

A CRM APPLICATION FOR LAPTOP RENTALS

1. Project Overview

This project is focused on creating a Customer Relationship Management (CRM) application for laptop rental services, designed to address the challenges of managing customer interactions, rental agreements, and inventory efficiently. The goal is to deliver a comprehensive solution by leveraging Salesforce CRM functionalities and automation tools. Through this project, we aim to enhance operational efficiency, improve user experience, and ensure data accuracy to support the long-term growth and customer satisfaction of the laptop rental business.

2. Objectives

Business Goals:

- Streamline the process of managing rental agreements and inventory.
- Improve customer engagement and communication through automated workflows.
- Increase revenue by optimizing rental processes and reducing turnaround time.

Specific Outcomes:

- A centralized database for tracking customers, rental orders, and laptop inventory.
- Automated reminders for rental due dates and maintenance schedules.
- Comprehensive reporting and analytics to track business performance.

3. Salesforce Key Features and Concepts Utilized

- **Custom Objects:** For managing laptops, customers, and rental agreements.

Setup

Home

Object Manager

Search Setup

Setup > OBJECT MANAGER

consumer

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Object Access

Triggers

Flow Triggers

Validation Rules

Conditional Field Formatting

8 items. Sorted by Field Label

Quick Find

New

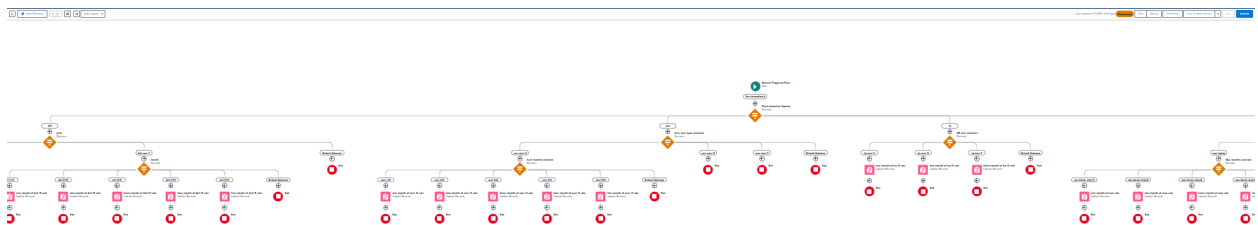
Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
consumer Status	consumer_Status__c	Picklist		
consumer_name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User Group)		✓
Phone number	Phone_number__c	Phone		

- **Workflows and Process Automation:** To send reminders, update statuses, and streamline approvals.



- **Lightning Components:** For an intuitive and responsive user interface.

Setup

Home

Object Manager

Q: app

Salesforce Mobile App

Data

Mass Transfer Approval Requests

Apps

App Manager

AppExchange Marketplace

Connected Apps

Connected Apps OAuth Usage

Manage Connected Apps

External Client Apps

External Client App Manager

OAuth Usage

Settings

Lightning Bolt

Flow Category

Lightning Bolt Solutions

Mobile Apps

Salesforce

Salesforce Branding

Salesforce Navigation

Salesforce Notifications

Salesforce Offline

Salesforce Settings

Packaging

Installed Packages

Package Manager

Package Usage

Feature Settings

Analytics

Apps

App Install History

App Install History

SETUP

App Manager

Alternative Payment Methods

Assets

Asset Actions

Asset Action Sources

Asset State Periods

Async Operation Logs

Authorization Form

Authorization Form Consent

Authorization Form Data UI

Authorization Form Test

Business Brands

Decision Matrices

Calculation Procedures

Add

Remove

Top

Up

Down

Bottom

Overwrite User's Personal Custom App Customizations

Default Landing Page

home

Show on Lightning Experience

Assign to Profiles

Profile	Visible	Default
Agent	<input type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Integration User	<input type="checkbox"/>	<input type="checkbox"/>
Analytics Cloud Security User	<input type="checkbox"/>	<input type="checkbox"/>
Authenticated Website	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Authorized Website	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B2B Reconnecting Portal Buyer Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contract Manager	<input type="checkbox"/>	<input type="checkbox"/>
Cross Org Data Privacy User	<input type="checkbox"/>	<input type="checkbox"/>
Custom: Marketing Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Sales Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custom: Support Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Community Login User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Community Plus Login User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Community Plus User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Community User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Portal Manager Custom	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Customer Portal Manager Standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
External Apps Login User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
External Identity User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Force.com - App Subscription User	<input type="checkbox"/>	<input type="checkbox"/>
Gold Partner User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High Volume Customer Portal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High Volume Customer Portal User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Identity User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marketing User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum Accesses - API Only Integrations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum Accesses - Salesforce	<input type="checkbox"/>	<input type="checkbox"/>
owner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partner App Subscription User	<input type="checkbox"/>	<input type="checkbox"/>
Partner Community Login User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Partner Community User	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Read Only	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- Validation Rules: To ensure data integrity and accuracy.

SETUP > OBJECT MANAGER

consumer

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Validation Rules

Conditional Field Formatting

consumer Validation Rule

[Back to consumer](#)

Validation Rule Detail

Rule Name

Phonenumberoremailblankrule

Active

✓

Error Condition Formula

OR(ISBLANK(Phone_number__c) , ISBLANK(Email__c))

Error Location

Top of Page

Error Message

please fill the phone number and email id

Modified By

suvrati.suvanda 06/01/2025, 8:04 pm

Description

phone number and email number should not be blank

Created By

suvrati.suvanda 06/01/2025, 8:04 pm

Edit

Clone

- **Creating The Roles in Role Hierarchy:**Access to customer records and the ability to create rental agreements.
- Focused on customer acquisition and engagement.

SETUP
Roles

Creating the Role Hierarchy


You can build on the existing role hierarchy shown on this page. To insert a new role, click **Add Role**.

Your Organization's Role Hierarchy Show in tree view

```

graph TD
    myorg[myorg] --> AddRole1[Add Role]
    myorg --> CEO[CEO Edit | Del | Assign]
    CEO --> AddRole2[Add Role]
    CEO --> CFO[CFO Edit | Del | Assign]
    CFO --> AddRole3[Add Role]
    CFO --> COO[COO Edit | Del | Assign]
    COO --> AddRole4[Add Role]
    COO --> owner[owner Edit | Del | Assign]
    owner --> AddRole5[Add Role]
    owner --> Agent[Agent Edit | Del | Assign]
    Agent --> AddRole6[Add Role]
    Agent --> SVP[SVP Customer Service & Support Edit | Del | Assign]
    SVP --> AddRole7[Add Role]
    SVP --> CSS[Customer Support International Edit | Del | Assign]
    CSS --> AddRole8[Add Role]
    CSS --> CSNA[Customer Support North America Edit | Del | Assign]
    CSNA --> AddRole9[Add Role]
    CSNA --> IRSR[Installation & Repair Services Edit | Del | Assign]
    IRSR --> AddRole10[Add Role]
    IRSR --> SVP_HRS[SVP Human Resources Edit | Del | Assign]
    SVP_HRS --> AddRole11[Add Role]
    SVP_HRS --> SVP_SM[SVP Sales & Marketing Edit | Del | Assign]
    SVP_SM --> AddRole12[Add Role]
    SVP_SM --> VPIS[VP International Sales Edit | Del | Assign]
    VPIS --> AddRole13[Add Role]
    VPIS --> VPM[VP Marketing Edit | Del | Assign]
    VPM --> AddRole14[Add Role]
    VPM --> MT[Marketing Team Edit | Del | Assign]
```

- **Apex Triggers:** For handling complex business logic.



SETUP

Apex Classes

Apex Class

LaptopBookingHandler

Help for this

Apex Class Detail

Edit

Delete

Download

Security

Show Dependencies

Name	LaptopBookingHandler	Status	Active
Namespace Prefix		Code Coverage	0% (0/10)
Created By	suvarit sumanda , 06/01/2025, 11:20 pm	Last Modified By	suvarit sumanda , 07/01/2025, 3:38 pm

Class Body

Class Summary

Version Settings

Trace Flags

```

1 public class LaptopBookingHandler {
2
3     public static void sendEmailNotification (List<Laptop_Booking__c> lapList){
4         for(Laptop_Booking__c lap:lapList)
5         {
6
7             Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();
8
9             email.setToAddresses( new List<String>{-lap.Email__c});
10            email.setSubject('Welcome to our company');
11
12            string body = 'Dear Customer, In';
13
14            body += 'Welcome to Laptop Rentals! You have been seen as a valuable customer to us, while we try to provide you with good quality resources. \n Laptop Amount = '+ lap.Amount__c + '\n core type = '+lap.coretype__c + '\n Laptop type = '+lap.Laptop_name__c;
15
16            email.setPlainTextBody(body);
17
18            Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});
19
20        }
21    }
22
23
24
25
26
27
28

```

Edit

Delete

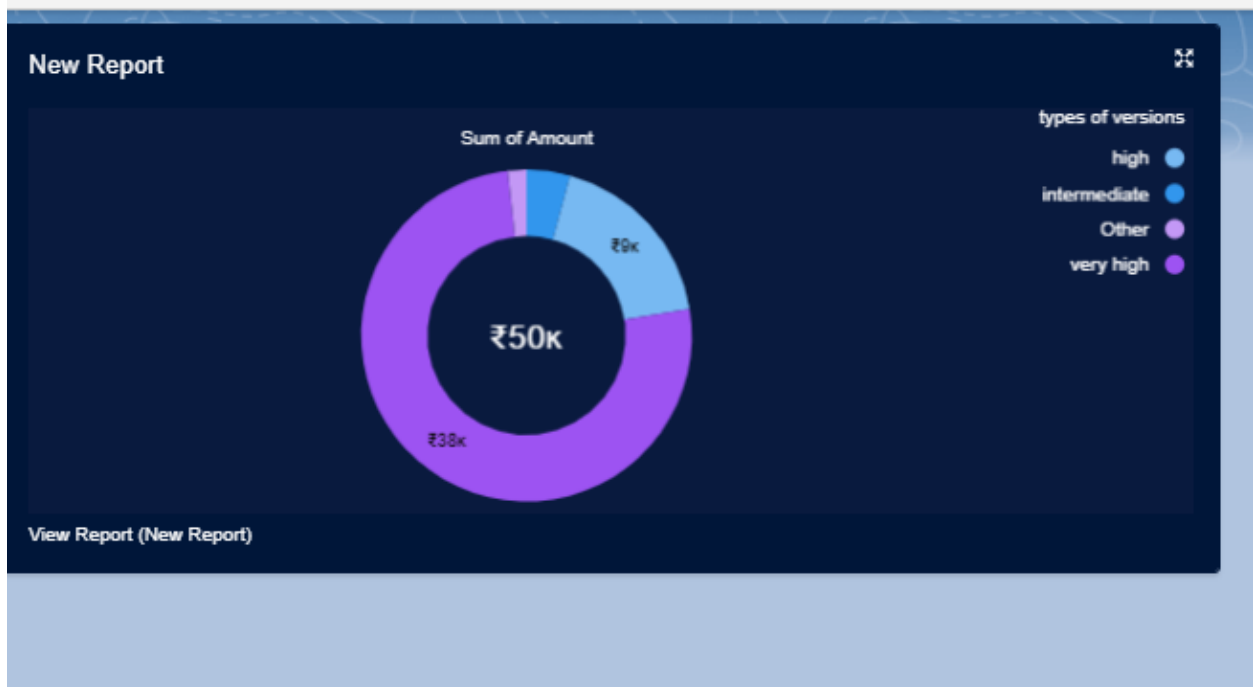
Download

Security

Show Dependencies

- **Reports and Dashboards:** For real-time monitoring of inventory and performance metrics.

Dashboard
data analytics of laptops
total amount of data in dashboard
As of 28-Jan-2025, 7:41 pm-Viewing as suvvari sunanda



4. Detailed Steps to Solution Design

- **Data Models:**
 - Design custom objects for Laptops, Customers, and Rental Agreements.
 - Establish relationships between objects using lookup and master-detail fields.
- **User Interface Designs:**
 - Create Lightning pages for managing laptops and viewing rental details.
 - Include quick actions for creating new rental agreements.
- **Business Logic:**
 - Implement validation rules to enforce business requirements.
 - Develop Apex triggers for inventory updates and rental status changes.

5. Testing and Validation

- **Unit Testing:**
 - Test Apex classes and triggers for all possible scenarios to ensure robustness.
- **User Interface Testing:**
 - Validate that all Lightning pages and components function correctly across devices.
- **System Testing:**
 - Test end-to-end workflows, from creating a rental agreement to updating inventory.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

- Automating rental due date reminders to customers.
- Tracking inventory status and availability in real-time.
- Generating performance reports for business insights.
- Managing customer inquiries and complaints through case management.

7. Conclusion

Summary of Achievements:

- Developed a robust CRM application tailored for laptop rental services.
- Automated critical business processes, enhancing efficiency and accuracy.

- Provided real-time insights into business performance, supporting data-driven decision-making.