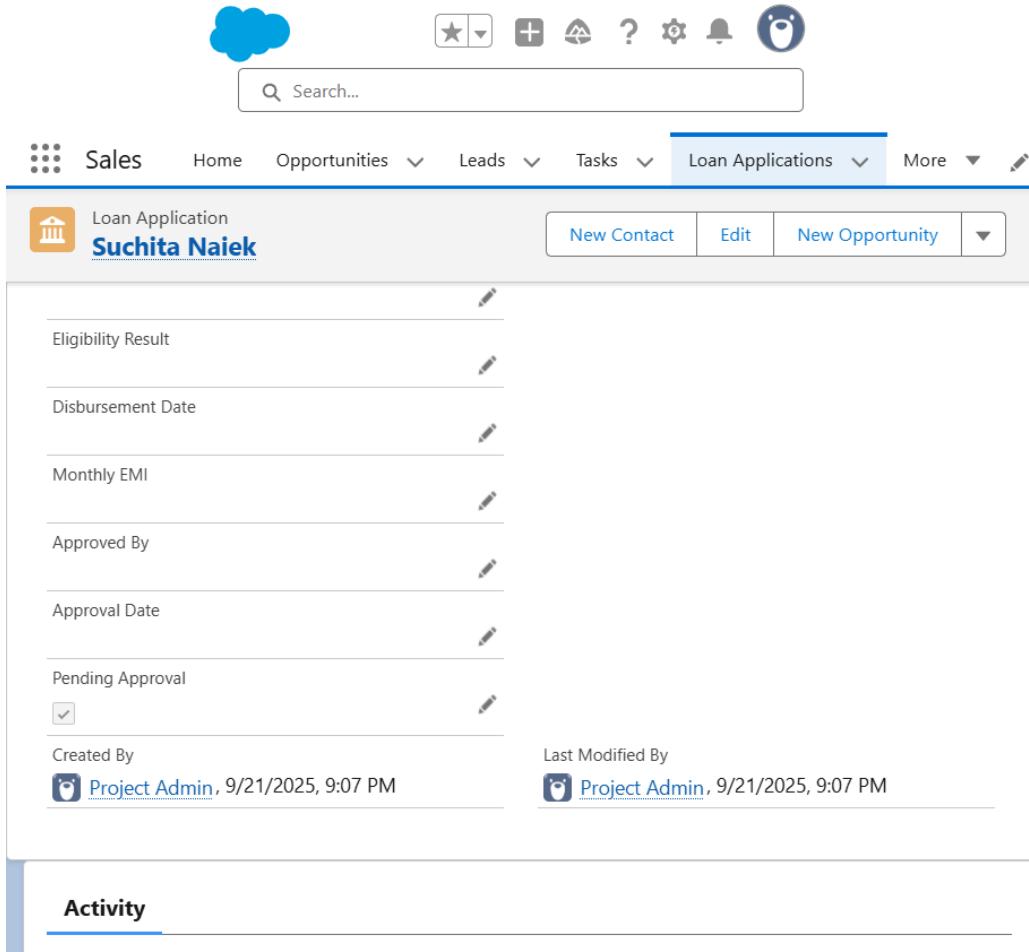
Monthly EMI

Approved By

Search People...

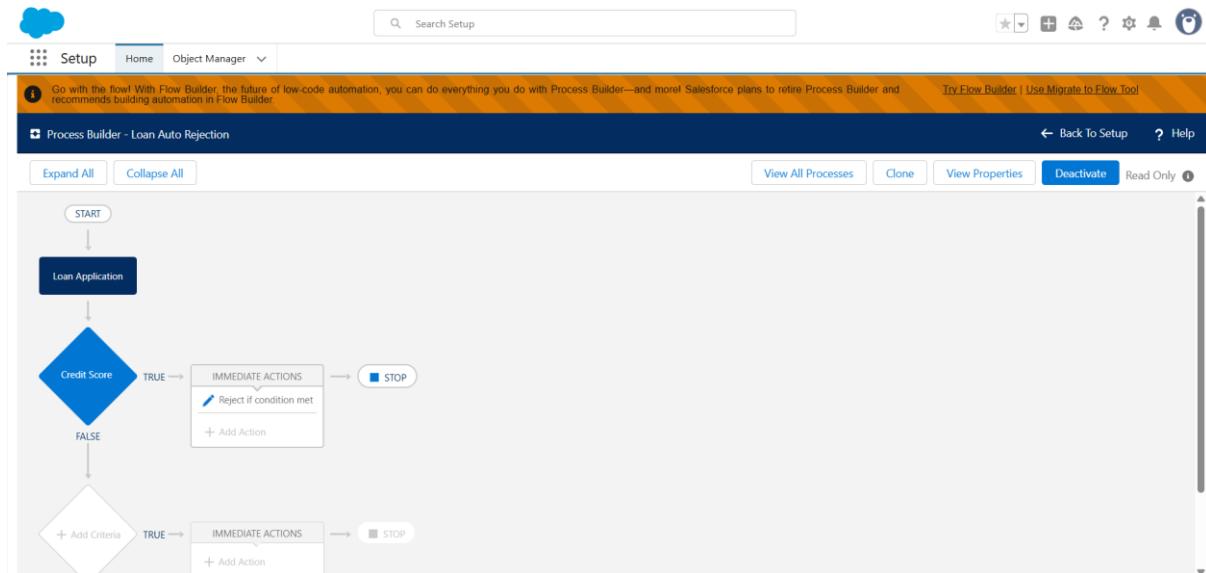
Approval Date

Pending Approval



3. Process Builder:

- **Process Name:** Loan Auto Rejection
- **Criteria:** When loan record meets rejection conditions.
- **Action:** Status automatically updated to “Rejected”.



Loan Application Name:

Owner: Project Admin

Applicant:	Rekha Gupta
Loan Amount:	\$500,000.00
Loan Type:	Personal
Tenure(Months):	12
Annual Interest Rate:	7%
Status:	Under Review
Credit Score:	440
Eligibility Result:	

Disbursement Date:

Loan Application Name: A-0021

Owner: Project Admin

Applicant:	Rekha Gupta
Loan Amount:	\$500,000.00
Loan Type:	Personal
Tenure(Months):	12
Annual Interest Rate:	7%
Status:	Rejected
Credit Score:	440
Eligibility Result:	
Disbursement Date:	
Monthly EMI:	

Filters: All time • All activities • All types

Upcoming & Overdue

No activities to show.
Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

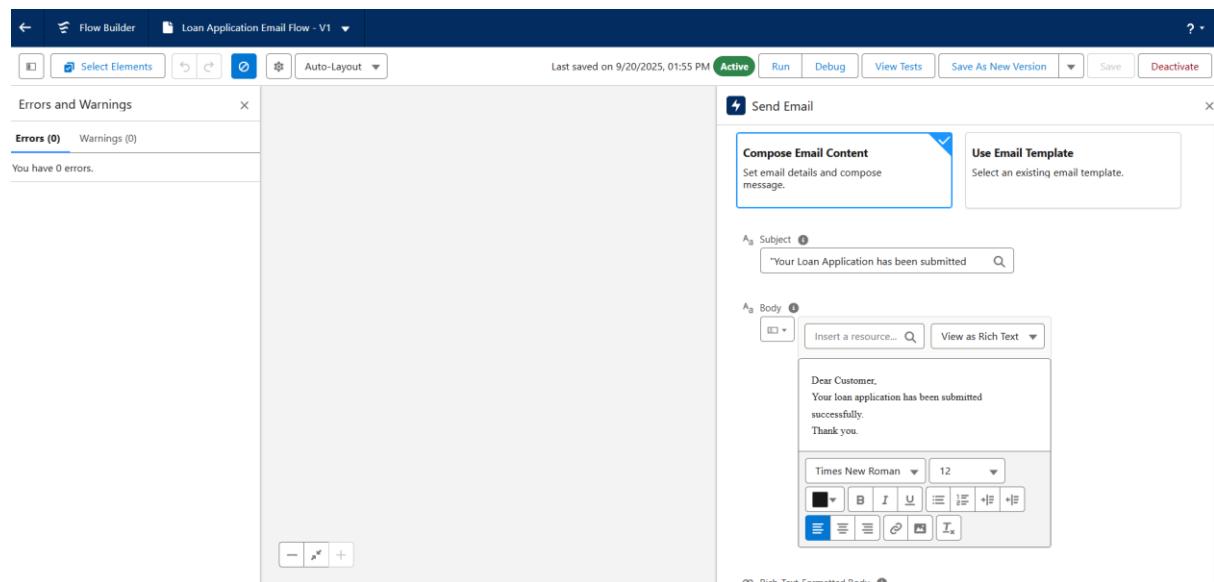
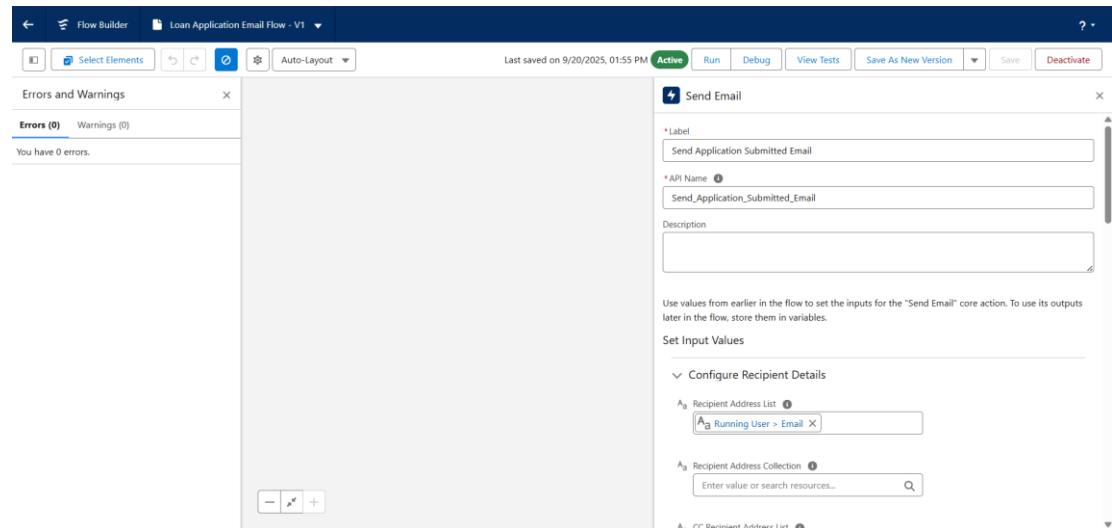
To Do List

4. Flow:

- **Flows Created:**

- **Loan Application EMI Flow** – auto-populates EMI field when loan record is created.
- **Next Loan Approval Date Flow** – auto-fills approval date upon record creation.

- **Purpose:** Automation ensures accurate EMI calculation and approval date assignment.



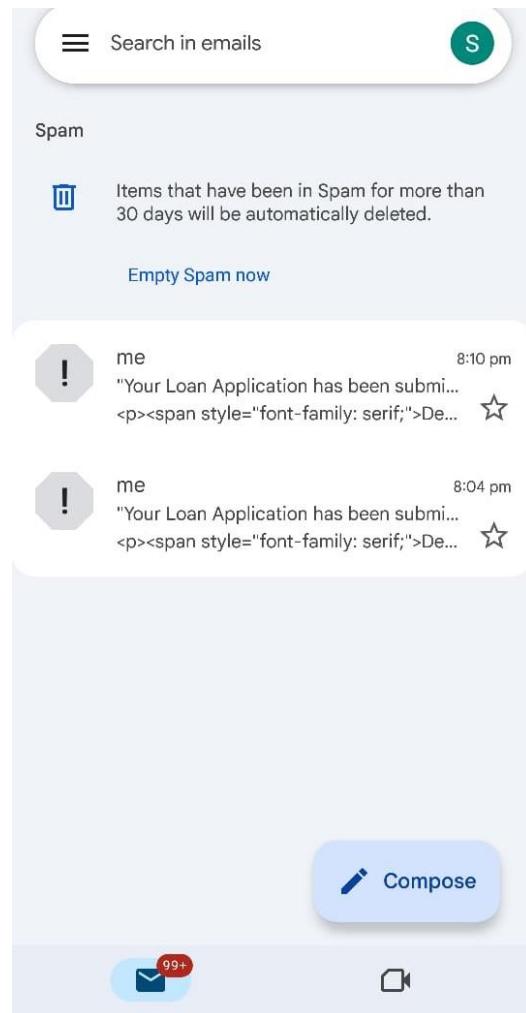
The screenshot shows the Salesforce Setup Home page. On the left, there's a sidebar with links like Setup Home, Salesforce Go, Service Setup Assistant, etc. The main area is titled "Flows" and shows a table of "Flow Definitions". The table has columns for Flow Label, Trigger, Action, Status, and Last Run. There are 61 items listed, including "Get External Storage Upload Config", "Inbound Cancel Appointment", and "Loan Application Email Flow".

Flow Label	Trigger	Action	Status	Last Run
Get External Storage Upload Config	Autol...	Salesf...	Active	9/20/...
Inbound Cancel Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound Modify Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound New Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound New Guest Appointment	Salesf...	Salesf...	Active	9/20/...
Loan Application Email Flow	Autol...	Unma...	Active	9/20/...
Messages Routed to Agents and Qu...	Omni...	Mana...	Active	9/20/...
Modify Guest Service Appointment	Salesf...	Salesf...	Active	9/20/...
Orchestration flow for Recurrence S...	Autol...	Salesf...	Active	9/20/...
Outbound Modify Appointment	Salesf...	Salesf...	Active	9/20/...
Outbound New Appointment	Salesf...	Salesf...	Active	9/20/...
Pay for Service Appointments	Salesf...	Salesf...	Active	9/20/...

This screenshot shows the Flow Builder interface for a flow named "Loan Approval Date Flow - V1". The flow starts with a "Record-Triggered Flow" step for "Loan Application" triggered by "A record is created or updated". It then branches to a "Set Approval Date" step, which updates the "Approval Date" field on the record. The flow ends. The builder interface includes tabs for "Select Elements", "Auto-Layout", and various buttons for saving and running the flow.

This screenshot is similar to the one above, showing the "Flows" section in the Setup Home page. The table shows the same 61 flow definitions, including "Inbound Cancel Appointment", "Inbound Modify Appointment", and "Loan Application Email Flow". The "Loan Approval Date Flow" is also visible in the list.

Flow Label	Trigger	Action	Status	Last Run
Inbound Cancel Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound Modify Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound New Appointment	Salesf...	Salesf...	Active	9/20/...
Inbound New Guest Appointment	Salesf...	Salesf...	Active	9/20/...
Loan Application Email Flow	Autol...	Unma...	Active	9/20/...
Loan Approval Date Flow	Autol...	Unma...	Active	9/20/...
Messages Routed to Agents and Qu...	Omni...	Mana...	Active	9/20/...
Modify Guest Service Appointment	Salesf...	Salesf...	Active	9/20/...
Orchestration flow for Recurrence S...	Autol...	Salesf...	Active	9/20/...
Outbound Modify Appointment	Salesf...	Salesf...	Active	9/20/...
Outbound New Appointment	Salesf...	Salesf...	Active	9/20/...
Pay for Service Appointments	Salesf...	Salesf...	Active	9/20/...
Process Simple Approval	Flow ...	Mana...	Active	9/20/...



The screenshot shows a CRM application interface. At the top, there is a navigation bar with icons for Sales, Home, Opportunities, Leads, Tasks, Loan Applications, and More. Below the navigation bar is a search bar with the placeholder 'Search...'. The main area displays a 'Loan Application' record for 'Priya Patil'. The record details include:
Annual Interest Rate: 9%
Status: Approved
Credit Score: 690
Eligibility Result: Pre-Qualified
Disbursement Date: [empty]
Monthly EMI: [empty]
Approved By: Branch Manager (with a user icon)
Approval Date: 9/22/2025
Pending Approval: [empty]
Created By: [empty] Last Modified By: [empty]

5. Other Automation Features

- Custom Notifications (not required for this project).
 - Scheduled Flows (optional, not used in this project).
-

Phase -5: Process Automation (Admin)

1. EMI Calculation Class

- **Class Name:** EMI_Calculation
 - **Purpose:** Calculate **Monthly EMI** based on Loan Amount, Annual Interest Rate, and Tenure.
 - **Outcome:** EMI field in Loan Application is automatically populated when a record is created.
 - **Tech Used:** Apex class, for loops, if conditions.
-

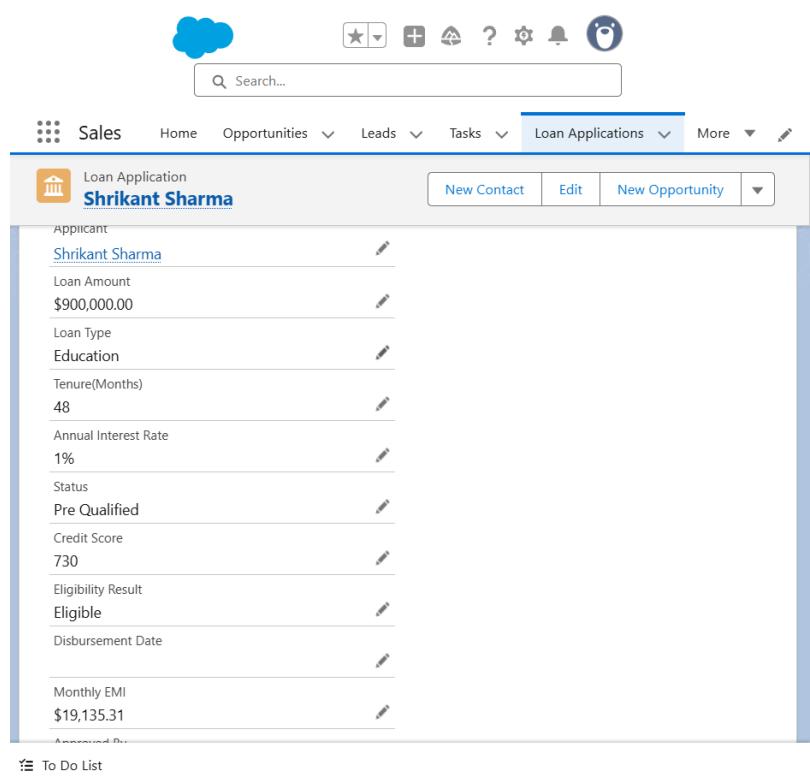
2. Loan Application Trigger

- **Trigger Type:** Before Insert/Update on Loan Application.
- **Purpose:** Calls EMI_Calculation class to auto-fill EMI field.
- **Tech Used:** Trigger, for loops, control statements.

The screenshot shows a Salesforce Loan Application form. The fields visible are:

- Loan Amount: \$900,000.00
- Loan Type: Education
- Tenure(Months): 48
- Annual Interest Rate: 1%
- Status: Pre Qualified
- Credit Score: 730
- Eligibility Result: Eligible
- Disbursement Date: (calendar icon)
- Monthly EMI: (highlighted in yellow, indicating it is calculated)

At the bottom of the form, there are buttons for Approved By, Cancel, Save & New, and Save. A status message "A-0101" is also present at the bottom.



The screenshot shows the Force.com IDE interface. The code editor displays the class `EMI_Calculation.apxc` with the following code:

```
1 public class EMI_Calculation {
2     public static Decimal calculateEMI(Decimal principal, Decimal annualRate, Integer months) {
3         if (principal == null || annualRate == null || months == null)
4             return 0;
5         Double P = principal.doubleValue();
6         Double r = (annualRate.doubleValue() / 100) / 12; // monthly rate
7         Double n = Double.valueOf(months);
8         Double pow = Math.pow(1 + r, n);
9         Double emi = (P * r * pow) / (pow - 1);
10        return Decimal.valueOf(String.valueOf(emi)).setScale(2);
11    }
12 }
```

The code coverage is listed as 'None' and the API version is '64'. Below the code editor is a log table:

User	Application	Operation	Time	Status	Read	Size
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	9.63 KB
Project Admin	Unknown	common.api.soa...	9/23/2025, 12:2...	Success	Unread	529 bytes
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.33 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.99 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.32 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.32 KB

The screenshot shows the Salesforce IDE interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and tabs for EMI_Calculation.apxc, Log executeAnonymous @9/23/2025, 12:10:06 PM, and LoanApplicationTrigger.apxt. The main area displays the Apex trigger code:

```

1 trigger LoanApplicationTrigger on Loan_Application__c (before insert, b
2 for (Loan_Application__c la : Trigger.new) {
3     // Check required fields before calculation
4     if (la.Loan_Amount__c != null && la.Annual_Interest_Rate__c != null) {
5         la.Monthly_EMI__c = EMI_Calculation.calculateEMI(
6             la.Loan_Amount__c,
7             la.Annual_Interest_Rate__c,
8             Integer.valueOf(la.Tenure_Months__c)
9         );
10    }
11 }
12

```

Below the code editor is the Logs panel, which lists application logs:

User	Application	Operation	Time	Status	Read	Size
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	9.63 KB
Project Admin	Unknown	common.api.soa...	9/23/2025, 12:2...	Success	Unread	529 bytes
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.33 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.99 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.32 KB
Project Admin	Browser	/aura	9/23/2025, 12:2...	Success	Unread	1.32 KB

Why is it useful?

Apex Concept	Reflects In	Useful For	Example
Trigger + Handler Pattern	Loan_Application__c	Loan Officer, Branch Manager	Auto-flag risky loans without affecting EMI calculation
Control Statements	Eligibility_Result__c	Officers can quickly identify high-risk applications	Amount > 10L or Credit Score < 650 → flagged
Reporting	Eligibility_Result__c	Branch Manager	Filter risky loans.

3. Risky Loan Handler

- **Class Name:** LoanRiskHandler
- **Purpose:** Identify risky loans based on:
 - Loan Amount > 10 Lakh
 - Credit Score < 650
- Updates **Eligibility Result** field with “Risky Loan” without overwriting existing values.
- **Tech Used:** Apex class, for loops, if conditions, string operations.

The screenshot shows the Salesforce code editor with the following code:

```
1 public with sharing class LoanRiskHandler {
2     public static void flagRiskyLoans(List<Loan_Application__c> loans){
3         for(Loan_Application__c loan : loans){
4             // Condition: risky if amount > 10L or credit score < 650
5             if((loan.Loan_Amount__c != null && loan.Loan_Amount__c > 1000000)
6                 || (loan.Credit_Score__c != null && loan.Credit_Score__c < 650)){
7
8                 // Append "Risky Loan" to existing Eligibility_Result__c
9                 if(String.isBlank(loan.Eligibility_Result__c)){
10                     loan.Eligibility_Result__c = 'Risky Loan';
11                 } else if(!loan.Eligibility_Result__c.contains('Risky Loan')){
12                     loan.Eligibility_Result__c = loan.Eligibility_Result__c + ' / Risky Loan';
13                 }
14             }
15         }
16     }
17 }
```

The screenshot shows the Salesforce code editor with the following trigger definition:

```
1 trigger LoanRiskTrigger on Loan_Application__c (before insert, before update)
2     LoanRiskHandler.flagRiskyLoans(Trigger.new);
3 }
```

Applicant

Kishor Gupta

Loan Amount
\$2,500,000.00

Loan Type
Personal

Tenure(Months)
36

Annual Interest Rate

Status
Under Review

Credit Score
649

Eligibility Result

Disbursement Date

Monthly EMI

Cancel Save & New Save

A-0015

To Do List

This screenshot shows a loan application form in a software application. The form is titled 'Applicant' and contains fields for the applicant's name (Kishor Gupta), loan amount (\$2,500,000.00), loan type (Personal), tenure (36 months), annual interest rate, status (Under Review, highlighted in blue), credit score (649), eligibility result, and disbursement date. At the bottom are buttons for 'Cancel', 'Save & New', and 'Save'. To the right is a sidebar with a list of items and a 'More' button. A task bar at the bottom includes a 'To Do List' icon.

Sales Home Opportunities Leads Tasks Loan Applications More

Loan Application
Kishor Gupta

New Contact Edit New Opportunity

Annual Interest Rate

Status
Under Review

Credit Score
649

Eligibility Result
Risky Loan

Disbursement Date

Monthly EMI

Approved By

Approval Date

Pending Approval

Created By
Project Admin, 9/23/2025, 3:28 AM

Last Modified By
Project Admin, 9/23/2025, 3:28 AM

To Do List

This screenshot shows a detailed view of a loan application record. The record is for 'Kishor Gupta' and includes fields for annual interest rate, status (Under Review), credit score (649), eligibility result (Risky Loan), disbursement date, monthly EMI, and approval status. It also shows the creation and last modification details. The top navigation bar includes tabs for Sales, Home, Opportunities, Leads, Tasks, and Loan Applications. A search bar and a 'To Do List' icon are also present.

4. Acknowledged but not implemented

- Batch Apex, Queueable Apex, Scheduled Apex
 - Future Methods, Exception Handling, Test Classes, Asynchronous Processing
 - **Note:** For this project, focus was on **EMI calculation and risky loan identification.**
-

5. Automation Outcome

- Screenshots included:
 - EMI automatically calculated after creating Loan Application record.
 - Risky loans flagged in Eligibility Result during record creation.
-

Phase 6: Process Automation (Admin)

In this phase, the Salesforce user interface was customized to provide a smooth and intuitive experience for users managing loans.

1. Lightning App Builder:

A custom app named **Loan & Credit Approval** was created. The navigation bar includes the key objects: **Loan Application, Payment, Credit Check, and Loan Product**, allowing users to access all loan-related functionalities from a single app.

2. Tabs:

Custom tabs for each object were already created during object setup, ensuring easy access and proper visibility for the required profiles.

3. Record Pages:

The **Loan Application record page** was customized using Lightning App Builder:

- **Record Detail** component displays fields like Loan Amount, EMI, Eligibility Result, and Risky Flag.
- **Related Lists** component shows associated Payments and Credit Checks.
- The page was saved, activated, and assigned as **Org Default**, so all users see the updated layout.

Outcome:

Users can view complete loan information and related transactions in a single record page. This improves efficiency for **Loan Officers** and **Managers**, enabling them to quickly access and assess loan details without navigating through multiple pages.

The screenshot shows a web-based application interface. At the top, there is a navigation bar with icons for search, refresh, and other functions. Below the navigation bar, the title "Loan & Credit Appr..." is visible, followed by dropdown menus for "Loan Applications", "Payments", "Credit Checks", and "Loan Products". The main content area is titled "Loan Products" and "Recently Viewed". It displays a list of 4 items, all updated a few seconds ago, with the first item being "Education Loan". On the right side of the list, there are buttons for "New", "Import", "Change Owner", and "Assign Label", along with some filter and sort options.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes a cloud icon, search bar, and various setup tools. The main menu is set to "Setup" and shows tabs for "Home" and "Object Manager". A search bar on the left is set to "tabs". The main content area is titled "Custom Tabs" and includes a "Help for this Page" link. It provides information about creating new custom tabs to extend Salesforce functionality. Below this, there are two sections: "Custom Object Tabs" and "Web Tabs". The "Custom Object Tabs" section lists four tabs: "Credit Checks", "Loan Applications", "Loan Products", and "Payments", all styled as "Bank". The "Web Tabs" section indicates "No Web Tabs have been defined".

Lightning App Builder | Pages | Loan Application Record Page

Components Fields

record

Standard (3)

- Record Detail
- Record Detail - Mobile
- Related Record

Custom (0)

Custom - Managed (0)

Loan Application Record Page

Loan Application Kishor Gupta

Loan Amount: \$2,500,000.00 | Loan Type: Personal | Status: Under Review | Credit Score: 649 | Monthly EMI:

Details

Payments (0)

Credit Checks (0)

Approval History (0)

Loan Application Name: A-0026
 Applicant: Kishor Gupta
 Loan Amount: \$2,500,000.00
 Loan Type: Personal
 Tenure(Months): 36
 Annual Interest Rate:
 Status: Under Review
 Credit Score: 649
 Eligibility Result: Risky Loan
 Disbursement Date:

Activity

Filters: All time • All activities • All types

No activities to show.
 Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

Upcoming & Ongoing

Enable page-level dynamic actions for the Salesforce mobile app

Phase-7: Integration & External Access

This phase covers Salesforce integration capabilities and external access mechanisms. While the following features were acknowledged for understanding, they were **not implemented** in this project:

- **Named Credentials** – Centralized authentication for external services.
- **External Services** – Integrating external APIs declaratively.
- **Web Services (REST/SOAP)** – Exposing Salesforce functionality or consuming external services.
- **Callouts** – Making HTTP requests to external endpoints.
- **Platform Events & Change Data Capture** – Real-time event-driven architecture.
- **Salesforce Connect** – Access external data without storing it in Salesforce.
- **API Limits** – Understanding usage restrictions for integration.
- **OAuth & Authentication** – Secure access for external apps.
- **Remote Site Settings** – Configuration needed for callouts to external URLs.

Project Note: No integrations were implemented. A **screenshot of System Overview** was included to demonstrate awareness of org-level settings and integration readiness.

Cloud icon

Setup Home Object Manager

Search Setup

System Overview

Did you find what you're looking for? Try using Global Search.

Environments

System Overview

Schema

YOUR CUSTOM OBJECTS + YOUR CUSTOM SETTINGS	1% (maximum 400)
4	

TOTAL CUSTOM OBJECTS + TOTAL CUSTOM SETTINGS	0% (maximum 3,000)
4	

YOUR CUSTOM METADATA TYPES	0% (maximum 200)
0	

TOTAL CUSTOM METADATA TYPES	0% (maximum 350)
0	

CUSTOM METADATA TYPE USAGE	0% (0 of 10,000,000 characters)
0%	

DATA STORAGE	8% (maximum 5.0 MB)
458 KB (Approx.)	

API Usage

API REQUESTS, LAST 24 HOURS	0% (maximum 15,000)
0	

Business Logic

User Interface

This screenshot shows the System Overview page in Salesforce Setup. It displays various system metrics under the Schema and API Usage sections. The Schema section includes counts for custom objects, total custom objects, custom metadata types, total custom metadata types, and custom metadata type usage. The API Usage section shows API requests over the last 24 hours. Below these are tabs for Business Logic and User Interface.

Cloud icon

Setup Home Object Manager

Search Setup

System Overview

Did you find what you're looking for? Try using Global Search.

Environments

System Overview

Business Logic

RULES	0% (maximum 2,000)
5	

APEX TRIGGERS	0% (maximum 1)
2	

APEX CLASSES	0% (maximum 100)
5	

CODE USED	0% (2,761 of 6,000,000 characters)
0.05%	

User Interface

CUSTOM APP	10% (maximum 10)
1	

ACTIVE SALESFORCE SITES	0% (maximum 1)
0	

ACTIVE FLOWS	0% (maximum 2,000)
3	

CUSTOM TABS	4% (maximum 100)
4	

VISUALFORCE PAGES	0% (maximum 100)
0	

Most Used Licenses

Show All

ANALYTICS CLOUD INTEGRATION USER
2

This screenshot shows the System Overview page in Salesforce Setup. It displays metrics for Business Logic (Rules, Apex Triggers, Apex Classes, Code Used) and User Interface (Custom Apps, Active Salesforce Sites, Active Flows, Custom Tabs, Visualforce Pages). Below these are sections for Most Used Licenses and a note about Analytics Cloud Integration User licenses.

Cloud icon

Setup Home Object Manager

Search Setup

System Overview

Did you find what you're looking for? Try using Global Search.

Environments

System Overview

5

CODE USED	0% (maximum 2,000)
0.05%	

3

CUSTOM TABS	0% (maximum 100)
4	

VISUALFORCE PAGES	0% (maximum 100)
0	

Most Used Licenses

Show All

ANALYTICS CLOUD INTEGRATION USER
2

SALESFORCE
4

CHATTER FREE
1

Contact us to obtain additional Analytics Cloud Integration User user licenses.
100% (2 of 2)

Contact us to obtain additional Salesforce user licenses.
100% (4 of 4)

This screenshot shows the System Overview page in Salesforce Setup. It displays metrics for Code Used and Custom Tabs. Below these are sections for Most Used Licenses, specifically listing Analytics Cloud Integration User and Salesforce, along with a note about obtaining additional licenses.

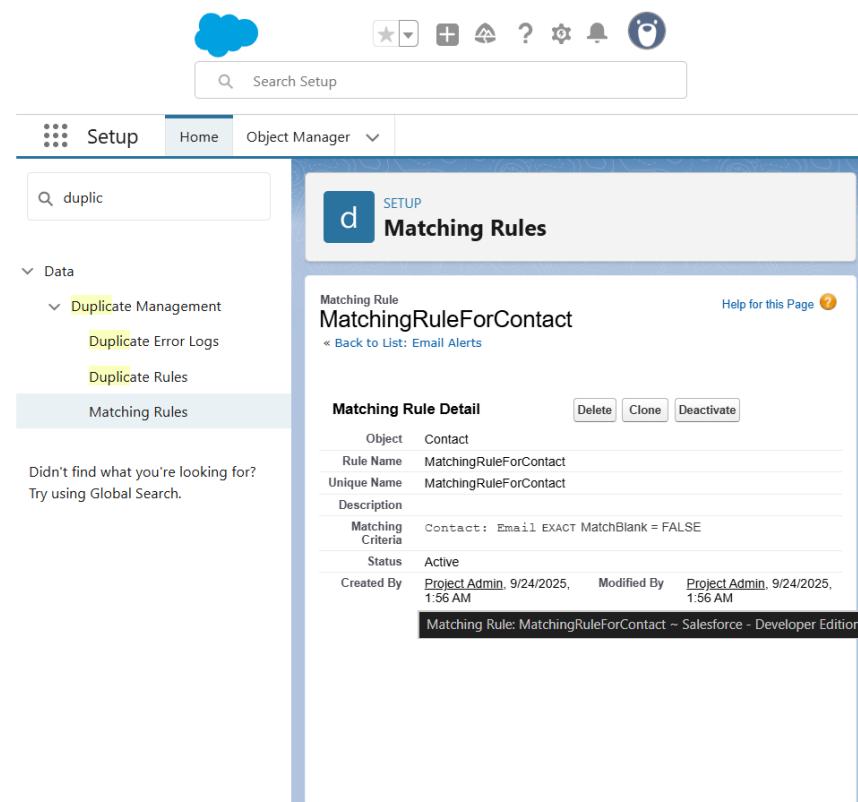
Phase-8: Integration & External Access

1. Duplicate Rules

To maintain clean and accurate data in the system, the following steps were completed:

- A **Matching Rule** named **MatchingRuleForContact** was created to identify duplicate contacts based on the **Email** field.
- A **Duplicate Rule** named **PreventDuplicateContacts** was configured.
- When a user tried to insert a new Contact with an **existing Email ID**, Salesforce displayed a **warning message**: “*Similar records exist*”.
- A screenshot was captured showing this validation, along with the “**View Duplicates**” option which allows users to review potential duplicates before saving.

This ensures that multiple records with the same email cannot be created, thereby improving data quality.

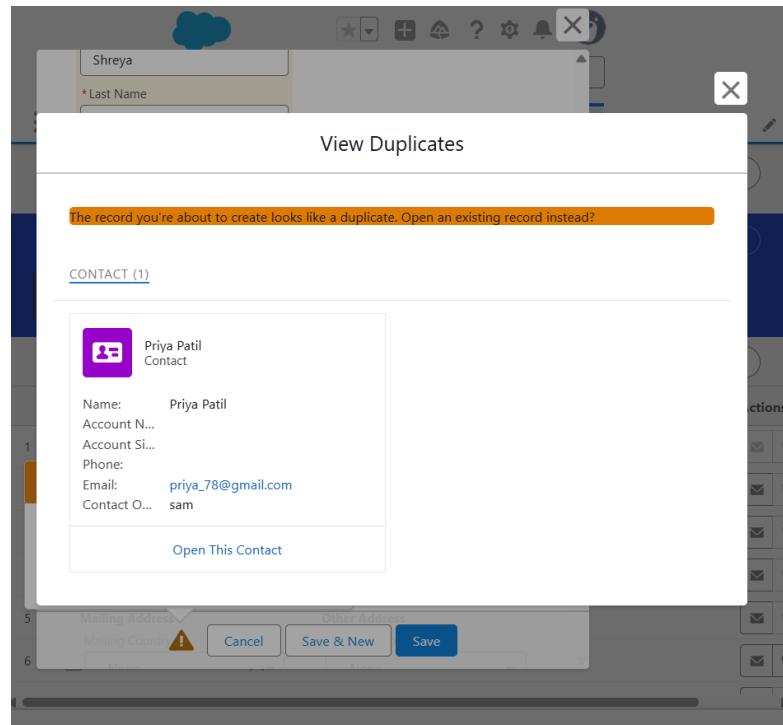


The screenshot shows the Salesforce Setup interface. In the left sidebar, under the 'Data' category, 'Duplicate Management' is expanded, showing 'Duplicate Error Logs', 'Duplicate Rules' (which is selected and highlighted in yellow), and 'Matching Rules'. A search bar at the top left contains the query 'duplic'. The main content area is titled 'd SETUP Duplicate Rules' and displays a Contact Duplicate Rule named 'Prevent_Duplicate_Contacts'. The rule details are as follows:

Duplicate Rule Detail	
Rule Name	Prevent_Duplicate_Contacts
Description	Contact Enforce sharing rules
Action On Create	Allow
Action On Edit	Allow
Alert Text	Use one of these records?
Active	<input checked="" type="checkbox"/>
Matching Rule	<input checked="" type="checkbox"/> MatchingRuleForContact <input checked="" type="checkbox"/> Mapped
Matching Criteria	Contact: Email EXACT MatchBlank = FALSE
Conditions	
Created By	Project Admin, 9/24/2025, 2:00 AM
Modified By	Project Admin, 9/24/2025, 2:00 AM

Buttons at the bottom include 'Edit', 'Delete', 'Clone', and 'Deactivate'.

The screenshot shows a Contact creation screen. The contact information entered is: First Name - Shreya, Last Name - Parekh. A modal window titled '⚠ Similar Records Exist' is displayed, stating: 'This record looks like an existing record. Make sure to check any potential duplicate records before saving.' It includes a 'View Duplicates' button. At the bottom of the screen, there are buttons for 'Cancel', 'Save & New', and 'Save'.



2. Data Import Wizard & Data Loader

- These tools are typically used to import or update bulk records into Salesforce.
 - Since existing records were already created manually for this project, these tools were **not used**.
-

3. Data Export & Backup

- Data Export is used to generate backups of Salesforce records for security and compliance.
 - As this was a project setup, scheduled backups were **not required**.
-

4. Change Sets

- Change Sets allow deployment of metadata (custom objects, fields, rules, etc.) from one Salesforce org to another.
 - While not implemented, this tool was **explored** to understand deployment processes.
-

5. Unmanaged vs Managed Packages

- **Unmanaged Packages** are used for sharing code/configurations that can be modified after installation (commonly used in development or academic projects).
 - **Managed Packages** are versioned and locked, generally used for commercial distribution on the AppExchange.
 - In this project, packages were **not implemented**, but the difference between the two was **studied for understanding Salesforce app distribution**.
-

6. ANT Migration Tool & VS Code with SFDX

- These tools are used by developers for advanced deployments and version control.
 - Although not directly used, **VS Code with SFDX** was acknowledged as a modern development environment for Apex, Lightning, and deployments.
-

Phase – 9: Reporting, Dashboards & Security Review

1. Reports

Four types of reports were created under a new folder named **Loan Reports**:

- **Loan Pipeline Report (Funnel Display)** – Shows the pipeline of loans across different approval stages, represented visually with a funnel chart for easy tracking.
- **Portfolio by Loan Type (Donut Display)** – Highlights the distribution of loans based on loan type using a donut chart.
- **Approval Time Report (Tabular Format)** – Displays the time taken for each loan approval in a simple tabular view.
- **Delinquent Payments Report (Tabular Format)** – Tracks overdue payments, making it easier to identify delayed customers.

These reports provide insights into loan performance, customer portfolio, and payment status.

The screenshot shows the Salesforce Reports page with the following details:

- Header:** Sales, Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, More.
- Search Bar:** Search... and Search all folders... with New Report and New Folder buttons.
- Left Sidebar:** Reports (Recent, Created by Me, Private Reports, Public Reports, All Reports), FOLDERS (All Folders, Created by Me, Shared with Me), and FAVORITES (All Favorites).
- Current View:** All Folders > Loan Reports (4 items).
- Table:** A grid showing the four reports:

REPORTS	Name	Description	Folder	Created By	Created On	Subscribed
Recent	Loan Pipeline	Shows number of applications in each stage (Submitted → Approved → Disbursed)	Loan Reports	Project Admin	9/24/2025, 2:37 AM	<input checked="" type="checkbox"/>
Created by Me	Approval Time Report		Loan Reports	Project Admin	9/24/2025, 8:25 AM	<input checked="" type="checkbox"/>
Private Reports	Delinquent Payments	Shows overdue EMIs	Loan Reports	Project Admin	9/24/2025, 9:10 AM	<input checked="" type="checkbox"/>
Public Reports	Portfolio by Loan Type		Loan Reports	Project Admin	9/24/2025, 9:15 AM	<input checked="" type="checkbox"/>
- Bottom:** To Do List.

The screenshot shows the Salesforce interface with the 'Sales' tab selected. The top navigation bar includes links for Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, and More. A search bar is at the top right, along with various icons for navigation and settings. The main content area is titled 'Dashboards' and 'Recent'. It displays a single item: 'Loan Management Dashboard'. The table columns are: Dashboard Name, Description, Folder, Created By, Created On, and Subscribed. The 'Loan Management Dashboard' is listed under 'Loan Dashboards' folder, created by 'Project Admin' on '9/24/2025, 9:41 AM'. A sidebar on the left lists categories like Recent, Created by Me, Private Dashboards, All Dashboards, Folders, All Folders, Shared with Me, and Favorites.

2. Report Types

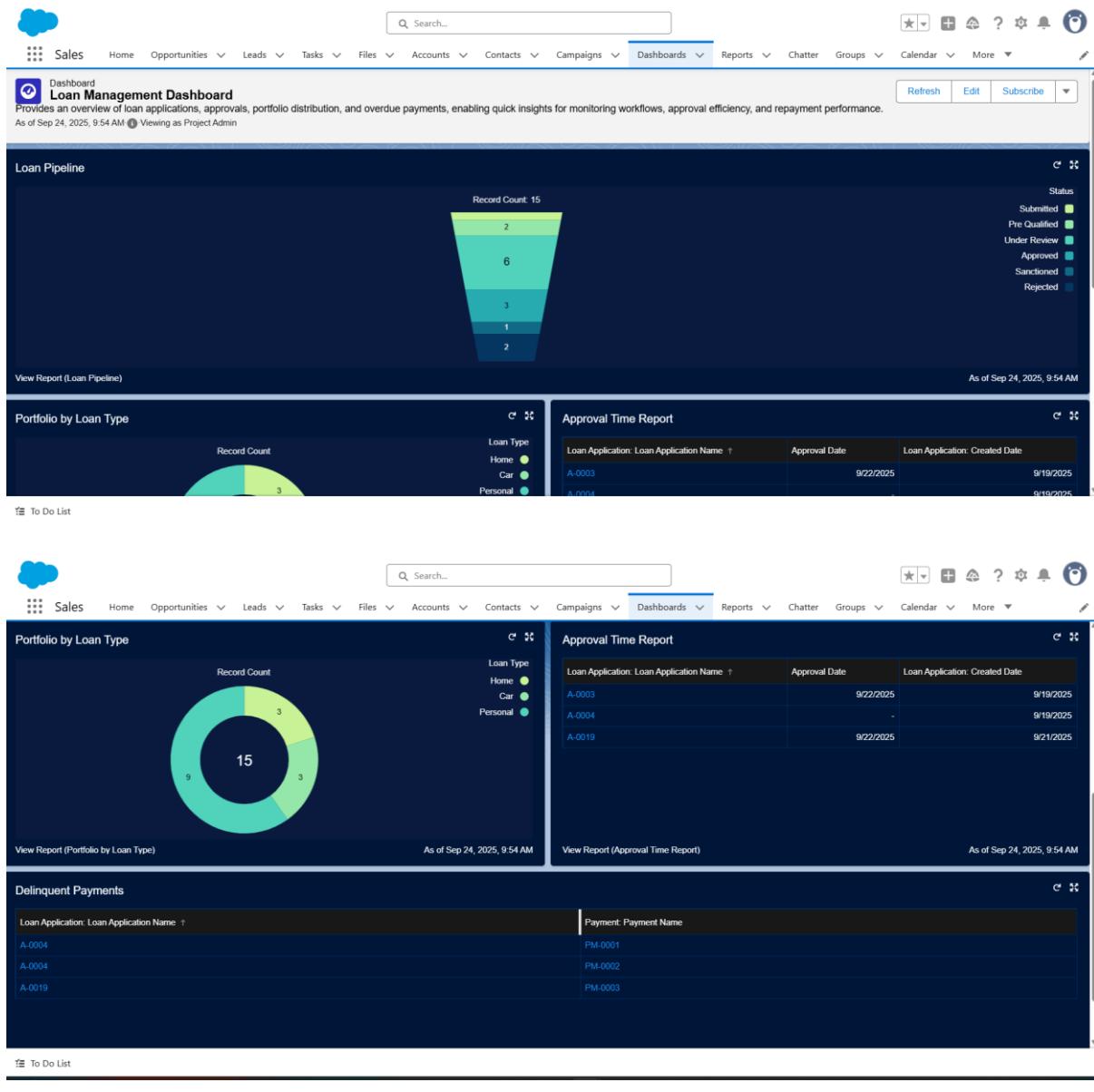
Custom report types were defined for the Loan Application object to ensure tailored reporting. This allowed linking related objects and fields, giving flexibility in data analysis.

3. Dashboards

A dedicated folder named **Loan Dashboards** was created, and a **Loan Management Dashboard** was built. This dashboard consolidates all key reports into a single visual interface:

- **Funnel (Loan Pipeline)** – Loan progress overview.
- **Donut (Loan Portfolio by Type)** – Distribution by loan type.
- **Tables (Approval Time & Delinquent Payments)** – Tabular insights for detailed analysis.

This dashboard enables stakeholders to quickly evaluate business health and loan performance trends.



4. Security Essentials

- Sharing Settings** – Configured for the Loan Application object to restrict access and ensure only authorized users can view or edit loan records.
- Field-Level Security (FLS)** – Sensitive fields like *Salary* and *Credit Score* were hidden from normal users while visible to managers/admins.
- Audit Trail** – Setup Audit Trail was enabled and reviewed to track all configuration changes, ensuring accountability. Screenshots were captured as proof.

5. Additional Security Settings

- **Session Settings** – Reviewed to ensure secure login sessions.
- **Login IP Ranges** – Considered for restricting access to trusted networks (not enforced in this project, but included as a best practice).

Sharing Settings

Object	Sharing Rule Type	Access Level	Controlled By
Work Order	Private	Private	✓
Work Plan	Private	Private	✓
Work Plan Template	Private	Private	✓
Work Step Template	Private	Private	✓
Work Type	Private	Private	✓
Work Type Group	Public Read/Write	Private	✓
Credit Check	Public Read/Write	Private	✓
Loan Application	Public Read/Write	Private	✓
Loan Product	Public Read/Write	Private	✓
Payment	Controlled by Parent	Controlled by Parent	

Other Settings

Manager Groups	<input type="checkbox"/>
Secure guest user record access	<input checked="" type="checkbox"/>
Require permission to view record	<input type="checkbox"/>

View Setup Audit Trail

Date	User	Source Namespace Prefix	Action	Section	Delegate User
9/24/2025, 2:00:38 AM PDT	samikshamore2004165@agentforce.com		For the Contact duplicate rule Prevent_Duplicate_Contacts, changed "Active" from "false" to "true"	Duplicate Rule	
9/24/2025, 2:00:33 AM PDT	samikshamore2004165@agentforce.com		For duplicate rule Prevent_Duplicate_Contacts, changed matching rules.	Duplicate Rule	
9/24/2025, 2:00:33 AM PDT	samikshamore2004165@agentforce.com		Created new Contact duplicate rule "Prevent_Duplicate_Contacts". Set "Record-Level Security" to "Enforce sharing roles"	Duplicate Rule	
9/24/2025, 1:56:42 AM PDT	samikshamore2004165@agentforce.com		Contact matching rule, MatchingRuleForContact, activating by Project Admin	Matching Rule	
9/24/2025, 1:56:37 AM PDT	samikshamore2004165@agentforce.com		For matching rule MatchingRuleForContact, added matching criteria where matching method is Exact, the field is Email and match blank fields is "Does Not Match If Null"	Matching Rule	
9/24/2025, 1:56:37 AM PDT	samikshamore2004165@agentforce.com		Created new Contact matching rule MatchingRuleForContact	Matching Rule	
9/23/2025, 9:10:00 AM PDT	samikshamore2004165@agentforce.com		Added standard button override on Loan Applications: View (Lightning Page null)	Custom Objects	
9/23/2025, 9:09:42 AM PDT	samikshamore2004165@agentforce.com		Created Lightning Page: Loan Application Record Page	Lightning Pages	
9/23/2025, 7:41:21 AM PDT	samikshamore2004165@agentforce.com		Created Lightning Page: Loan & Credit Approval UtilityBar	Lightning Pages	
9/23/2025, 7:41:21 AM PDT	samikshamore2004165@agentforce.com		Created custom app Loan & Credit Approval	Custom Apps	