## **Simple Pharmacy System**

## Roles:-

#### 1- Admin

- Admin will have access to everything in the system ,he can see any links or make any action Pharmacy and Doctors can do with these extra functionalities
- We will have only one admin in the system and by default will be seeded through <u>laravel seeders</u>, with email (<u>admin@admin.com</u>) & pw (123456) but we can create other admins through console command, for example i can make this

php artisan create:admin <u>--email=admin2@admin.com</u> --password=123456

- In the left menu we will have these links (Pharmacies, Doctors, Users, Areas, User Addresses, Medicines, Orders, Revenue) these links will allow us to do CRUD operations
- Pharmacy & Doctor will have (email, name, password, national\_id, avatar\_image)
- national\_id, email must be unique | password must be at least 6 chars |
   avatar\_image must be an image with extensions jpg, jpeg and if there's no
   avatar\_image then we will provide a default one
- Admin can make CRUD on Areas which will have (name, address) .
- When Creating a pharmacy you must assign it an area\_id & priority

 When deleting a pharmacy make sure that it doesn't have any order assigned to it . and also make sure i can restore it <u>Check Soft</u> Delete

Note: there will be no registration form in our app . only login & forget pw screens.

## 2- Pharmacy (or can be named Pharmacy Owner)

- Pharmacy can do what Doctors Can do except he can create new doctors and also change the pharmacy info except the serving area & priority it can only be changed by admin

#### **Doctors Tab**

- Pharmacy will have a menu called Doctors where he can make
   CRUD on Doctors and Ban Or UnBan Doctor
- In Doctors page we will need to show these columns (name, created at date only --- check mutator in laravel, avatar\_image, email, national\_id, is\_baned) but if the current logged in user is Admin then we will need to show an extra column called Pharmacy Name, which is the name of the Pharmacy who created the doctor and make sure Pharmacy can see it's own doctors only.
- (Actions column will have **Edit**, **Delete**) and **if banned then there** will be an action called unban, and if unbanned then will have an action called ban.

#### **Orders Tab**

- Pharmacy Or Doctor will have a menu called Orders where they can make CRUD on Orders
- Orders index page . will have a dataTables that show this ID,Ordered User Name, Delivering Address, Creation Date, Doctor Name, Is Insured, Status, Actions Note Doctor Name can be empty if this order isn't created by a doctor

And if i am logged in as admin then we need to show extra columns

Creator Type where it shows wither this order Created by Doctor Or

Pharmacy Or User

**Assigned Pharmacy** . where it shows the assigned pharmacy name and empty if none.

- When Creating Order it will show a form, where pharmacy or doctor chooses a user from a dropdown list, and inserts the medicine name and quantity and type and it's price. and then enters the visa card number through stripe, Price Must Be Stored In Database in Cents And To Be Shown In Dollars
  Note1: pharmacy or doctor can add multiple medicines.
  Note2: medicine names can be autocomplete while typing or and if medicine doesn't exist the doctor or pharmacy can insert them normally in the same typing area so check Adminite Select2 & Select2 Tags.
- Please make sure that orders follow the flow . like i can't edit an order that has been changed to **WaitingForUserConfirmation**

#### **Revenue Tab**

We need to show the total revenue as a card at the top of this page
 , if i am logged in as pharmacy, then will show the total revenue
 of my pharmacy , and if i am logged in as a admin it will show the
 total revenue of all pharmacies and also make a dataTables like
 this

PharmacyAvatar PharmacyName TotalOrders TotalRevenue Elazaby 50 2,000\$

#### 3- Doctor (who works in pharmacy)

- All this role does is just modify the flow of order . so it will have one tab called Orders . where doctor can modify the order like making it WaitingForUserConfirmation or Canceled ... etc.

#### 4- User (it will be an api only)

 User will have an endpoint to register, he needs to enter his (name ,email, gender, password, password confirmation, date of birth, profile\_image, mobile number, national\_id) all of these fields are required, after he register\_you must send an email verification link to his email After User is verified we will need to greet him by sending an email using laravel notifications and it must be Queued again Must Be Queued - Must Be Queued

So read this page very very very carefully https://laravel.com/docs/master/notifications#queueing-notifications

- User will have an endpoint to login, using email & password, response will be object that contains the user info with access token (same response that we did in labs like sanctum package)
- User will have an endpoint to update his profile info except email
- User will have CRUD endpoints on his addresses . and address info will be : { area\_id, street\_name , building\_number, floor\_number , falt\_number , is\_main }
- User will have an endpoint to see his orders and end point to see order details for example of /orders json object {id:1, medicines: ['name': 'panadol', 'type': 'capsule', 'quantity':2, 'total\_price':10], order\_total\_price: 10, ordered\_at: '2 hours ago', status: 'delivered', 'assigned\_pharmacy': {id:1, name: 'elazaby', address: 'mahtetmasr', avatar\_image\_url: 'http://someimage.jpg'}}
- User will have endpoints to make an order /orders POST and /orders/{id} PUT request to update order data like uploaded prescriptions or cancel it . make sure the user can't modify a delivered, processing, canceled,confirmed order he only can modify new orders .

Order information that the user will enter: list of prescription images and whether this order is insured or not and delevirng\_address\_id from his addresses. a json example {
 Is\_insured: true,
 prescription: [image1.jpg, image2.jpg],
 delivering\_address\_id: 1 //make sure it belongs to this user
}

 We need a schedule command that runs daily using laravel, that will send an email notification to users who didn't login from the past month, and telling them that we miss you

A Code Example that will be in **console/Kernel.php**:-\$schedule->command('notify:users-not-logged-in-for-month') ->daily();

So read this link Very Veryyyyyyy Carefully

- We need a schedule command that runs every minute to scan the new orders and assign them to the highest priority pharmacy that serves same delivering address
- Authentication will be using <u>Laravel Sanctum</u>, all routes are allowed only for authenticated users except for register & login, also any other routes like attend or edit profile <u>must be verified</u>

## **Summary Of Workflow**

- 1- User makes an order
- 2- Order gets assigned to the highest priority pharmacy that serves the same area of order delivering address.
- 3- pharmacy starts to put the medicines and there prices and then clicks notify user to pay the price
- 4- then user can see the total price and choose whether to pay that price or cancel the order
- 5- after that the pharmacy can change the order to be delivered

#### **Order Statuses**

**New**: means the order is just created and must be assigned to pharmacy

**Processing**: means the pharmacy is ready to put medicines and prices

**WaitingForUserConfirmation**: this happens when the pharmacy submit a form with medicine names and prices and clicks notify the user to pay the order button. then we send email notification for the user to pay the order

Canceled: happens when user cancels his order

Confirmed: happens when user confirm the order and pay the price

Delivered: happens when pharmacy delivers the order

## System General Rules

- All tables in the system must use **DataTables Plugin and all logical Fields Must Be Searchable And Orderable like (name, price, email, etc)**
- All charts in the system must use Chart Js and Data Retrieved By
   Ajax
- All **Delete Buttons** must show a **warning** before deleting and also must be done through **ajax requests**, and if the ajax request succeeded you can then **refresh the Datatables**
- Price Must Be Stored In Database in Cents And To Be Shown In Dollars
- All of the users can change their profile info like name or email
- Use default laravel auth , and make sure the forgot password functionality works

## Bonus (Bonus Is Approved If The Old Code Is Clean):-

 Try To Reduce Or Eliminate The Duplication In Code, And Make Your Code More Readable And Pleasing For Eye, If The Code Isn't Clean Then Any Bonus Won't Be Counted As Finished

# So Please Clean Your Code First Before Implementing The Bonus

#### **Statistics**

 We will have a menu Tab called Statistics, it will open a page which will have four charts

(Male - Female Attendance) pie chart that shows how much percent males to females attendance

(Revenue) basic line chart which will show how much money we got in 12 months for this year, this chart by default will show current year

(**Top Ordered Users**) **pie chart** to show the **top 10 users** with there bough orders number, for example will show (ahmed: 20, mohamed: 3, ali:4,...)

- Deploy Your Project On Heroku
   <a href="https://mikateach.com/setting-up-laravel-5-6-on-heroku/">https://mikateach.com/setting-up-laravel-5-6-on-heroku/</a>
- Use laravel cache to temporary cache drop down list of user when creating an order

- All Charts support filtering by year, so i can choose a specific year on each chart and it will show it's statistics
- Pharmacy Can Export all the orders as excel sheet

#### **Project General Rules**

- All classes must follow **StudlyCase** (pascal case) naming for example ( PostsController , UsersController , Post , StorePostRequest)
- All routes must follow resource naming convention
- All views must be divided into sub directories like ( posts/index.blade.php - users/index.blade.php clients/index.blade.php)
- All **Middlewares should be applied on routes** (check Route::group) and not to be applied on controller
- All **Models** must be Singular like (Post, Comment, User, Country, Floor, Room, Reservation)
- Don't Push Any Deadly Comments on the Git Repo like :-//dd(\$request); // \$user = User::first();

## **Project Resources**

 For Admin LTE ( Mandatory ) after installing open starter.html file and remove unused bower\_components <a href="https://adminite.io/">https://adminite.io/</a>

DataTables have two plugins one will be used on the frontend, and another will be used on backend (Mandatory), also all the filtering and searching and ordering must be done from backend (https://datatables.net/manual/server-side)
 <a href="https://datatables.net/">https://datatables.net/</a> (Frontend)
 <a href="https://github.com/yajra/laravel-datatables">https://github.com/yajra/laravel-datatables</a> (Backend)

For roles & permissions ( Mandatory )
 <a href="https://github.com/spatie/laravel-permission">https://github.com/spatie/laravel-permission</a>

 For Ban Or Unban you can use https://github.com/cybercog/laravel-ban

- For Api Authentication (Mandatory) we will use laravel sanctum
- For charts use chart js( Mandatory If You Will Work On Bonus ) https://www.chartjs.org/
- For Stripe , follow the quick start guide ( Mandatory ) <u>https://stripe.com/docs/quickstart</u>
- For countries you can use ( Mandatory )
   <a href="https://github.com/webpatser/laravel-countries">https://github.com/webpatser/laravel-countries</a>
- For Excel you can use <u>https://github.com/Maatwebsite/Laravel-Excel</u>