

Criando uma API Rest simples com Laravel e Laragon

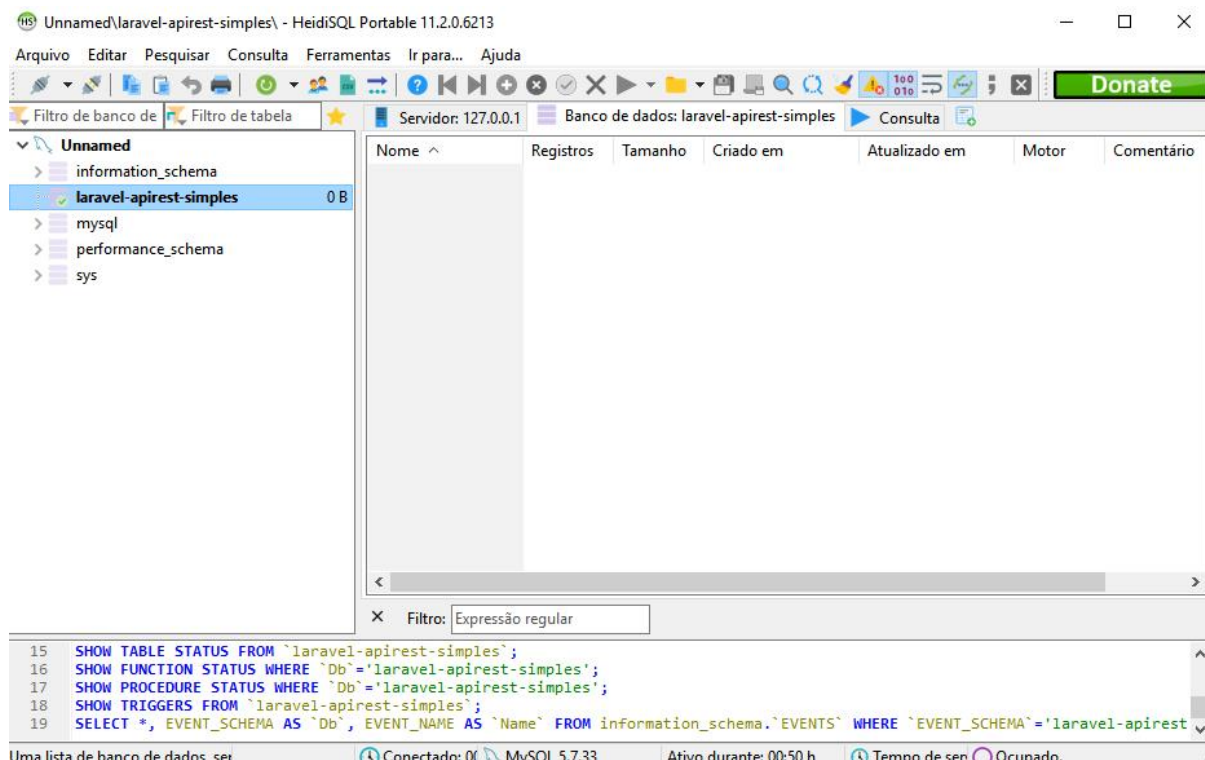
Cristian Bernardes

Vídeo: <https://www.youtube.com/watch?v=daq5S5-55Lw>

- No Laragon rode o Apache e o MySQL
- No Laragon, clique com o botão direito e selecione:

Criar rapidamente um website --> Laravel

- De o nome de: **laravel-apirest-simples**
- Clique no botão "**Banco de dados**"



.env

```
APP_NAME=Laravel
APP_ENV=local
APP_KEY=base64:QL7CfGZvIBsaUX70otPyyFhu7iZ4NGQyKfel6Sii/m8=
APP_DEBUG=true
APP_URL=http://localhost
```

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=laravel-apirest-simples
DB_USERNAME=root
DB_PASSWORD=
```

Criando o model e a migration

php artisan make:model Dog -m

```
Roberto@DESKTOP-HGDUQT MINGW64 /c:/laragon/www/laravel-api-rest-simples
$ php artisan make:model Dog -m
Model created successfully.
Created Migration: 2022_05_25_133452_create_dogs_table
```

app\Models\Dog.php

```
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Database\Eloquent\Model;

class Dog extends Model
{
    use HasFactory;

    protected $fillable = [
        'name', 'breed'
    ];
}
```

database/migrations/2022_05_25_133452_create_dogs_table.php

```
<?php

use Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;

class CreateDogsTable extends Migration
{
    public function up()
    {
        Schema::create('dogs', function (Blueprint $table) {
            $table->id();
            $table->string('name');
            $table->string('breed');
            $table->timestamps();
        });
    }

    public function down()
    {
        Schema::dropIfExists('dogs');
    }
}
```

Criando as tabelas

php artisan migrate

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/laragon/www/laravel-apirest-simples
$ php artisan migrate
Migration table created successfully.
Migrating: 2014_10_12_000000_create_users_table
Migrated: 2014_10_12_000000_create_users_table (1,162.03ms)
Migrating: 2014_10_12_100000_create_password_resets_table
Migrated: 2014_10_12_100000_create_password_resets_table (968.05ms)
Migrating: 2019_08_19_000000_create_failed_jobs_table
Migrated: 2019_08_19_000000_create_failed_jobs_table (984.40ms)
Migrating: 2019_12_14_000001_create_personal_access_tokens_table
Migrated: 2019_12_14_000001_create_personal_access_tokens_table (1,067.46ms)
Migrating: 2022_05_25_133452_create_dogs_table
Migrated: 2022_05_25_133452_create_dogs_table (414.73ms)
```

Unnamed\laravel-apirest-simples\ - HeidiSQL Portable 11.2.0.6213

Arquivo Editar Pesquisar Consulta Ferramentas Ir para... Ajuda

Filtro de banco de dados Filtro de tabela

Servidor: 127.0.0.1 Banco de dados: laravel-apirest-simples Consulta

Donate

Nome	Registros	Tamanho	Criado em	Atualizado em	Motor	Cor
dogs	0	16,0 KiB	2022-05-25 10:47:57		InnoDB	
failed_jobs	0	32,0 KiB	2022-05-25 10:47:53		InnoDB	
migrations	5	16,0 KiB	2022-05-25 10:47:50	2022-05-25 10:47:57	InnoDB	
password_resets	0	32,0 KiB	2022-05-25 10:47:53		InnoDB	
personal_access_tokens	0	48,0 KiB	2022-05-25 10:47:53		InnoDB	
users	0	32,0 KiB	2022-05-25 10:47:53		InnoDB	

Filtro: Expressão regular

```
23 SHOW TABLE STATUS FROM `laravel-apirest-simples`;
24 SHOW FUNCTION STATUS WHERE `Db`='laravel-apirest-simples';
25 SHOW PROCEDURE STATUS WHERE `Db`='laravel-apirest-simples';
26 SHOW TRIGGERS FROM `laravel-apirest-simples`;
27 SELECT *, EVENT_SCHEMA AS `Db`, EVENT_NAME AS `Name` FROM information_schema.`EVENTS` WHERE `EVENT_SCHEMA`='laravel-apirest'
```

Conectado: 0' MySQL 5.7.33 Ativo durante: 01:19 h Tempo de sen Ocupado.

Criando as rotas

routes\api.php

```
<?php
```

```
use Illuminate\Http\Request;  
use Illuminate\Support\Facades\Route;
```

```
Route::middleware('auth:sanctum')->get('/user', function (Request $request) {  
    return $request->user();  
});
```

```
Route::apiResource('dogs', '\App\Http\Controllers\api\DogController');
```

Criando o controller

php artisan make:controller api/DogController --resource --api

```
Roberto@DESKTOP-HGDUAQT MINGW64 /c/laragon/www/laravel-api-rest-simples
$ php artisan make:controller api/DogController --resource --api
Controller created successfully.
```

app\Http\Controllers\api\DogController.php

```
<?php
```

```
namespace App\Http\Controllers\api;
```

```
use App\Http\Controllers\Controller;
```

```
use Illuminate\Http\Request;
```

```
use App\Models\Dog;
```

```
class DogController extends Controller
```

```
{
```

```
    public function index()
```

```
    {
```

```
        return Dog::all();
```

```
    }
```

```
    public function store(Request $request)
```

```
    {
```

```
        Dog::create($request->all());
```

```
    }
```

```
    public function show($id)
```

```
    {
```

```
        return Dog::findOrFail($id);
```

```
    }
```

```
    public function update(Request $request, $id)
```

```
    {
```

```
        $dog = Dog::findOrFail($id);
```

```
        $dog->update($request->all());
```

```
    }
```

```
    public function destroy($id)
```

```
    {
```

```
        $dog = Dog::findOrFail($id);
```

```
        $dog->delete($id);
```

```
    }
```

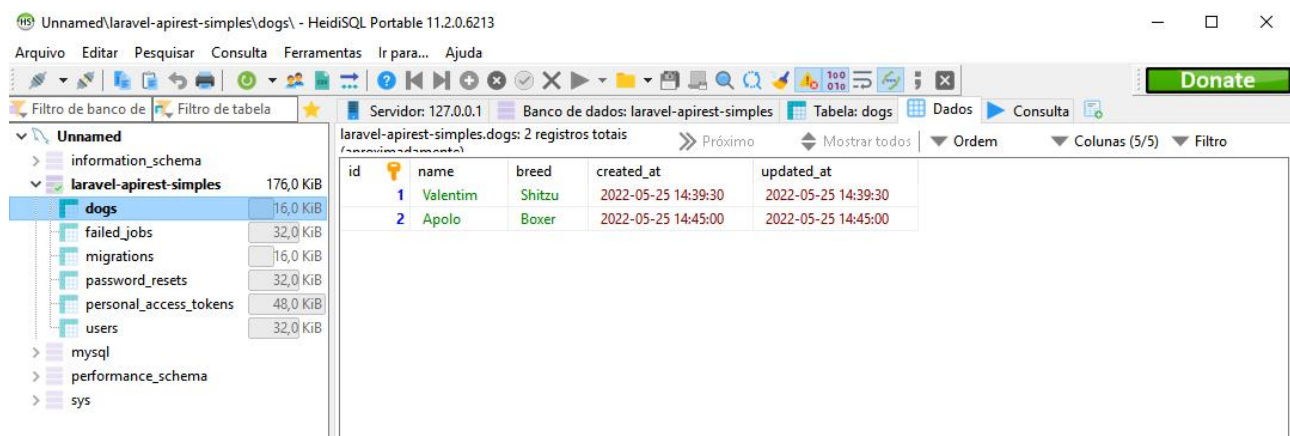
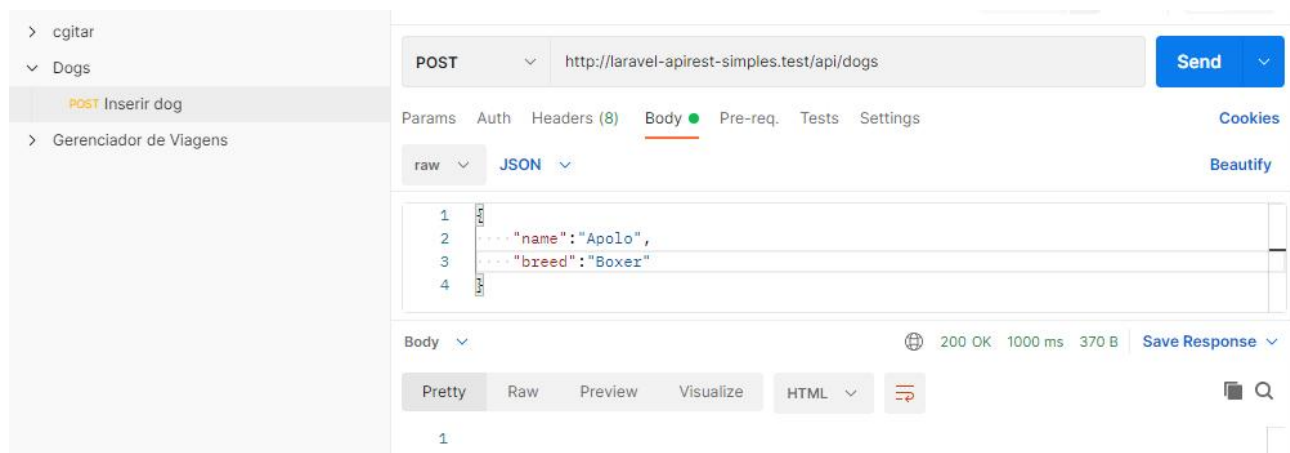
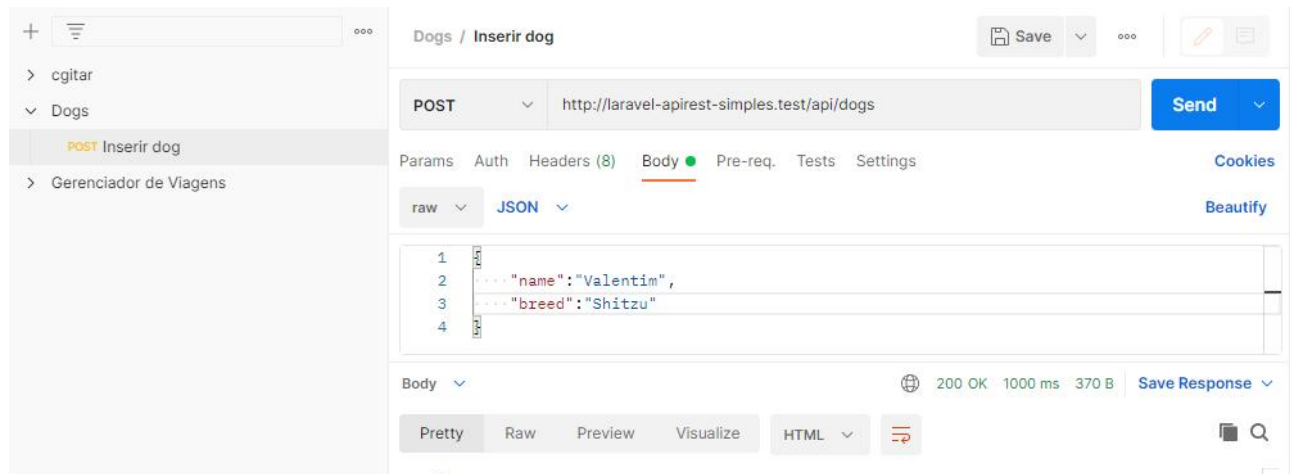
```
}
```

Usando o Postman

Inserir dog

POST

http://laravel-apirest-simples.test/api/dogs



Listar dogs

GET

<http://laravel-apirest-simples.test/api/dogs>

Dogs / Listar dogs

GET <http://laravel-apirest-simples.test/api/dogs> Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Body Cookies Headers (11) Test Results Status: 200 OK Time: 946 ms Size: 621 B Save Response

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "id": 1,
4     "name": "Valentin",
5     "breed": "Shitzu",
6     "created_at": "2022-05-25T14:39:30.000000Z",
7     "updated_at": "2022-05-25T14:39:30.000000Z"
8   },
9   {
10    "id": 2,
11    "name": "Apolo",
12    "breed": "Boxer",
13    "created_at": "2022-05-25T14:45:00.000000Z",
14    "updated_at": "2022-05-25T14:45:00.000000Z"
15  }
16 ]
```

Exibir dados de um dog

GET

<http://laravel-apirest-simples.test/api/dogs/2>

Dogs / Exibir dados de um dog

GET <http://laravel-apirest-simples.test/api/dogs/2> Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (11) Test Results Status: 200 OK Time: 716 ms Size: 489 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 2,
3   "name": "Apolo",
4   "breed": "Boxer",
5   "created_at": "2022-05-25T14:45:00.000000Z",
6   "updated_at": "2022-05-25T14:45:00.000000Z"
7 }
```


Atualizar dados de um dog

PUT

http://laravel-apirest-simples.test/api/dogs/2

The screenshot shows the Postman interface for a PUT request to `http://laravel-apirest-simples.test/api/dogs/2`. The request body is a JSON object: `{ "name": "Apollo", "breed": "Boxer" }`. The response status is 200 OK, with a time of 946 ms and a size of 370 B. The response is displayed in the 'Pretty' format.

Dogs / Atualizar dados de um dog

PUT `http://laravel-apirest-simples.test/api/dogs/2` **Send**

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies Beautify

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "name": "Apollo",
3   "breed": "Boxer"
4 }
```

Body Cookies Headers (11) Test Results Status: 200 OK Time: 946 ms Size: 370 B Save Response

Pretty Raw Preview Visualize HTML

1

The screenshot shows the HeidiSQL interface. The left pane displays the database structure, including the 'dogs' table. The right pane shows the data for the 'dogs' table, which contains two records: 'Valentim' (Shitzu) and 'Apollo' (Boxer). The bottom pane shows the SQL query used to retrieve the data.

Unnamed\laravel-apirest-simples\dogs\ - HeidiSQL Portable 11.2.0.6213

Arquivo Editar Pesquisar Consulta Ferramentas Ir para... Ajuda

Filtro de banco de dados Filtro de tabela

Servidor: 127.0.0.1 Banco de dados: laravel-apirest-simples Tabela: dogs Dados Consulta

laravel-apirest-simples.dogs: 2 registros totais

id	name	breed	created_at	updated_at
1	Valentim	Shitzu	2022-05-25 14:39:30	2022-05-25 14:39:30
2	Apollo	Boxer	2022-05-25 14:45:00	2022-05-25 15:12:05

Filtro: Expressão regular

```
45 SHOW INDEXES FROM `dogs` FROM `laravel-apirest-simples`;
46 SELECT * FROM information_schema.REFERENTIAL_CONSTRAINTS WHERE CONSTRAINT_SCHEMA='laravel-apirest-simples' AND TABLE_NAME='dogs' AND REFERENCED_TABLE_NAME IS NOT NULL;
47 SELECT * FROM information_schema.KEY_COLUMN_USAGE WHERE TABLE_SCHEMA='laravel-apirest-simples' AND TABLE_NAME='dogs' AND REFERENCED_TABLE_NAME IS NOT NULL;
48 SELECT * FROM `laravel-apirest-simples`.`dogs` LIMIT 1000;
49 /* Entrando na sessão "Unnamed" */
```

Conectado: 02:21 MySQL 5.7.33 Ativo durante: 02:42 h Tempo de servidor: Ocupado

Excluir dog

DELETE

http://laravel-apirest-simples.test/api/dogs/1

The screenshot shows a REST client interface. On the left, a sidebar lists endpoints under 'Dogs': POST Inserir dog, GET Listar dogs, GET Exibir dados de um dog, GET Atualizar dados de um dog, and DEL Excluir dog. The main area displays a DELETE request to 'http://laravel-apirest-simples.test/api/dogs/1'. Below the URL bar, there are tabs for Params, Authorization, Headers (6), Body, Pre-request Script, Tests, and Settings. The 'Query Params' section is empty. The 'Body' section shows a status of 200 OK, a time of 693 ms, and a size of 370 B. The response is displayed in a 'Pretty' format, showing a single record with the number '1'.

The screenshot shows a database management tool (HeidiSQL) interface. The top panel displays the 'dogs' table in the 'laravel-apirest-simples' database. The table has columns: id, name, breed, created_at, and updated_at. The data shows one record with id 2, name 'Apollo', breed 'Boxer', created_at '2022-05-25 14:45:00', and updated_at '2022-05-25 15:12:05'. The bottom panel shows SQL queries and the status bar. The status bar indicates 'Conectado: 02:33', 'MySQL 5.7.33', 'Ativo durante: 02:46 h', and 'Tempo de servid: Ocupado'.