PROPERTY RENTAL MANAGEMENT SYSTEM:

Story 1:

Cognizant hired you and asked to provide a platform for "MAGIC BRICKS" who are famous in the market for Property Management where they can run their business efficiently.

Requirements of the Client:

- Flexible application to customize easily.
- Can be used from any location.
- On Cloud platform.
- Flexible in payments (pay as per use).
- No Infrastructure to be needed.
- Quick Deployment.

Statement by Project Manager:

Provide some information to your client how Salesforce CRM can help them, with Salesforce features. And target to get this project get approved somehow. Before doing anything, you must explain client what you are doing.

Write 8-10 key points about Salesforce CRM.

Story 2:

Due to your previous efforts in Story 1, Customer is ready to the proposed process. And he is asking BA to visit him and take all the requirements.

As your team size is low, you only will be going instead of Business Analyst (BA).

Prepare a questionnaire which you are going to ask client before starting the work.

Write at least 10 such questions.

Once we get project from client, we initially work on Requirement Analysis document or RA document. It is provided by BA or PM (Project Manager).

BA/PM will keep on speaking with clients for the updates in requirements and they will keep on giving you work to make the necessary changes.

*** In real time scenario we had to make it fast to close the deal ASAP due to possible intervention by competitors. ***

(STORY 2 IS FOR IMPROVING YOUR BA SKILLS OR INITIAL REQUIREMENT GATHERING SKILLS. DO STORY 2 BY YOUR OWN EFFORTS. SEE QUESTIONS WHICH I WOULD HAVE ASKED TO CLIENT, IN STORY 3. ANALYSE WHAT YOU HAVE MISSED OR WHAT U DID MORE)

Story 3:

The Client answered with below information. Your team is going through those in detail so that accurate planning can be done.

1. **What all business process the Client want to execute on Salesforce CRM?**

Client:

We want our entire business process to be run on Salesforce CRM such that it stores all the property data in a secure environment and gives complete control over who access information.
Owners who are interested in giving the property to rental or lease; register the property with the necessary details in the application.
The Key features of the Salesforce CRM must include:

1. **Receive & organize the Property Information Details.**
2. **Track & monitor the Properties which are being shown interest by the Tenants.**
3. **Data must be Safe & Secure.**

2. **How many users will use Salesforce CRM?**

Client: 5 users

Property Manager, Operations Manager, Supervisor, Sales Executive, Marketing Executive.

3. **How many departments will be using Salesforce and details of department wise members?**

Client:

Administration Department (Property Manager)
Operations Department (Operations Manager)
Supervising Department (Supervisor)
Marketing Department (Marketing Executive)
Sales Department. (Sales Executive)

4. **What are the roles of each user?**

Client: Tom - Property Manager,
John - Operations Manager,
Harry - Supervisor,
Julia - Sales Executive,
Robert - Marketing Executive.

5. **How is Organisation Hierarchy?**

Property Manager

↓

Operations Manager

↓

Supervisor | Sales Executive | Marketing Executive

6. Which department/users of department will be able to access what data?

Administration Department - Tom
Operations Department - John
Supervision Department - Harry
Sales Department - Julia
Marketing Department - Robert

7. What type of business data we will be storing in Salesforce CRM?

All Properties Data with their images and facilities provided in them will be stored.

8. What are the different types of services you offer?

List of services offered by our Property Rental Management are:
Property Details
Owner Information
Tenant Bookings
Rental Agreements
Online Payments
Maintenance
Email Notifications

9. What Master Data you will provide for your application?

All data regarding Properties will be provided.

10. What are the various types of Mode of payments are allowed?

Online and Offline Mode of payments are allowed.

11. Are Rental Agreements available for the Properties?

Yes, they are available for the Properties for a mutual understanding between Owner and Tenant.

12. Is Movers and Packers; Property Maintenance and Security are available?

Yes, they are available for any type of emergency.

<u>**Solution:**</u>

A. With above data, lets plan below things:

1. Objects

2. Relationships between them

3. Roles

4. Profiles

5. Role Hierarchy

6. Object access for various profiles

And all Master Data Needed to take final Steps before execution.

With above available data lets plan various Objects and their fields:

1. **Property**

Fields	Data Type
Property Name	Standard field
Address	Text Area
No: of Units	Number
No: of floors	Number
No: of bedrooms	Number
No: of bathrooms	Number
Parking space Available	Check Box
Furniture	Picklist (Full Furnished, Semi Furnished, Not Furnished)
Utilities Included	Multi Picklist (Hot Water, Gas, Air Conditioning, Lift Swimming Pool, GYM, Strong Room)
Pets Allowed	Check Box
Photo	Image
Property	Picklist (Residential, Commercial)
Property Type	Picklist (Flat, Villa, Bungalow, Studio, Office, Retail, Banks, HealthCare)
Property Status	Picklist (Occupied, Partially Occupied, Vacant)
Description	Text Area

2. Prospective Tenants (Standard Lead Object):

Fields	Data Type
First Name	Text
Last Name	Text (Required)
Company	Text (Required)
Title	Text
Source	Picklist (Web, Advertisement, Other)
Industry	Picklist (All values)
Contact number	Phone
Email	Email
Website	URL
Status	Picklist (All values)
Rating	Picklist (All values)
Address	Text Area
Description	Text Area

3. Accounts (Standard Account Object):

Fields	Data Type
Account Name	Text
Account Type	Text
Phone	Phone
Email	Email
Website	URL
Address	Text Area
Type	Picklist (All values)
Industry	Picklist (All values)
Annual Revenue	Currency
Rating	Picklist (All values)
Active	Picklist (All values)
Employees	Number
Description	Text Area

4. Tenant (Standard Contact Object):

Fields	Data Type
Tenant First Name	Text
Last Name	Text
Contact No:	Phone
Email Id	Email
Address	Text Area
Aadhar Number	Number
Pan Number	Text
Photo	Image
Occupation	Text
Marital Status	Picklist (Single, Married)
No: Family members	Number

5. Owner

Fields	Data Type
Owner Name	Standard field
Contact No:	Phone
Email Id	Email
Address	Text Area
Aadhar Number	Number
Pan Number	Text
Photo	Image
Occupation	Text
Property Type	Picklist (Residential, Commercial)
No: of Properties	Number

6. Rental Agreement

Fields	Data Type
Deposit Amount	Currency
Rent	Currency
Lease Start Date	Date
Lease End Date	Date
Amount to be Increased after 1 yr.	Percent

7. Maintenance (Use Standard Case Object)

Fields	Data Type
Type	Picklist (Electrical, Electronic, Structural, Other)
Reason	Picklist (Installation, Equipment Complexity, Performance, Breakdown, Feedback, Other)
Status	Picklist (New, Working, Closed)
Priority	Picklist (High, Medium, Low)
Origin	Picklist (Phone, Email, WhatsApp, Web)
Subject	Text
Description	Text Area
Remarks	Text Area

B. Before coming to roles ensure you have created users in Salesforce.

2 users - Tom and John with Salesforce licence.

3 users – Harry, Julia and Robert with Salesforce Platform licence.

C. Roles

Tom - Property Manager,

John - Operations Manager,

Harry - Supervisor,

Julia - Sales Executive,

Robert - Marketing Executive.

D. Profiles

Administration for Tom

Operations for John

Operations for Harry

Sales for Julia

Marketing for Robert

(Here System Admin is Tom and we must have one System Admin in Org so don’t change the profile for him and consider as Property Manager)

Object Access for Profiles:

Objects	Permissions						Users
	C	R	E	D	View All	Modify All	
All	Y	Y	Y	Y	Y	Y	Tom
All	Y	Y	Y	Y	Y		John
All		Y	Y	Y			Harry
Property, Tenant	Y	Y	Y				Julia
Property		Y	Y				Robert

Story 4:

Client is "MAGIC BRICKS" so the App name will be MAGIC BRICKS with their logo.

Based on the conversation with MAGIC BRICKS we came to know that they used PHP as platform and SQL as database and now they want all their data on Salesforce. This task has been assigned to you.

In such cases we have detail discussion with SQL team and get all the information about tables in SQL and their relationships.

Then we decide which tables should have what relationship with other tables and then we load the data into objects from SQL.

Data is to be imported from SQL database into Salesforce objects where SQL data has been saved as csv files.

CSV files to be created for sample data

This data is not final as the project progresses, we have to add some more fields and objects to our application as per the Client requirement

Story 5:

Data Cleaning Process: Property

Client started working on the app and related objects. Now while adding the data by their employees, they have seen some bad data into system, and they want us to take some actions to avoid this in future.

Bad data means that data which is not suitable as per business rule.

1. Property address is mandatory.
2. Both no: of bedrooms and bathrooms are mandatory.
3. Furniture and property are mandatory
4. Only Available utilities are to be included.

Story 6:

Data Cleaning Process: Tenant

Client started working on the app and related objects. Now while adding the data by their employees, they have seen some bad data into system, and they want us to take some actions to avoid this in future.

Bad data means that data which is not suitable as per business rule.

1. Tenant's last name is required.
2. Both phone number and email id are mandatory.
3. Contact number is always a 10-digit number and email should be of the prescribed format only.
4. Either Aadhar or Pan is mandatory.
5. Aadhar and PAN should be of prescribed format.

Story 7:

Data Cleaning Process: Owner

Client started working on the app and related objects. Now while adding the data by their employees, they have seen some bad data into system, and they want us to take some actions to avoid this in future.

Bad data means that data which is not suitable as per business rule.

1. Owner's last name is required.
2. Either phone number or email id are mandatory.
3. Contact number is always a 10-digit number and email should be of the prescribed format only.
4. Both Aadhar and PAN is mandatory.
5. Aadhar and PAN should be of prescribed format.
6. No: of properties is required.

Story 8:

Client wants us to link the objects with each other according to the business requirement.

So, we Create relationships between the objects

Look up Relationship: Property to Prospective Tenant, Property to Account Property to Contact, Property to Rental Agreement, Tenant to Rental Agreement, Owner to Rental Agreement.

Master Detail Relationship: Owner to Property, Tenant to Maintenance, Property to Maintenance

Story 9:

Business asked us to provide solutions for ensuring the record will have some fixed population of data based on some scenarios.

We need to find out what is the way by which we can achieve this:

We need to create field dependent Picklist for Property and Property type

Where if property is Residential then the values must be Flat, Villa, Bungalow and Studio.

If it is Commercial then the values must be Office, Retail, Banks and Healthcare.

Story 10:

For collaborative work, the Property Manager is looking for an internal platform which works in private mode.

All Employees from Sales and Marketing as well as Operations can use the same for discussions on various Properties and their pricing and other scenarios including Property Manager and Operations Manager.

Group name needs to be "MAGIC BRICKS internal discussions".

Give solution.

Story 11:

Client wants to send an email whenever a new Property record is created in the Property Details with the details of the Property to various Prospective Tenants (We can use Lead object for this) interested in our organisation.

An email is also sent to the Tenants regarding the property along with the details if they have any idea to shift to a new property.

Story 12:

Management wants Aadhar card and PAN card being a sensitive information of Tenant and Owner, it should not be misused by any of the employee.

Aadhar card and PAN card are used for Rental Agreements and financial transactions so that the tenants may get any kind of benefits like loans from banks if they are Commercial Type.

1. **Show the data in the field "Aadhar Card Number" from Tenant and Owner should be shown to no one in the Organisation. Only last 4 letters are to be shown.**
2. **Show the data in the field "Pan Card Number" from Tenant and Owner should be shown to no one in the Organisation. Only last 4 letters are to be shown.**
3. **It should be visible only for Property Manager and Operations Manager.**

Story 13:

Client said, automated email is to be sent to the Tenants, regarding the Rent to be paid in the first week of every month along with maintenance.

If the amount is paid before 5th of every month, then 10% of the total amount can be considered as the discount to be added to the next month rent so that they would spread positive talk about "MAGIC BRICKS".

In this email we need to keep the Property Manager and Operations Manager as CC.

Story 14:

Management realised as business is expanding, we are making entries in many states as well as countries and many property types are being introduced.

But whenever any new country is added into the list of business, we have to make changes in all objects and change the values of country related fields. This sometimes leading to human error.

Management wants a quick process for that.

So, by which we make one time change in country list and it should reflect in all country fields we are using across all objects.

Implement this for countries, states and utilities.

Story 15:

Client is annoyed with those employees who are making changes in the fields of the objects like Property Details Tenant and Owner.

Prevent all users except those with the System Administrator Profile from changing the related field if it is already populated.

Story 16:

Business wants a better look and feel for the standard pages that we are using for all objects in our project.

For the same they need below changes:

1. Every object record needs to be shown with 2 columns.
2. Clone button need not be available.

3. Create appropriate sections for all the objects in the application.

Story 17:

Create various List views of Property Details based on the requirements.

1. Properties based on Residential and Commercial.
2. Properties based on various locations.
3. Properties based on the type if it is Residential.
4. Properties based on the Commercial type.
5. Properties based on the Utilities available in the property.

Story 18:

Business is looking for some quick ways and quick actions by which we can make better processing of the Property Details, Leads, Tenants and Cases.

1. Create a Search layout for Property with Details.
2. Create a Search layout for Tenants with Details.
3. Create a Search layout for Cases with Details.
4. Create a Quick action to book a Property by the Tenant.
5. Create a Quick action to create a case on the Maintenance object.

Story 19:

Business is looking for some quick ways by which we can make better processing of the properties.

The processing includes searching the Property location based on Address fields of the Property and arrange a visit for the Tenant. Mostly Tenants ask for Properties in their own flexible location.

Hint: Custom link on Google Maps.

Story 20:

Business is looking for some quick ways by which we can make better processing of the properties.

The processing includes sending email to the tenants based on email given by the Tenant and keep updating them on the available properties by manual mails.

Hint: Custom button to show on record page which will open Gmail app automatically with email of concern person auto populated.

Story 21:

Management has observed unexpected inputs coming from different users for some sensitive data like

Property Details

Rental Agreement

Maintenance

When tried to understand the person behind this wrong data entry, management got no clue as multiple users are working on project.

We are asked to provide a solution for them by which they can track the changes which are being done in these fields, with details like:

- **Username**
- **Date of change**
- **Previous value**
- **Latest Value**
- **Time of change**

Story 22:

As client is using PHP website,

Client wants all those enquiries coming from the website to be redirected to Prospective Tenants (Lead Object).

When spoke about integration, client said, they don't have budget as well as time for integration.

So now you have to perform this without any code.

Hint:

Web to Lead

Story 23:

Pre requisite:

Create picklist field "Property Type" on Lead objects with LOV's: Residential and Commercial.

After your implementation of web to lead, client is happy with the current setup.

But client wants when lead is generated, then any lead which comes for property "Residential" those records to be assigned to John.

Means John needs to be lead owner.

And when service type is 'Commercial' then owner needs to be Tom.

And also ensure both are getting emails about when any lead is assigned.

Story 24:

Client wants to give more flexibility to Tenants to ensure company will provide them all possible services using salesforce platform.

Client wants if any Tenant has any concern or issue about the services provided by "MAGIC BRICKS", tenant can just send one email and the issue will be created in Salesforce environment.

Even an auto response can be sent to the Tenant email as soon as he submits the issue in the website.

All the emails created in the Maintenance are to be assigned to the Supervisor and Property Manager.

Implement this.

Story 25:

Client wants to give more flexibility to Tenants to ensure company will provide them all possible services using salesforce platform.

Client wants if any Tenant has any concern or issue about the services provided by "MAGIC BRICKS", tenant can just fill up the feedback form or complaint form in the company's website and the issue will be created in Salesforce environment.

Even an auto response can be sent to the Tenant email as soon as he submits the issue in the website.

All the emails created in the Maintenance are to be assigned to the Operations Manager and Property Manager.

Implement this.

Story 26:

Client recently saw there are many complaints/cases created for Maintenance and are not yet solved. Some resolved but too much delay.

This is hampering the company's image and for this client wants as soon as any case is created it needs to be resolved in 4 hours max. by the owner.

If this is not resolved in 4 hours then it needs to be sent to immediate senior person.

Means ownership of this case is to be sent to senior person.

Manager's hint:

1. **Case auto escalation**
2. **Only assign to that senior who has suitable licence to access Case Object.**

Story 27:

For branding purpose,

Client wants MAGIC BRICKS logo to be used in Salesforce App. So, the app we created for it we need to use the company's Logo

Also, for all objects related to this project as icon of MAGIC BRICKS logo is to be used.

Implement this.

Managers hint: In tab we can add an Image.

Story 28:

Due to regular improvements in Process builder which is called as replacement to Workflow rules client is asking to use Process builder than Workflow rules here after.

Also, all existing Workflow rules client wants to be converted into Process builder.

Client got to know that we can also convert many WFR's into one PB.

And the same thing client wants us to do as this will save resource of client means with a smaller number of PBs we can do the same setup the way we did using many WFRs.

Anyways client point of view is saving money, but this is good for us as well as this best practice in Salesforce as one PB will give u good control of the automation on that single object.

When it's not possible looks hard you can use another PB.

Implement this.

Story 29:

Client wants all the data of the Properties, Tenants, Owners and Cases in individual reports and export it to excel file for future use. Use chart components also and subscribe the reports and share them with others users also.

Even customised reports are to be created which clearly shows us the business being done by the company and other details.

Create these reports based on the requirement:

1. **Properties by Type**
2. **Properties by Status**
3. **Properties with Tenants**

Implement this.

Story 30:

Client wants all the data of the Properties and Tenants to be categorised by some fields in Reports but those fields should not be seen in the objects.

He wants the records to be categorised as Zones with the values like North Zone, South Zone, East Zone, West Zone and Central Zone for picklist field State__c in both Property and Tenant Object and also categorise the family

of Tenants based on the number of family members like Nuclear Family (<= 3 family members), Micro family (<= 6 family members) and Joint Family (<= 10 family members).

Implement this.

Story 31:

Client wants to display the welcome message to customer with an image and display the username and then show a greeting message and add it to the home page of the application and make it as a Dynamic Message.

Image:

https://drive.google.com/drive/folders/1kdH_nA3nDf45z-ke7iuvkjulZfB1EARW?usp=sharing

Implement this. **Hint:** **Using Flows**

Story 32:

Client wants to create a Quick Action for a New Tenant where the user needs to input all the required fields like First Name, Last Name, Title, Phone number, Email id and Address and then click on save button then the new Tenant record is created and add it to the Home Page of the application.

Implement this.

Hint: Using Screen Flows

Story 33:

Client wants to create a one click solution to update the Case status to closed and also send out a confirmation email to the tenant and the owner using a Custom Button called as Close case and add it to the Maintenance object when clicked on it sends the Email to tenant and owner.

Implement this using flows.

Story 34:

Client wants to conduct a survey to check for the tenant satisfaction and post a message to the Chatter Group for internal discussions whenever an event is created for the Public Calendars.

Implement this using flows.

Story 35:

Client wants to automate the conversion of Prospective Tenants (Leads) to Accounts and Tenants. The lead conversion is a manual process but automate

it to auto convert the leads as the picklist field in the Lead object is changed to closed and converted.

Implement this using flows.

Story 36:

Client wants to automate to add the Permission sets to the user to extend the users functional access without changing their profile that is to grant modify all access to the Account object to a set of users without changing their profile or creating a new profile.

Implement this using Record triggered flows.

Story 37:

Client wants to automate to add a record which needs to be verified by other users like a property whose value is more and is being interested in booking by a tenant and whether he is able to afford it or not to the Chatter group which means we can now collaborate and discuss the records as a team in the Chatter group.

Implement this using Record triggered flows.

Story 38:

Client wants to create an automation to setup an out of office messages for Chatter posts where if a user is out of the office and every time someone mentions him on a Chatter post then auto post an automatic out of office comment.

Implement this using Record triggered flows.

Story 39:

Client wants to create an automation to send password expiration reminder to the users to change their passwords 7 days before they expire (Morning 10.00 am) as changing Salesforce passwords periodically is crucial as it prevents unauthorised persons from gaining access to the org.

He also wants to remind by sending an email to users to upload Chatter profile photos.

Implement this using Schedule triggered flows.

Story 40:

Client wants to create an automation which allows us to submit a record for approval to be automatically submitted into the approval process without any manual intervention when it meets the entry criteria and also generate tasks if the rental agreements of properties between the Tenant and Owner are up for renewal in 30 days for the Account Owner.

Implement this