

GOVT.ARTS AND SCIENCE COLLEGE, VANUR

**PROPERTY MANAGEMENT APPLICATION USING
SALESFORCE**

- By

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1. INTRODUCTION

1.1 Overview

Salesforce is a customer relationship management (CRM) platform that allows businesses to manage their customer interactions and related processes. While Salesforce is primarily known for its CRM capabilities, it also has features that can be used to manage properties and related processes.

A property management application built on Salesforce can have a variety of features, including:

- Property Listings:** The application can allow property managers to list properties for rent or sale, including details such as photos, location, and pricing.

- Tenant Management:** Property managers can use Salesforce to manage tenant information, including contact information, lease terms, and rent payments.

- Maintenance and Repairs:** Property managers can use Salesforce to manage maintenance and repair requests, track work orders, and schedule service appointments.

- Accounting and Finance:** The application can allow property managers to track income and expenses related to their properties, including rent payments, property taxes, and utility bills.

- Reporting and Analytics:** The application can provide property managers with real-time insights into their properties, including occupancy rates, rental income, and maintenance costs.

By building a property management application on Salesforce, property managers can take advantage of Salesforce's powerful CRM capabilities, including automation, workflow management, and reporting. Additionally, because Salesforce is a cloud-based platform, property managers can access their data and manage their properties from anywhere, on any device.

1.2 PURPOSE

Efficient property management: A property management application built on Salesforce can streamline the management of properties, tenants, maintenance requests, and financial transactions. It can provide a centralized platform for property With the ability to automate many processes, property managers can save time and focus on providing better customer service to their tenants.

Better customer experience: A Salesforce-based property management application can help property managers provide better customer experience to their tenants by enabling them to quickly address any concerns or issues. For example, tenants can submit maintenance requests through the application, which can then be automatically routed to the appropriate team member for resolution. Property managers can also use the application to communicate with tenants and keep them informed about important information related to their lease, such as rent increases or lease renewals. By providing a more efficient and responsive service, property managers can improve tenant satisfaction and retention.

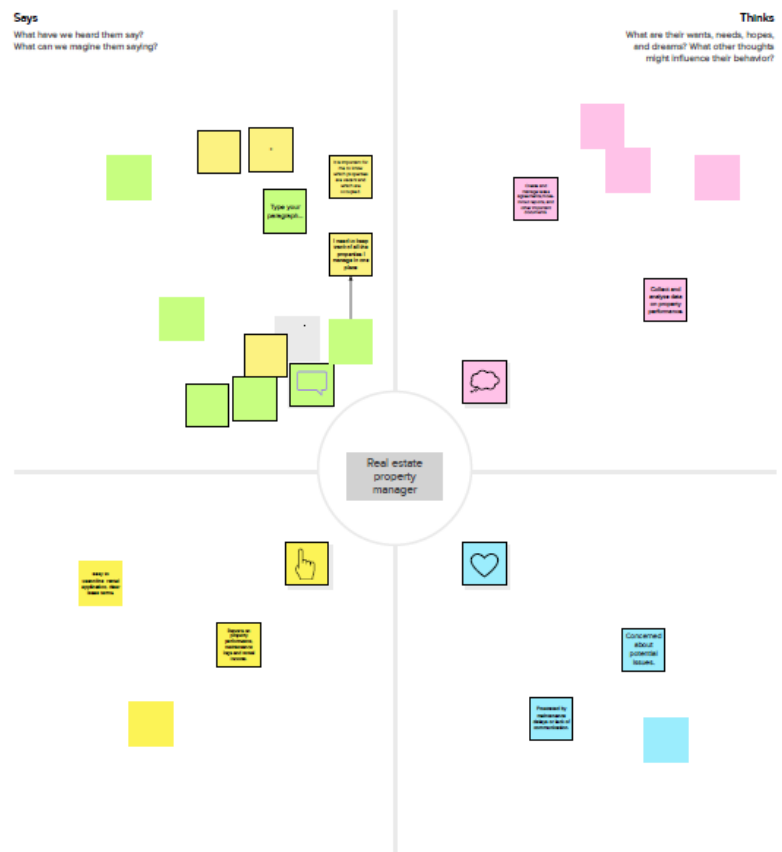
managers to access critical information related to properties, such as lease agreements, tenant contact details, rental payments, and maintenance history.

2.PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map

Empathy map

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.



2.2 Ideation & brainstorming map



3.RESULT

3.1 Data Model

| Object Name | Field in the Object | |
|-------------|---------------------|-----------------------------------|
| | Field Label | Data Type |
| Buy | Buy | Picklist, percentage |
| Rent | Rent | Auto number, Text, Picklist |
| Loan | Loan | Auto number, Formula |

3.2 Activity & Screenshot

1. Create an object

ACTIVITY 1

The screenshot shows a web browser window with two tabs: '404 Error | Salesforce Developers' and 'Buy | Salesforce'. The address bar shows the URL: `govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nc/Details/view`. The browser's search bar contains 'Search Setup'. The Salesforce interface has a top navigation bar with 'Setup', 'Home', and 'Object Manager' (selected). Below this, a breadcrumb trail reads 'SETUP > OBJECT MANAGER' followed by the object name 'Buy'. A left-hand sidebar lists various configuration options: 'Details' (selected), 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', and 'Search Layouts'. The main content area, titled 'Details', shows the configuration for the 'Buy' object. It includes a description 'Buy and buyers information', API Name 'Buy__c', Custom status 'Custom' (checked), Singular Label 'Buy', Plural Label 'Buyers', and several checkboxes: 'Enable Reports' (checked), 'Track Activities', 'Track Field History', 'Deployment Status' (checked), 'Help Settings', and 'Standard salesforce.com Help Window'. 'Edit' and 'Delete' buttons are in the top right of the details section. The Windows taskbar at the bottom shows the search bar, several application icons, and system information: 36°C Sunny, ENG IN, 12:44, 13/04/2023, and 6 notifications.

ACTIVITY 2

404 Error | Salesforce Developers x Rent | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nr/Details/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Rent

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

Details

Description
Information of rent and rents

API Name
Rent_c

Custom
✓

Singular Label
Rent

Plural Label
Rents

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Edit Delete

Type here to search

36°C Sunny

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ACTIVITY 3

404 Error | Salesforce Developers x Loan | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nw/Details/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER

Loan

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

Details

Description
Detail of loan and loans

API Name
Loan_c

Custom
✓

Singular Label
Loan

Plural Label
Loans

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Edit Delete

Type here to search

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ACTIVITY 4

404 Error | Salesforce Developers x Lead | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244ob/Details/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Lead

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Details

Description
Information of lead and leads

API Name
Lead__c

Custom
✓

Singular Label
Lead

Plural Label
Leads

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Edit Delete

javascript:void(0);

Type here to search

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2. Create a custom fields

ACTIVITY 1

404 Error | Salesforce Developers x Buy | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nc/FieldsAndRelationships/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Buy

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Fields & Relationships

9 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|--------------------|-------------------|---------|
| Annual Amount | Annual_Amount__c | Currency(18, 0) | | |
| Buy Name | Name | Text(80) | | ✓ |
| City | City__c | Picklist | State | |
| Created By | CreatedById | Lookup(User) | | |
| Discount | Discount__c | Percent(18, 0) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |

javascript:void(0);

Type here to search

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ACTIVITY 2

404 Error | Salesforce Developers x Rent | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nr/FieldsAndRelationships/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Rent

Details

Fields & Relationships
7 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|--------------------|-------------------|---------|
| BHK type | BHK_type__c | Picklist | Rental city | |
| Created By | CreatedById | Lookup(User) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Rent | Rent__c | Auto Number | | |
| Rent Name | Name | Text(80) | | ✓ |
| Rental city | Rental_city__c | Picklist | | |

https://govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/one/app#/setup/ObjectManager/0115i00000244nr/FieldsAndRelationships/view

Type here to search

Very high UV 13:10 13/04/2023

ACTIVITY 3

404 Error | Salesforce Developers x Loan | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115i00000244nw/FieldsAndRelationships/view

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Loan

Details

Fields & Relationships
11 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|--------------------|-------------------|---------|
| Annual Loan | Annual_Loan__c | Number(5, 0) | | |
| Created By | CreatedById | Lookup(User) | | |
| Interest Rate | Interest_Rate__c | Currency(5, 0) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Loan Amount | Loan_Amount__c | Formula (Currency) | | |
| Loan Id | Loan_Id__c | Auto Number | | |
| Loan Name | Name | Text(80) | | ✓ |

Type here to search

36°C Sunny 13:10 13/04/2023

ACTIVITY 4

The screenshot shows the Salesforce Setup interface for the 'Lead' object. The 'Fields & Relationships' section is active, displaying a list of 9 fields sorted by Field Label. The fields are:

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|--------------------|-------------------|---------|
| City | City__c | Picklist | State | |
| Created By | CreatedById | Lookup(User) | | |
| Email | Email__c | Email | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Lead ID | Lead_ID__c | Auto Number | | |
| Lead Name | Name | Text(80) | | ✓ |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |

The left sidebar shows the navigation menu with 'Fields & Relationships' selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The bottom status bar shows the system clock as 13:09 on 13/04/2023.

3. Create a Tab

The screenshot shows the Salesforce Setup interface for 'Custom Tabs'. The 'Custom Object Tabs' section is active, displaying a list of tabs for the 'Buyers' object. The tabs are:

| Action | Label | Tab Style | Description |
|------------|--------|-----------|-------------|
| Edit Del | Buyers | Camera | |
| Edit Del | Leads | People | |
| Edit Del | Loans | Bank | |
| Edit Del | Rents | Building | |

The left sidebar shows the navigation menu with 'Custom Tabs' selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The bottom status bar shows the system clock as 13:13 on 13/04/2023.

4. Create a custom Profile

ACTIVITY 1

The screenshot shows the Salesforce Setup interface for the 'Standard User' profile. The left sidebar contains navigation links for Users, Profiles, Data, Feature Settings, Marketing, Sales, and Products. The main content area displays the profile details for 'Standard User', including its name, user license, and creation/modification dates. Below this, the 'Page Layouts' section lists various layouts assigned to the profile, such as Global, Email Application, and Home Page Layout. The bottom of the screen shows a Windows taskbar with various application icons and system status information.

404 Error | Salesforce Developers x Bank | Salesforce x Profiles | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00e5i000003V0Nb

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

PR

Users

Profiles

Data

Mass Transfer Approval Requests

Feature Settings

Data.com

Prospector Preferences

Prospector Users

Functions

Marketing

Lead Processes

Sales

Products

Asset Settings

SETUP Profiles

Profile Standard User

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Login IP Ranges [0] | Enabled Apex Class Access [0] | Enabled Visualforce Page Access [0] | Enabled External Data Source Access [0] | Enabled Named Credential Access [0] | Enabled Custom Metadata Type Access [0] | Enabled Custom Setting Definitions Access [0] | Enabled Flow Access [0] | Enabled Service Presence Status Access [0] | Enabled Custom Permissions [0]

Profile Detail

Edit Clone View Users

| | | | |
|--------------|---------------------------------|----------------|----------------------------------|
| Name | Standard User | | |
| User License | Salesforce | Custom Profile | <input type="checkbox"/> |
| Created By | Yoggeeta G. 12/04/2023, 9:31 pm | Modified By | Yoggeeta G. 13/04/2023, 12:39 am |

Page Layouts

Standard Object Layouts

| | | | |
|-------------------|---------------------------------|------------------|---|
| Global | Global Layout [View Assignment] | Object Milestone | Object Milestone Layout [View Assignment] |
| Email Application | Not Assigned [View Assignment] | Operating Hours | Operating Hours Layout [View Assignment] |
| Home Page Layout | DE Default [View Assignment] | Opportunity | Opportunity Layout [View Assignment] |

Type here to search

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ENG IN 14:28 13/04/2023

ACTIVITY 2

The screenshot shows the Salesforce Setup interface for the 'Sales Manager' profile. The left sidebar contains navigation links for Users, Profiles, Data, Feature Settings, Marketing, Sales, and Products. The main content area displays the profile details for 'Sales Manager', including its name, user license, and creation/modification dates. Below this, the 'Page Layouts' section lists various layouts assigned to the profile, such as Global, Email Application, and Home Page Layout. The bottom of the screen shows a Windows taskbar with various application icons and system status information.

404 Error | Salesforce Developers x Bank | Salesforce x Profiles | Salesforce x +

govtartsandsciencecollege44-dev-ed.develop.lightning.force.com/lightning/setup/EnhancedProfiles/page?address=%2F00e5i000003V9qg

Gmail YouTube Maps

Search Setup

Setup Home Object Manager

PR

Users

Profiles

Data

Mass Transfer Approval Requests

Feature Settings

Data.com

Prospector Preferences

Prospector Users

Functions

Marketing

Lead Processes

Sales

Products

Asset Settings

SETUP Profiles

Profile Sales Manager

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

Login IP Ranges [0] | Enabled Apex Class Access [0] | Enabled Visualforce Page Access [0] | Enabled External Data Source Access [0] | Enabled Named Credential Access [0] | Enabled Custom Metadata Type Access [0] | Enabled Custom Setting Definitions Access [0] | Enabled Flow Access [0] | Enabled Service Presence Status Access [0] | Enabled Custom Permissions [0]

Profile Detail

Edit Clone Delete View Users

| | | | |
|--------------|---------------------------------|----------------|-------------------------------------|
| Name | Sales Manager | | |
| User License | Salesforce | Custom Profile | <input checked="" type="checkbox"/> |
| Description | | | |
| Created By | Yoggeeta G. 13/04/2023, 1:15 am | Modified By | Yoggeeta G. 13/04/2023, 1:45 am |

Page Layouts

Standard Object Layouts

| | | | |
|-------------------|---------------------------------|------------------|---|
| Global | Global Layout [View Assignment] | Object Milestone | Object Milestone Layout [View Assignment] |
| Email Application | Not Assigned [View Assignment] | Operating Hours | Operating Hours Layout [View Assignment] |
| Home Page Layout | DE Default [View Assignment] | Opportunity | Opportunity Layout [View Assignment] |

Type here to search

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ENG IN 14:24 13/04/2023

5. To create a user

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with "user" entered. Under the "Users" section, "User Management Settings" is selected. The main content area displays the "User Detail" for "Vidhya A".

User Detail for Vidhya A:

| Field | Value | Field | Value |
|------------|--|---------------------------|-------------------------------------|
| Name | Vidhya A | Role | Marketing Manager |
| Alias | va | User License | Salesforce |
| Email | mailammozhia@gmail.com | Profile | Marketing Manager |
| Username | mailammozhia@gmail.com | Active | <input checked="" type="checkbox"/> |
| Nickname | User16813609413048050886 | Marketing User | <input type="checkbox"/> |
| Title | Proper Management | Offline User | <input type="checkbox"/> |
| Company | | Knowledge User | <input type="checkbox"/> |
| Department | | Flow User | <input type="checkbox"/> |
| Division | | Service Cloud User | <input type="checkbox"/> |
| Address | | Site.com Contributor User | <input type="checkbox"/> |
| Time Zone | (GMT+05:30) India Standard Time (Asia/Kolkata) | Site.com Publisher User | <input type="checkbox"/> |
| Locale | English (India) | WDC User | <input type="checkbox"/> |

6. Create a Sharing rule

The screenshot shows the Salesforce Setup interface. The left sidebar has a search bar with "sharing se" entered. Under the "Security" section, "Sharing Settings" is selected. The main content area displays the "Sharing Settings" page.

Sharing Settings:

This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to [Background Jobs](#) to monitor the progress of a change to an organization-wide default or a parallel sharing recalculation.

Manage sharing settings for: **Users**

[Disable External Sharing Model](#)

Default Sharing Settings

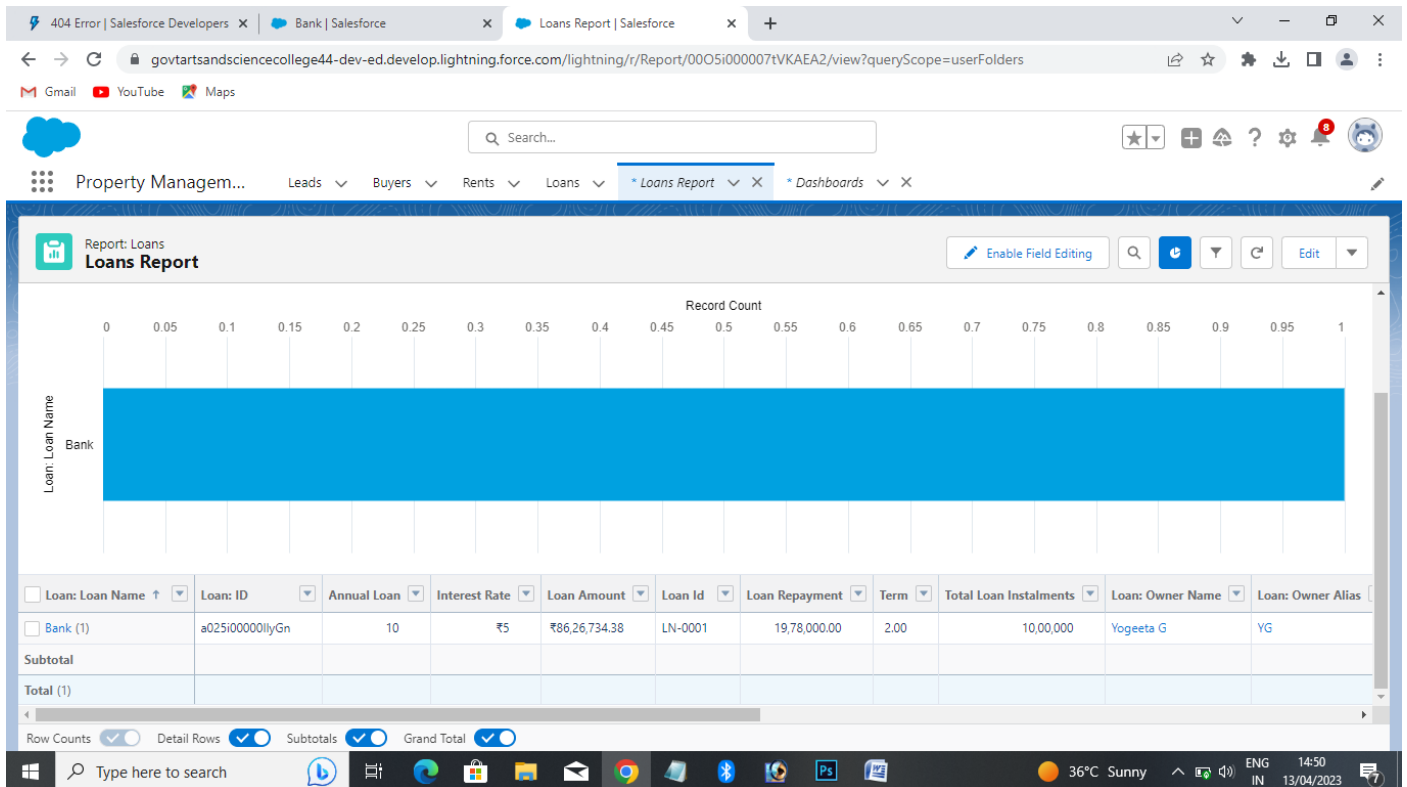
Organization-Wide Defaults [Edit](#) [Organization-Wide Defaults Help](#)

| Object | Default Internal Access | Default External Access | Grant Access Using Hierarchies |
|--------|-------------------------|-------------------------|-------------------------------------|
| User | Public Read Only | Private | <input checked="" type="checkbox"/> |

Other Settings [Other Settings Help](#)

| | |
|----------------------------|-------------------------------------|
| Standard Report Visibility | <input checked="" type="checkbox"/> |
| Manual User Record Sharing | <input type="checkbox"/> |
| Manager Groups | <input type="checkbox"/> |

7. Create Report



4. TRAIL PROFILE PUBLIC URL

Team Leader (Yogeeta .G)- <https://trailblazer.me/id/yogee8>

Team Member (Vidhya . A)- <https://trailblazer.me/id/vidha20>

Team Member (Youvarani. K)- <https://trailblazer.me/id/youvk>

Team Member (Theerthana .T)- <https://trailblazer.me/id/theet6>

5. Advantages

- **Improved communication and collaboration between property managers and tenants.**
- **Streamlined maintenance and repair requests with automated workflows.**
- **Enhanced tenant experience with self-service portals and online rent payments.**
- **Better tracking and analysis of property performance and financials.**

Disadvantages

- **High implementation and customization costs.**
- **Steep learning curve for non-technical users.**
- **Limited flexibility and customization options compared to dedicated property management software.**
- **Dependency on Salesforce infrastructure and updates.**
- **Potential data privacy and security concerns.**

6. APPLICATION

- **Property Listing and Management:** Salesforce can be used to manage a property listing, including its details such as the property type, location, amenities, rent, and availability. The system can also track tenant information, lease agreements, and payments.
- **Communication and Collaboration:** Communication is essential for effective property management. Salesforce can facilitate communication between property managers, tenants, and maintenance personnel. The system can also provide a forum for collaboration among team members, including sharing documents and files.
- **Reporting and Analytics:** Salesforce can generate reports and analytics that help property managers make informed decisions. Reports can be generated on tenant turnover, occupancy rates, maintenance costs, and revenue. This data can help property managers identify trends and make decisions that improve profitability.

7.CONCLUSION

In conclusion, property management using Salesforce can be a highly effective solution for managing a variety of tasks related to property management. By leveraging the power of the Salesforce platform, property

managers can streamline their processes and gain valuable insights into their operations. Key benefits of using Salesforce for property management include increased efficiency, improved communication, better data management, and the ability to easily track and analyze key metrics. Additionally, Salesforce offers robust security features and can be customized to meet the unique needs of individual property management companies. Overall, property management using Salesforce can help organizations achieve greater success and enhance the overall customer experience.

8.FUTURE SCOPE

- **Enhanced data analytics:** As the amount of data generated by property management systems continues to increase, there will be a growing need for more powerful analytics tools. Salesforce could be used to create custom dashboards and reports, allowing property managers to analyze data in real-time and make data-driven decisions.
- **Improved communication and collaboration:** Property management teams often work across multiple locations and departments, which can lead to communication challenges. Salesforce can be used to create a centralized communication platform that enables property managers to collaborate more effectively, share information, and track progress.
- **Mobile optimization:** With the increasing use of smartphones and tablets, property managers will need to be able to access their data and workflows from anywhere. Salesforce can be used to create mobile-friendly applications and interfaces, enabling property managers to access important information and tasks on the go.
- **IoT integration:** The Internet of Things (IoT) is becoming increasingly important in property management, with connected devices such as smart thermostats, door locks, and security systems being used to improve efficiency and reduce costs. Salesforce could be used to integrate these devices into a property management system, allowing property managers to monitor and control them from a single platform.
- **Artificial intelligence:** As AI technology continues to evolve, it is likely that property management systems will be able to use machine learning

algorithms to automate routine tasks and make predictive recommendations. Salesforce could be used to integrate AI capabilities into a property management system, enabling property managers to optimize their workflows and improve efficiency.