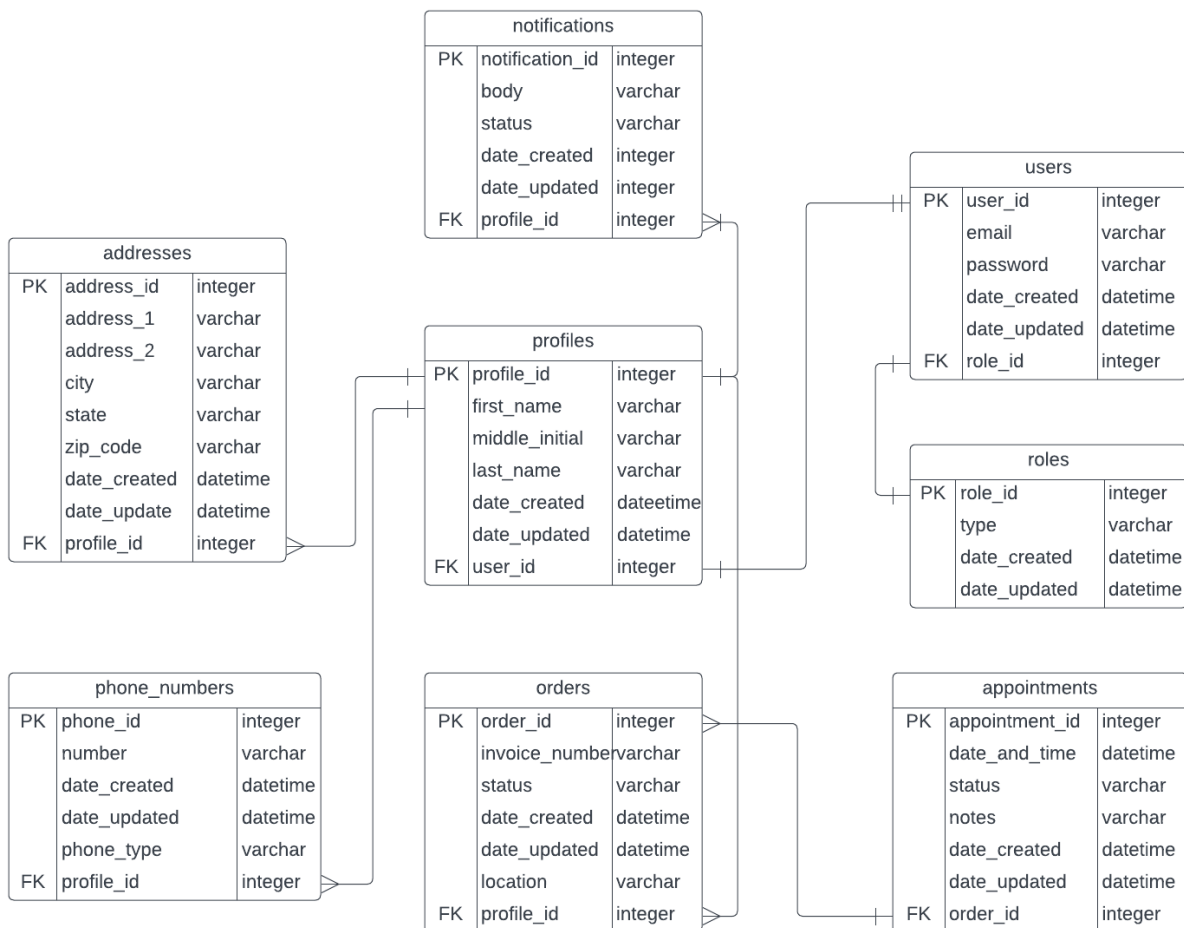


The Pickup Tool – Database Design

Overview

I have chosen to use PostgreSQL for data persistence in this application. As this is an application for a business that requires structured data, a relational database is ideal for this solution.



Database Specifications

Addresses

The “addresses” table contains the addresses associated with customer profiles.

addresses		
PK	address_id	integer
	address_1	varchar
	address_2	varchar
	city	varchar
	state	varchar
	zip_code	varchar
	date_created	datetime
	date_update	datetime
FK	profile_id	integer

Application Context

When creating customer profiles, the admin is required to enter the customer’s primary address. Customers have the ability to add a secondary address or a third if they wish.

Roles

The “roles” table holds the different roles for the application. Roles control what the associated user is able to see or use within the application. Currently there are only two roles: “customer” and “admin”.

roles		
PK	role_id	integer
	type	varchar
	date_created	datetime
	date_updated	datetime

Application Context

User with a role of “customer” will not be able to log into the admin panel.

Users

The “users” table is used for user authentication. The existence of a user does not necessarily mean that an account is present; It is simply used to log in and out of the system. Each user has an associated role, which can be either “customer” or “admin”.

users		
PK	user_id	integer
	email	varchar
	password	varchar
	date_created	datetime
	date_updated	datetime
FK	role_id	integer

Application Context

Once a customer purchases furniture, the admin creates an order. If there is no customer to associate the order with, the admin will have

the option to create a new customer. This will create a new user with a role type of “customer” and an associated profile. The customer will then be automatically sent an email containing their credentials.

Profiles

The “profiles” table is where all personally identifiable information (PII) about the customer. It is also used to associate notifications, messages (super stretch goal), appointments, orders, and other relevant information to the user.

profiles		
PK	profile_id	integer
	first_name	varchar
	middle_initial	varchar
	last_name	varchar
	date_created	datetime
	date_updated	datetime
FK	user_id	integer

Application Context

User profiles are created based on the role type. While all user profiles contain the same fields, customer profiles may have different associations than admin profiles.

Phone Numbers

The “phone_numbers” table stores the phone numbers associated with a customer profile. Admin profiles do not need an associated phone number.

phone_numbers		
PK	phone_id	integer
	number	varchar
	date_created	datetime
	date_updated	datetime
	phone_type	varchar
FK	profile_id	integer

Application Context

Phone numbers are important for future functionality. In the future, customers will have the option to opt-in for text notifications when their furniture arrives and other reminders.

Orders

The “orders” table contains orders that belong to both customer profiles and locations. While there is no related table for locations, the location field is required and not nullable.

orders		
PK	order_id	integer
	invoice_number	varchar
	status	varchar
	date_created	datetime
	date_updated	datetime
	location	varchar
FK	profile_id	integer

Application Context

An order is created when by the admin whenever a customer purchases furniture. The initial status of the order is “pending” until the furniture arrives at the store. The status is then changed to “arrived”.

Appointments

The “appointments” table contains the pickup appointments made by either the customer or admin. Each appointment is associated with an order.

appointments		
PK	appointment_id	integer
	date_and_time	datetime
	status	varchar
	notes	varchar
	date_created	datetime
	date_updated	datetime
FK	order_id	integer

Application Context

When a customer’s order has arrived at the store, the admin changes that status of the order to “arrived”. The customer can then log in and schedule a pickup.

Notifications

The “notifications” table contains the notifications sent to the customer profile or group.

notifications		
PK	notification_id	integer
	body	varchar
	status	varchar
	date_created	integer
	date_updated	integer
FK	profile_id	integer

Application Context

Notifications are sent to the customer profile whenever orders have arrived at the store. Notifications can be sent to multiple users or admins.