



KJ's Educational Institute
KJ COLLEGE OF ENGINEERING AND
MANAGEMENT RESEARCH

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Cloud
Computing

PROJECT TITLE: Design and
develop a custom Application
(Mini Project) using Salesforce
Cloud

Done By:

ROLL NO – 'A46'

KJ COLLEGE OF ENGINEERING AND MANAGEMENT RESEARCH

Department of Computer Engineering



CERTIFICATE

This is to certify that the project entitled
“Movie Recommendation Model “
submitted by

Jankee Ranjeet Patil 46(A)

is a record of bonafide work carried out by them, in the partial fulfillment of
the requirement for the award of Degree of Bachelor of Engineering
(Computer Engineering) at

KJ COLLEGE OF ENGINEERING AND MANAGEMENT RESEARCH, Pune under the
University of Pune. This work will be done during the year 2024-2023, under
our guidance.

Date: / /

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ABSTRACT

In today's hypercompetitive market, the efficacy of sales processes can make or break a business. This project proposes a bespoke Sales Force Cloud application aimed at redefining how sales teams operate. By leveraging the extensive capabilities of Sales Force Cloud, such as customizable workflows, automated task management, and real-time analytics, the application facilitates seamless lead management, meticulous opportunity tracking, precise quote generation, and insightful sales performance analysis. Furthermore, its integration prowess ensures harmonious data flow across platforms, fostering collaboration and coherence. With an eye on scalability, the solution is primed to adapt to evolving business needs, thereby empowering organizations to drive revenue growth, enhance customer engagement, and stay ahead of the curve in today's dynamic marketplace.

ACKNOWLEDGEMENT

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1.INTRODUCTION

- **Relevance of the Project**

Salesforce is a cloud computing service as a software (SaaS) company that specializes in customer relationship management (CRM). Salesforce's services allow businesses to use cloud technology to better connect with customers, partners, and potential customers. The software has become the number one for customer success and helps businesses track customer activity, market to customers, and many more services. Salesforce is a customer relationship management solution that brings companies and customers together. It is one integrated CRM platform that gives all your departments — including marketing, sales, commerce, and service — a single, shared view of every customer.² Salesforce Lightning Experience: Salesforce Lightning Experience is simply referred to as “Lightning”. When working with Lightning Salesforce we will learn about different Salesforce lightning topics like Lightning Login, Lightning App Builder, Lightning for Outlook, Salesforce Lightning Components, Lightning Sync, and many more. Some of them are applicable in Lightning Experience only, but some others will work in both Lightning Experience and older Classic user interfaces. Lightning Sync is used to sync your user contacts and events between your email server with Salesforce.

- **Problem Statement**

Design and develop custom Applications (Mini Project) using Salesforce Cloud.

- **Scope of the Project**

Requirement Analysis:

- Conduct a comprehensive analysis of the current sales processes, pain points, and business requirements.
- Define clear objectives and goals for the custom application to address specific challenges and improve efficiency.

- Design and Development:

1. Design a user-friendly interface with intuitive navigation for a seamless user experience.
2. Develop custom modules for lead management, opportunity tracking, quote generation, and sales performance analysis.
3. Implement customization features to tailor the application according to unique business needs.

- Deployment and Rollout:

1. Plan and execute a phased deployment strategy to minimize disruption to business operations.
2. Monitor the deployment process and provide ongoing support to address any issues or concerns.
3. Collaborate with stakeholders to gather feedback and make necessary refinements.

2.SYSTEM REQUIREMENTS SPECIFICATION

- Objective:

To create a custom application on the Salesforce Lightning platform.

- Software / Hardware Requirements:

OS - Windows / Ubuntu, Google Chrome.

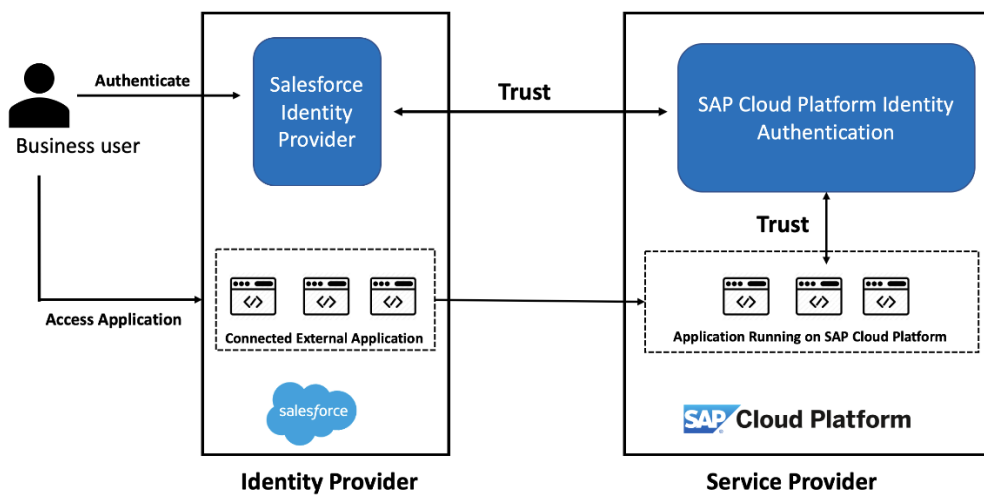
Salesforce Integration Cloud provides a single view of customer data for large businesses and enterprises. This cloud helps users connect large amounts of data spread across the various cloud platforms. It is built on the MuleSoft integration platform, which [Salesforce acquired in 2018](#).

The main features of the Integration Cloud include the following:

- provides the Lightning Flow feature, which enables the creation of personalized customer experience across all units including sales, service and marketing;
- enables customer service reps to transform service interactions into cross-selling and [upselling opportunities](#), without ever leaving their console through the Lightning app builder feature;
- provides easy integration with third-party apps to optimize business and development processes; and
- helps with smart decisions and data optimization as data is pulled from all sources.

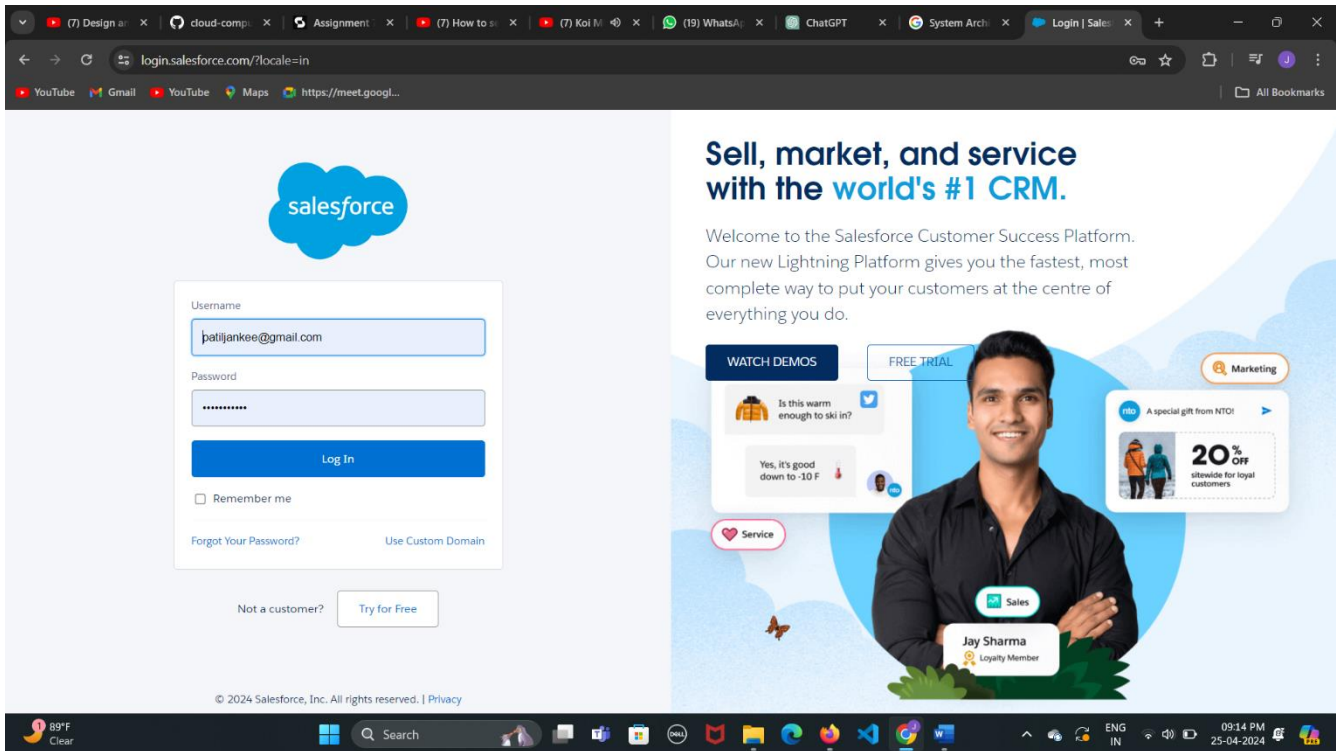
3.SYSTEM ANALYSIS AND DESIGN

3.1 System Architecture of Proposed System:

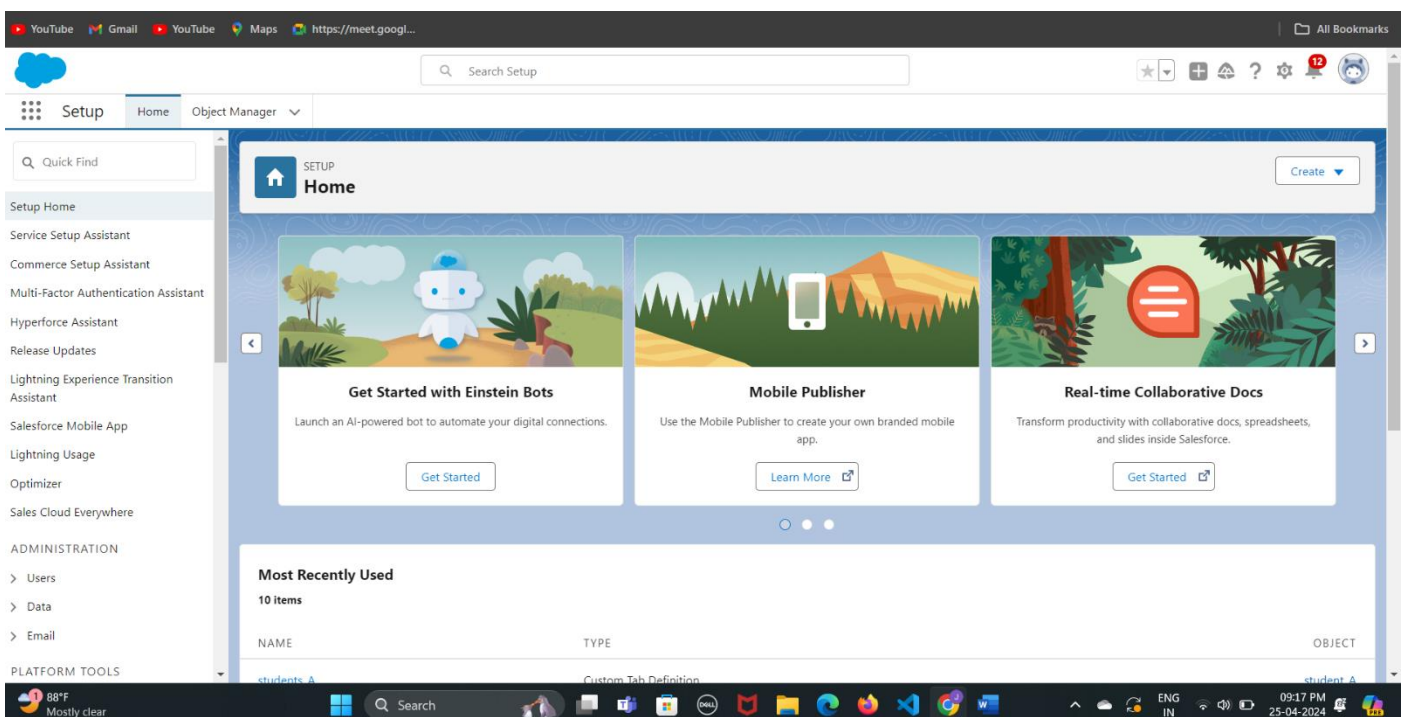


4.IMPLEMENTATION

Step 1: Log into Salesforce Developer account.



Step 2: Open the Salesforce Lightning platform and click on Object Manager => Create => Custom Object



Step 3: Fill in the required fields and under Optional Features, select Allow Reports and Allow Activities. Click Save.

SETUP
New Custom Object

Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles. [Tell me more!](#) [Don't show this message again](#)

Custom Object Definition Edit [Save] [Save & New] [Cancel]

Custom Object Information ! Required Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label Example: Account

Plural Label Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name Example: Account

Description

SETUP
New Custom Object

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name Example: Account Name

Data Type

Optional Features

- ☒ Allow Reports
- ☒ Allow Activities
- ☐ Track Field History
- ☐ Allow in Chatter Groups

Object Classification

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more](#)

- ☒ Allow Sharing
- ☒ Allow Bulk API Access
- ☒ Allow Streaming API Access

Deployment Status [What is this?](#)

Step 4: Now, Click on Fields & Relations => New.

The screenshot shows the Salesforce Setup interface for the 'Student_Detail' object. The 'Fields & Relationships' tab is selected, displaying a table of 4 items. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The items listed are 'Created By', 'Last Modified By', 'Owner', and 'Student_Detail Name'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Student_Detail Name	Name	Text(80)		✓

Step 5: Then select option “Text” and click Next-> Next -> Save.

The screenshot shows the Salesforce Setup interface for the 'Book' object. The 'Fields & Relationships' tab is selected, displaying a list of field types. The 'Text' option is selected, and the 'Next' button is visible at the bottom right.

Field Type	Description
<input type="radio"/> Number	Allows users to enter any number. Leading zeros are removed.
<input type="radio"/> Percent	Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
<input type="radio"/> Phone	Allows users to enter any phone number. Automatically formats it as a phone number.
<input type="radio"/> Picklist	Allows users to select a value from a list you define.
<input type="radio"/> Picklist (Multi-Select)	Allows users to select multiple values from a list you define.
<input checked="" type="radio"/> Text	Allows users to enter any combination of letters and numbers.
<input type="radio"/> Text Area	Allows users to enter up to 255 characters on separate lines.
<input type="radio"/> Text Area (Long)	Allows users to enter up to 131,072 characters on separate lines.
<input type="radio"/> Text Area (Rich)	Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
<input type="radio"/> Text (Encrypted) i	Allows users to enter any combination of letters and numbers and store them in encrypted form.
<input type="radio"/> Time	Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50.600" are all valid times for this field.
<input type="radio"/> URL	Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.

Step 6: Similarly. Repeat steps 4 and 5 to add more fields like Book, and Author. This is how the custom object will have the various fields.

The screenshot shows the Salesforce Setup interface for the 'Book' custom object. The left sidebar lists navigation 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, and Restriction Rules. The main content area is titled 'Fields & Relationships' and shows a list of 6 fields. The fields are: Author Name (Text(20)), Book Name (Text(80)), Created (Lookup(User)), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), and Publisher (Text(30)). The 'Book Name' field is highlighted with a mouse cursor.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Author Name	Author_Name__c	Text(20)		
Book Name	Name	Text(80)		✓
Created	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Publisher	Publisher__c	Text(30)		

Step 7: Now go to Home => search for "Tabs". Click on New

The screenshot shows the Salesforce Setup interface for the 'Tabs' page. The left sidebar lists navigation options: User Interface (selected), Rename Tabs and Labels, and Tabs. The main content area is titled 'Custom Tabs' and provides instructions on how to create new custom tabs. Below the instructions, there are two sections: 'Custom Object Tabs' and 'Web Tabs'. The 'Custom Object Tabs' section shows a table with columns: Action, Label, Tab Style, and Description. The table lists several tabs: Comments, Names, Student Names, Student Details, and x23. The 'Web Tabs' section is currently empty.

Action	Label	Tab Style	Description
Edit Del	Comments	Guitar	
Edit Del	Names	Piano	Enter your name
Edit Del	Student Names	Star	
Edit Del	Student Details	Gears	
Edit Del	x23	Cell phone	

Step 8: Enter the Object name and select any icon for tab style. Leave all defaults as it is. Click Next, Next, and Save.

Step 1. Enter the Details Step 1 of 3

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or [create a new custom object now](#)

Object: **Student_Detail**

Tab Style: **Phone**

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab

Splash Page Custom Link: **None**

Enter a short description

Description:

Step 9: In Setup, click Home. Enter “App Manager” in Quick Find and select App Manager. Click New Lightning App

Lightning Experience App Manager

[New Lightning App](#) [New Connected App](#)

24 items • Sorted by App Name • Filtered by All appmenuitems - TabSet Type

	App Name ↑	Developer Name	Description	Last Modified Date	App T...	Visi...	
1	All Tabs	AllTabSet		20/04/2024, 2:58 pm	Classic		
2	Analytics Studio	Insights	Build CRM Analytics dashboards and apps	20/04/2024, 2:58 pm	Classic	✓	
3	App Launcher	AppLauncher	App Launcher tabs	20/04/2024, 2:58 pm	Classic	✓	
4	Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry.	20/04/2024, 3:00 pm	Lightning	✓	
5	Commerce	Commerce	Manage your store's products, catalogs, and pricebooks.	20/04/2024, 2:58 pm	Lightning	✓	
6	Community	Community	Salesforce CRM Communities	20/04/2024, 2:58 pm	Classic	✓	
7	Content	Content	Salesforce CRM Content	20/04/2024, 2:58 pm	Classic	✓	
8	Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	20/04/2024, 2:58 pm	Lightning	✓	
9	Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	20/04/2024, 2:58 pm	Lightning	✓	
10	First selfservice app	First_selfservice_app		20/04/2024, 3:32 pm	Lightning	✓	
11	Library management system	library_management_system		25/04/2024, 7:25 pm	Lightning	✓	
12	Lightning Usage App	LightningInstrumentation	View Adoption and Usage Metrics for Lightning Experience	20/04/2024, 2:58 pm	Lightning	✓	
13	Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	20/04/2024, 2:58 pm	Classic	✓	

5.RESULTS AND DISCUSSION

The custom Sales Force Cloud application project culminates in a transformative solution designed to revolutionize sales operations, enhance efficiency, and foster collaborative synergy. By seamlessly automating lead management, opportunity tracking, and quote generation, coupled with real-time analytics and performance metrics, the application empowers sales teams to navigate complexities with informed precision, propelling revenue growth and fortifying customer relationships. This comprehensive solution, imbued with scalability and flexibility, ensures seamless adaptation to evolving business landscapes. It epitomizes a steadfast commitment to sustained excellence in a rapidly evolving marketplace. Through intuitive user interfaces and centralized data access, the application facilitates seamless collaboration among sales teams, fostering teamwork and synergy. Its modular architecture allows for customizability and integration with existing systems, ensuring alignment with specific business needs and processes. By providing actionable insights into sales trends and customer preferences, the application enables personalized engagement strategies, leading to higher customer satisfaction and loyalty. Its robust security measures safeguard sensitive data, instilling trust and confidence among stakeholders. With ongoing support and maintenance, the application continues to evolve, driving continuous improvement and innovation within the organization.

6. REFERENCE

- [1][http://faculty.winthrop.edu/domanm/csci411/Hanouts/ NIST.pdf](http://faculty.winthrop.edu/domanm/csci411/Hanouts/NIST.pdf).
- [2] <https://www.salesforce.com/in/what-is-salesforce>
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- [4]https://developer.salesforce.com/docs/atlas.enus.api.rest.meta/api_rest/
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- [6] Tadepalli Sarada Kiranmayee "A Survey on the Role of Cloud Computing in Social Networking Sites" International Journal of Computer Science and Information Technologies, Vol. 6 (2), 2015, 1509-1512.