Property Booking App

Introduction: Property Booking App is a platform for customers to purchase built property online and negotiate on the final rate.

Type of Users:

1. Builder
2. Contractor
3. Customer

Use Cases:

1. Builder should be able to create Property and Customer records, Contractor should be able to create Property Booking Records. Contractor and Builder should be able to Read and Write all the 4 objects but Builder should only be able to delete any Records from the 3 objects except Quotation **(Data - Model).**

2. Customer should only be able to edit Quoted Price and Acquire Property By field. He should not be able to see Quotation Records but can see all the property Records. Customer should only be able to see his own Customer Record. **(OWD)**

3. Aadhar And PAN details should be encrypted. The mask type should be Social Security Number for Aadhar and Social Insurance number for PAN **(Data-Model)**

4. If Contractor tries to delete Quotation data, an error should pop up saying "Quotation data is not allowed to be deleted". **(Flows)**

5. Once the Quoted Price is filled up by the Customer, Property Booking should go for Approval to the Contractor. The status should change to Sent for Approval and records should get locked. **(Approval Process)**

6. Once the status moves to Sent for Approval, an email should be triggered to the Contractor who created the property booking record. The email should show all the data of the property Booking Record **(Email Template and Apex Trigger).**

7. The status should move to Approved once the Builder approves and should move to rejected if Builder rejects. In both the scenarios, records should not be in locked status. **(Approval Process)**

8. If the status moves to Approved, then a new Quotation record should be created, all the fields of the Quotation Record should take in Data from rest of the 3 objects except Quoted to Customer. Price data should be the quoted price. **(Apex Trigger)**

9. Once the Quotation is created, Quotation Generated should be checked and the property booking record should be Locked. **(Apex Trigger)**

10. Property age should be calculated automatically based on the built-on date **(FORMULA)**

11. Needs Renovation should show green dot if the Age of the property is less than 5 years, should show orange dot if the Age of the property is between 5 and 10 years and should show red dot if the Age of the property is greater than 10 years **(FORMULA)**

12. The state and District data on customer and property should be reusable. Also based on the state data, district data should get unlocked and should show only those district values which falls under that state. **(Global Picklist and Field Dependency)**

13. No duplicate Property booking record should be created for same property and customer, if the status of the property booking is not completed **(Flows)**

14. Property Booking and Quotation should portray 1:1 relationship. If more than one Quotation record is created for the same Property Booking then user should be thrown with an error saying "Only one quotation is allowed per Property Booking" **(Apex Trigger)**

15. A custom button named "Open Quote" should be created on Property Booking which when clicked should navigate to the Corresponding Quotation Record. **(Button, LWC and APEX)**

16. A custom Button named "Send Quote" should be created on Quotation object which should send PDF of the Quotation Object's Data to the Customer Email and set the Quoted to Customer value to True **(LWC and Apex)**

17. Once the Quoted to Customer is set to true, no user shall be allowed to make changes on the Quotation record. If tried to change, user should be thrown with error that "Quotation could not be modified once sent to Customer" **(Validation Rule)**

18. Create an LWC Page which should have a Search Section, Property Section, Customer Section, Property Booking Section, Quotation Section. Search should take in Property Name, Property #, Customer Name, Booking Reference or Quote No. If either of the data is passed in the search, then each section should show the relevant related values. **(LWC and APEX)**

19. All the section should have all the fields displayed as columns **(LWC)**

20. Property #, Customer Name, Booking Reference and Quote No should be displayed as Hyperlink. Clicking on link should navigate me to individual pages. **(LWC)**

21. Whenever a new property booking record is created, the status should be set to "New". **(Process Builder)**
22. Create **TEST CLASSES** with minimum 75% coverage for all Apex classes and triggers

Picklist Values:

1. **Property: Type** → Bungalow, 1BHK,2BHK,3BHK,4BHK,5BHK
2. **Property Booking: Status** → New, Sent for Approval, Approved, Rejected
3. Global Picklist: - **State and District** → Choose any State and District combination of your choice. (Minimum 4 State and 10 Districts)

ER Diagram:

Customer

PK	ID	
FK1	User	(Lookup)
	Name	TEXT
	Aadhar	Encrypted
	PAN	Encrypted
	State	Picklist
	District	Picklist
	Email	Email
	Phone	Phone

Property

PK	ID	
	Property #	Auto Number
	Name	TEXT
	Area	TEXT
	State	Picklist
	District	Picklist
	Type	Picklist
	Storey	Number
	Built On	Date
	Property Age(Years)	FORMULA
	Needs Renovation	FORMULA

Property Booking

PK	ID	
FK1	Property	Master-Detail
FK2	Customer	Master-Detail
	Status	Picklist
	Actual Price	Currency
	Quoted Price	Currency
	Quotation Generated	Checkbox
	Booking Reference	AutoNumber
	Acquire Property By	Date

Quotation

PK	ID	
FK1	Booking Ref	Lookup
	Property Name	Text
	Property Type	Text
	Customer Name	Text
	Acquire Property By	Date
	Price	Currency
	Quoted to Customer	Checkbox
	Customer Email	Email
	Quote No	Auto Number