Design: Database

PostgreSQL: I would choose the **PostgreSQL** relation database for my BizBuilding application. BizBuilding application have the structured data to save in the database and data have some relations like whom assigned to a specific compliant from tenant to fix it. Data must store in the form of rows and columns like excel or 2-dimentional array to store staff information, compliant types and other data in the database by multi-row transactions and generate reports by using joins. So, I would choose relation database to store my BizBuilding application data. Why choose **PostgreSQL as database template** is that I already have worked with SQL Server and MySQL databases earlier and I would like to learn new database now.

Database Table Structure and Explanation:

Properties:

property _id	name	addre ss	city	stat e	zipco de	count ry	created_d ate	expiration_d ate	is_cancell ed
101	My Proper ty	Middl e road dr.	Folso m	**CA**	**95630**	**USA**	2020-10-29 10:30:00	2021-10-29 00:00:00	0

Properties table is used to store the landlords property information like name , address information and expiration date of subscription. By default, application will give 1 year subscription for each property subscription.

Users:

user _id	First_n ame	last_n ame	Email_addre ss	passw ord	user_ tye	propert y_id	created_ date	modified _date	Is_act ive
201	Malli	Middle road dr.	mnookala@x xx.xom	**CA**	**Mana ger**	101	2020-10-29 10:30:00	2021-10-29 00:00:00	1

Users table is used to store the property maintenance staff members information. A staff member can be assigned to a specific compliant requested by a tenant to fix the problem. User table is used to login the staff members into the application to manage compliants.

Categories:

Category_id	name	description	is_active	**created_date**	**modified_date**	Profile_id
301	Window	Window related issues	1	**2020-10-29 10:30:00**	**2021-10-29 00:00:00**	101

Categories table is used to store the different types of issue types. Categories will be loaded in the compliant form when tenant scans a QR Code and tenant can select appropriate category while submitting the compliant request.

NotificationPreferences:

preference_id	user_id	Email	SMS
1	201	1	0

NotificationPreferences table is used to configure the notification preferences to receive email or sms when a tenant submit a complaint. This can helpful to the maintenance team so that they can I know the complaint immediately.

IssueLogs:

log_id	category_id	description	location/suite	Assigned_to	status	Requested_date	Resolved_date	Is_archive
1	301	Window is stuck and is not opening on my suite left.	3201	201	New	2020-10-29 10:30:00	2020-10-29 10:30:00	1

IssueLogs table is used to store the complaints information from the tenants when they find problems in their suites or common washrooms. Application will automatically notify the maintenance team members based on the email and SMS configuration. Manager can assign any staff member to fix the problem by changing the status to processing. Once the problem fixed status will be changed to completed and date changed to fixed date time.

ER Diagram:

Properties

PK	property_id int NOT NULL
FK1	name char(120) NOT NULL
	address char(100) NOT NULL
	city char(50) NOT NULL
	state char(50) NOT NULL
	zipcode char(50) NOT NULL
	country char(50) NOT NULL
	created_date date NOT NULL
	expiration_date date NOT NULL
	is_cancelled bit NOT NULL

Users

PK	user_id int NOT NULL
	first_name char(50) NOT NULL
	last_name char(50) NULL
	email_address char(100) NOT NULL
	password char(100) NOT NULL
	user_type char(100) NOT NULL
FK1	property_id int NOT NULL
	created_date date NOT NULL
	modified_date date NOT NULL
	isactive bit NOT NULL

Categories

PK	category_id int NOT NULL
	name char(60) NOT NULL
	description char(500) NULL
	is_active char(500) NULL
	created_date date NOT NULL
	modified_date date NOT NULL
FK1	profile_id int NOT NULL

IssueLogs

PK	log_id int NOT NULL
FK1	category_id char(60) NOT NULL
	description char(500) NOT NULL
	location char(100) NOT NULL
FK1	assigned_to int NULL
	status char(20) NOT NULL
	requested_date date NOT NULL
	resolved_date date NOT NULL
	is_archive date NOT NULL

NorificationPreferences

PK	preference_id int NOT NULL
FK1	user_id int NOT NULL
	Email bit NOT NULL
	SMS bit NOT NULL