# Minha primeira API Rest em Laravel 8 Code Experts

Vídeo:

https://www.youtube.com/watch?v=jq-FkfKBZ50

composer create-project laravel/laravel:^8.0 laravel8\_a pi rest

touch database/database.sqlite

.env

DB\_CONNECTION=sqlite # DB\_HOST=127.0.0.1 # DB\_PORT=3306 # DB\_DATABASE=laravel # DB\_USERNAME=root # DB\_PASSWORD=

# Gerando os models, migration e factory

php artisan make:model Store -mf

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest $ php artisan make:model Store -mf Model created successfully.
Factory created successfully.
Created Migration: 2022_05_24_190128_create_stores_table
```

php artisan make:model Product -mf

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest
$ php artisan make:model Product -mf
Model created successfully.
Factory created successfully.
Created Migration: 2022_05_24_190630_create_products_table
```

#### **Models**

```
app\Models\Store.php
<?php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Store extends Model
{
  use HasFactory;
  protected $fillable = ['name', 'description'];
  public function products()
    return $this->hasMany(Product::class); //store_id
}
app\Models\Product.php
<?php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Product extends Model
  use HasFactory;
  protected $fillable = ['name', 'description', 'price'];
  public function store()
    return $this->belongsTo(Store::class);
}
```

#### Criando as tabelas

php artisan migrate

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest
$ php artisan migrate
Migration table created successfully.
Migrating: 2014_10_12_0000000_create_users_table
Migrated: 2014_10_12_0000000_create_users_table (219.45ms)
Migrating: 2014_10_12_1000000_create_password_resets_table
Migrated: 2014_10_12_1000000_create_password_resets_table (412.32ms)
Migrating: 2019_08_19_0000000_create_failed_jobs_table
Migrated: 2019_08_19_0000000_create_failed_jobs_table (592.90ms)
Migrating: 2022_05_24_190128_create_stores_table
Migrated: 2022_05_24_190630_create_products_table
Migrated: 2022_05_24_190630_create_products_table (137.03ms)
```

#### database\factories\StoreFactory.php

```
<?php
namespace Database\Factories;
use App\Models\Store;
use Illuminate\Database\Eloquent\Factories\Factory;
class StoreFactory extends Factory
{
  * The name of the factory's corresponding model.
  * @var string
  protected $model = Store::class;
  * Define the model's default state.
  * @return array
  */
  public function definition()
    return [
      'name' => $this->faker->words(3, true),
      'description' => $this->faker->sentence
    ];
  }
}
```

#### database\factories\ProductFactory.php

```
<?php
namespace Database\Factories;
use App\Models\Product;
use Illuminate\Database\Eloquent\Factories\Factory;
class ProductFactory extends Factory
{
   * The name of the factory's corresponding model.
  * @var string
  protected $model = Product::class;
  * Define the model's default state.
  * @return array
  public function definition()
    return [
      'name' => $this->faker->words(3, true),
      'description' => $this->faker->sentence,
      'price' => $this->faker->randomFloat(2, 10, 300)
    ];
 }
}
```

```
app\Models\Product.php
<?php
namespace App\Models;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;
class Product extends Model
  use HasFactory;
  protected $fillable = ['name', 'description', 'price'];
  public function getPriceAttribute()
    return $this->attributes['price'] / 100; // 1990 -> 19.9
  public function setPriceAttribute($attr)
    return $this->attributes['price'] = $attr * 100; //19.90 -> 1990
  public function store()
    return $this->belongsTo(Store::class);
}
database\seeders\DatabaseSeeder.php
<?php
namespace Database\Seeders;
use Illuminate\Database\Seeder;
class DatabaseSeeder extends Seeder
   * Seed the application's database.
   * @return void
   */
  public function run()
    \App\Models\Store::factory(10)
        ->hasProducts(10)
        ->create();
  }
```

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest $ php artisan db:seed Database seeding completed successfully.
```

php artisan tinker

\$store = \App\Models\Store::first()

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest
$ php artisan tinker
Psy Shell v0.11.4 (PHP 7.4.29 - cli) by Justin Hileman
>>> $store = \App\Models\Store::first()
=> App\Models\Store {#4207
    id: "1",
    name: "qui est reprehenderit",
    description: "Aut et illo enim qui aperiam.",
    created_at: "2022-05-24 19:44:29",
    updated_at: "2022-05-24 19:44:29",
}
```

\$store -> products -> count()

```
>>> $store -> products -> count() => 10
```

\$store -> products -> pluck('name')

```
>>> $store -> products -> pluck('name')
=> Illuminate\Support\Collection {#4459
    all: [
        "consectetur dolorem minus",
        "ipsa aut perspiciatis",
        "voluptates officia vel",
        "ea voluptas quo",
        "reiciendis et id",
        "iste est ducimus",
        "iusto temporibus aut",
        "molestias est corporis",
        "reprehenderit fugiat delectus",
        "quos iste quod",
    ],
}
```

```
>>> $store -> products
=> Illuminate\Database\Eloquent\Collection {#4464
    all: [
      App\Models\Product {#4465
         id: "1",
        store id: "1",
        name: "consectetur dolorem minus",
        description: "Deserunt et quia dolore quasi molestiae quasi.",
        price: "27784",
        created at: "2022-05-24 19:44:29",
        updated at: "2022-05-24 19:44:29",
       },
       App\Models\Product {#4466
        id: "2",
        store_id: "1",
        name: "ipsa aut perspiciatis",
        description: "Molestiae quia assumenda ea esse eveniet eaque velit.",
        price: "7244",
        created at: "2022-05-24 19:44:29",
        updated at: "2022-05-24 19:44:29",
       },
       App\Models\Product {#4467
         id: "3",
         store id: "1",
         name: "voluptates officia vel",
         description: "Explicabo tempore distinctio aut consequatur.",
         price: "14519",
         created at: "2022-05-24 19:44:30",
         updated_at: "2022-05-24 19:44:30",
        },
       App\Models\Product {#4468
         id: "4",
         store id: "1",
         name: "ea voluptas quo",
         description: "Omnis vel voluptatem asperiores aut.",
         price: "14935",
         created at: "2022-05-24 19:44:30",
         updated at: "2022-05-24 19:44:30",
        },
       App\Models\Product {#4469
         id: "5",
         store id: "1",
         name: "reiciendis et id",
         description: "Consectetur quia voluptate quas pariatur laboriosam.",
         price: "10081",
         created_at: "2022-05-24 19:44:30",
         updated at: "2022-05-24 19:44:30",
        },
```

```
App\Models\Product {#4470
    id: "6",
    store id: "1",
    name: "iste est ducimus",
    description: "Corporis qui qui aut id enim et voluptatibus.",
    price: "5888",
    created_at: "2022-05-24 19:44:30",
    updated at: "2022-05-24 19:44:30",
  },
  App\Models\Product {#4471
     id: "7",
    store id: "1",
    name: "iusto temporibus aut",
    description: "Debitis laborum rerum mollitia quam sit in corporis.",
    price: "6263",
    created at: "2022-05-24 19:44:30",
    updated at: "2022-05-24 19:44:30",
  App\Models\Product {#4472
    id: "8",
    store id: "1",
    name: "molestias est corporis",
    description: "Dolorem nemo voluptatem id est omnis et.",
    price: "5516",
    created_at: "2022-05-24 19:44:30",
    updated_at: "2022-05-24 19:44:30",
App\Models\Product {#4473
 id: "9",
store_id: "1",
 description: "Aut praesentium labore consequatur aliquam officiis cum sint perspiciatis.",
 price: "10519",
created_at: "2022-05-24 19:44:30",
updated_at: "2022-05-24 19:44:30",
App\Models\Product {#4474
 id: "10",
store_id: "1",
name: "quos iste quod",
 created_at: "2022-05-24 19:44:30",
updated_at: "2022-05-24 19:44:30",
```

#### **Rotas**

#### routes\api.php

#### **Controllers**

php artisan make:controller Api/StoreController --resource --api

Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8\_api\_rest \$ php artisan make:controller Api/StoreController --resource --api Controller created successfully.

php artisan make:controller Api/ProductController -r --api

Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8\_api\_rest \$ php artisan make:controller Api/ProductController -r --api Controller created successfully.

#### app\Http\Controllers\Api\StoreController.php

```
<?php
namespace App\Http\Controllers\Api;
use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\Store;
class StoreController extends Controller
  private $store;
  public function __construct(Store $store)
    $this->store = $store;
  * Display a listing of the resource.
  * @return \Illuminate\Http\Response
  public function index()
    return $this->store->paginate(5);
  * Store a newly created resource in storage.
  * @param \Illuminate\Http\Request $request
  * @return \Illuminate\Http\Response
  public function store(Request $request)
    return $this->store->create($request->all());
  * Display the specified resource.
  * @param Store $store
  * @return \Illuminate\Http\Response
  public function show(Store $store)
    //stores/:id/products
    return $store;
  }
  * Update the specified resource in storage.
  * @param \Illuminate\Http\Request $request
  * @param Store $store
  * @return \Illuminate\Http\Response
  */
```

```
public function update(Request $request, Store $store)
{
    $store->update($request->all()); //true or false
    return $store;
}

/**
    * Remove the specified resource from storage.
    *
    * @param Store $store
    * @return \Illuminate\Http\Response
    */
    public function destroy(Store $store)
    {
        return $store->delete();
    }
}
```

#### app\Http\Controllers\Api\ProductController.php

```
<?php
namespace App\Http\Controllers\Api;
use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\Store;
class ProductController extends Controller
  * Display a listing of the resource.
  * @return \Illuminate\Http\Response
  public function index(Store $store)
    //$store->with('products')->first()
    return $store->products;
  * Store a newly created resource in storage.
  * @param \Illuminate\Http\Request $request
  * @return \Illuminate\Http\Response
  public function store(Request $request)
  {
    //
  * Display the specified resource.
  * @param int $id
  * @return \Illuminate\Http\Response
  public function show($id)
    //
  * Update the specified resource in storage.
  * @param \Illuminate\Http\Request $request
  * @param int $id
  * @return \Illuminate\Http\Response
  public function update(Request $request, $id)
    //
  }
  * Remove the specified resource from storage.
```

```
*
 * @param int $id
 * @return \Illuminate\Http\Response
 */
 public function destroy($id)
 {
    //
 }
}
```

#### Listando as rotas

#### php artisan route:list

```
Roberto@DESKTOP-HGDUAQT MINGw64 /c/xampp/htdocs/laravel8_api_rest
$ php artisan route:list

| Domain | Method | URI | Name | Action | Middleware |
| GET|HEAD | / | | Closure | web |
| GET|HEAD | api/stores | stores.index | App\Http\Controllers\Api\StoreController@index | api |
| GET|HEAD | api/stores/store} | stores.store | App\Http\Controllers\Api\StoreController@store | api |
| PUT|PATCH | api/stores/{store} | stores.update | App\Http\Controllers\Api\StoreController@date | api |
| DELETE | api/stores/fstore} | stores.destroy | App\Http\Controllers\Api\StoreController@date | api |
| GET|HEAD | api/stores/fstore} | stores.destroy | App\Http\Controllers\Api\StoreController@date | api |
| GET|HEAD | api/stores/fstore}/products | stores.products.index | App\Http\Controllers\Api\ProductController@dindex | api |
| GET|HEAD | api/stores/fstore}/products | stores.products.index | App\Http\Controllers\Api\ProductController@index | api |
| GET|HEAD | api/stores/fstore}/products | stores.products.index | App\Http\Controllers\Api\ProductController@index | api |
| GET|HEAD | api/stores/fstore}/products | stores.products.index | App\Http\Controllers\Api\ProductController@index | api |
| GET|HEAD | api/stores/fstore}/products | stores.products.index | App\Http\Controllers\Api\ProductController@index | api |
```

# Rodando o servidor

php artisan serve

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/xampp/htdocs/laravel8_api_rest
$ php artisan serve
Starting Laravel development server: http://127.0.0.1:8000
[Tue May 24 19:13:06 2022] PHP 7.4.29 Development Server (http://127.0.0.1:8000) started
```

# Listando as lojas no browser

#### http://127.0.0.1:8000/api/stores

```
← → C ① 127.0.0.1:8000/api/stores
```

```
4 + {
       "current_page": 1,
       "data": [
6 +
          "id": 1,
8
         "name": "qui est reprehenderit",
9
          "description": "Aut et illo enim qui aperiam.",
10
           "created at": "2022-05-24T19:44:29.000000Z",
11
12
          "updated_at": "2022-05-24T19:44:29.000000Z"
13
14 +
           "id": 2,
15
16
          "name": "incidunt voluptatibus sed",
         "description": "Quam architecto quibusdam eos et est nihil voluptatem voluptatem.",
17
         "created_at": "2022-05-24T19:44:31.000000Z",
18
19
          "updated_at": "2022-05-24T19:44:31.0000000Z"
20
21 +
           "id": 3,
22
          "name": "nulla reiciendis sint",
23
           "description": "Reiciendis doloribus voluptatibus molestiae est repellendus quia.",
24
          "created_at": "2022-05-24T19:44:32.000000Z",
          "updated_at": "2022-05-24T19:44:32.000000Z"
26
27
28 +
           "id": 4,
29
         "name": "quasi eius odit",
30
         "description": "Officia quae et recusandae voluptas nihil.",
31
          "created_at": "2022-05-24T19:44:33.0000000Z",
32
33
          "updated_at": "2022-05-24T19:44:33.0000000Z"
34
35 +
36
           "id": 5,
          "name": "iure et vero",
37
38
           "description": "Facere voluptas maxime ullam ea vel.",
          "created_at": "2022-05-24T19:44:35.0000000Z",
39
          "updated_at": "2022-05-24T19:44:35.0000000Z"
40
41
        3
42
       ],
```

#### ← → C ① 127.0.0.1:8000/api/stores/?page=2

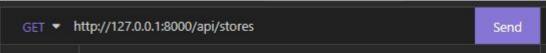
```
4 * {
        "current_page": 2,
5
6 +
        "data": [
7 +
           "id": 6,
8
            "name": "eius quia aut",
9
10
            "description": "Consequuntur ad qui quia nobis voluptatem dolores et.",
            "created_at": "2022-05-24T19:44:36.000000Z",
11
           "updated_at": "2022-05-24T19:44:36.000000Z"
12
13
14 +
           "id": 7,
15
           "name": "veritatis amet sunt",
16
           "description": "Facere voluptatibus quo voluptatem vel.",
17
           "created_at": "2022-05-24T19:44:38.000000Z",
18
            "updated at": "2022-05-24T19:44:38.000000Z"
19
20
21 *
           "id": 8,
22
           "name": "et et velit",
23
           "description": "Nihil illo iusto vitae harum.",
24
25
           "created_at": "2022-05-24T19:44:39.000000Z",
            "updated_at": "2022-05-24T19:44:39.000000Z"
26
27
         },
28 +
           "id": 9,
29
30
           "name": "earum officia voluptatem",
            "description": "Laudantium et amet molestias ducimus reprehenderit voluptatibus amet.",
31
           "created at": "2022-05-24T19:44:40.000000Z",
32
33
           "updated_at": "2022-05-24T19:44:40.000000Z"
34
         },
35 +
           "id": 10,
36
           "name": "porro aliquam rem",
37
38
           "description": "Numquam harum suscipit odio nostrum quod neque praesentium.",
           "created_at": "2022-05-24T19:44:42.000000Z",
39
40
            "updated_at": "2022-05-24T19:44:42.000000Z"
41
42
        "first page upl": "http://www.o.o.d.coop/ani/stopeclares.d"
```

# Usando o Insomnia para fazer requisições

São 10 lojas e são exibidas 5 por página.

### Listar lojas - página 1

GET http://127.0.0.1:8000/api/stores



```
200 OK
                          10.3 s
                                              1594 B
Preview ~
                                                            Cookie
                                                                                   Timeline
          "current_page": 1,
            {
    "id": 1,
    "name": "qui est reprehenderit",
    "intion": "Aut et illo enim
    "74T19:44:
                "description": "Aut et illo enim qui aperiam.",
"created_at": "2022-05-24T19:44:29.0000002",
"updated_at": "2022-05-24T19:44:29.0000002"
           "description": "Quam architecto quibusdam eos et est nihil voluptatem voluptatem.", "created_at": "2022-05-24T19:44:31.000000Z",
                "updated_at": "2022-05-24T19:44:31.0000000Z"
          "description": "Reiciendis doloribus voluptatibus molestiae est repellendus quia.",
"created_at": "2022-05-24T19:44:32.0000002",
                "updated_st": "2022-05-24T19:44:32.0000002"
            {
    "id": 4,
    "name": "quasi eius odit",
    "name": "Officia qu.
    "25-24T
               "description": "Officia quae et recusandae voluptas nihil.",
"created_at": "2022-05-24T19:44:33.0000002",
"updated_at": "2022-05-24T19:44:33.0000002"
          },
{
    "id": 5,
    "name": "iure et vero",
    "scription": "Facere v
    ":" "2022-05-
                "description": "Facere voluptas maxime ullam ea vel.",
                "created_at": "2022-05-24T19:44:35.0000002",
"updated_at": "2022-05-24T19:44:35.0000002"
```

# Listar lojas - página 2

```
GET ▼ http://127.0.0.1:8000/api/stores?page=2 Send
```

```
200 OK
                         92.1 ms
                                                1598 B
Preview *
                                                          Cookie
                                                                                 Timeline
          "current_page": 2,
           "id": 6,
   "name": "eius quia aut",
   "description": "Consequuntur ad qui quia nobis voluptatem dolores et.",
   "description": "2022-05-24T19:44:36.0000002",
            {
    "id": 7,
    "name": "veritatis amet sunt",
             "description": "Facere voluptatibus quo voluptatem vel.",
"created_at": "2022-05-24T19:44:38.0000002",
"updated_at": "2022-05-24T19:44:38.0000002"
          {
   "id": 8,
   "name": "et et velit",
   "within" "within"
             "description": "Nihil illo iusto vitae harum.",
"created_at": "2022-05-24T19:44:39.0000002",
"updated_at": "2022-05-24T19:44:39.0000002"
           {
    "id": 10,
    "name": "porro aliquam rem",
    "name": "Numquam harum
    05-24T19
              "description": "Numquan harum suscipit odio nostrum quod neque praesentium.",
               "created_at": "2022-05-24T19:44:42.00000002",
"updated_at": "2022-05-24T19:44:42.00000002"
```

#### Listar dados de uma loja

**GET** 

http://127.0.0.1:8000/api/stores/9

GET ▼ http://127.0.0.1:8000/api/stores/9 Send

```
Preview 

Header 10 Cookie Timeline

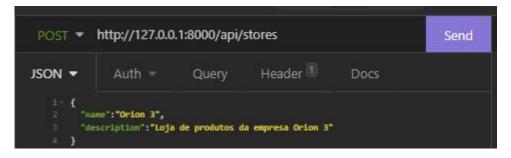
1 {
2    "id": 9,
3    "name": "earum officia voluptatem",
4    "description": "Laudantium et amet molestias ducimus reprehenderit voluptatibus amet.",
5    "created_at": "2022-05-24T19:44:48.0000002",
6    "updated_at": "2022-05-24T19:44:48.0000002",
7 }
```

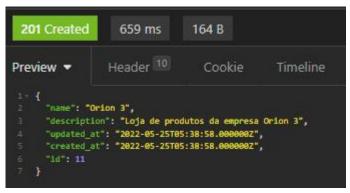
# Inserir loja



Tip: paste Curi commana into OKL afterwards to import

# POST http://127.0.0.1:8000/api/stores



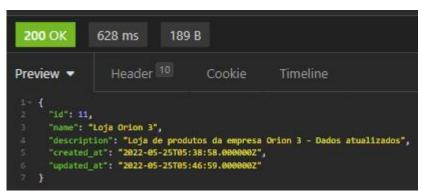


# Atualizar loja



PUT http://127.0.0.1:8000/api/stores/11

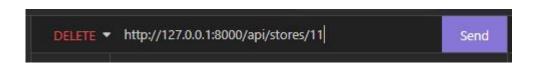




# **Excluir loja**



# DELETE http://127.0.0.1:8000/api/stores/11





#### Listar produtos de uma loja



<sup>\*</sup> Tip: paste Curl command into URL afterwards to import it

Create

#### Listando os produtos da loja de id 1

GET http://127.0.0.1:8000/api/stores/1/products



```
200 OK
                      387 ms
                                          2.2 KB
Preview -
                                                   Cookie
                                                                        Timeline
           "store_id": "1",
"name": "consectetur dolorem minus",
           "description": "Deserunt et quia dolore quasi molestiae quasi.",
           "created_at": "2022-05-24T19:44:29.00000082",
"updated_at": "2022-05-24T19:44:29.0000002"
       { -1d-: 2,
          "store_id": "1",
          "name": "ipsa aut perspiciatis",
"description": "Molestiae quia assumenda ea esse eveniet eaque velit.",
          "price": 72.44,
"created_at": "2022-05-24T19:44:29.0000002",
"updated_at": "2022-05-24T19:44:29.0000002"
       {
    "id": 3,
    "store_id": "1",
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