

API RES LARAVEL

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Instalación de paquetes api en laravel

```
PS C:\Users\USUARIO\Desktop\helloApi> php artisan serve
forking is not supported on this platform

[INFO] Server running on [http://127.0.0.1:8000].

Press Ctrl+C to stop the server

2024-11-08 19:33:13 / ..... ~ 520.01ms
2024-11-08 19:33:13 /favicon.ico ..... ~ 2s
PS C:\Users\USUARIO\Desktop\helloApi> php artisan install:api
./composer.json has been updated
Running composer update laravel/sanctum
Loading composer repositories with package information
Updating dependencies
Lock file operations: 1 install, 0 updates, 0 removals
- Locking laravel/sanctum (v4.0.3)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 1 install, 0 updates, 0 removals
INFORMACIÓN: no se pudo encontrar ningún archivo para los patrones dados.
INFORMACIÓN: no se pudo encontrar ningún archivo para los patrones dados.
- Downloading laravel/sanctum (v4.0.3)
- Installing laravel/sanctum (v4.0.3): Extracting archive
Generating optimized autoload files
> illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi

[INFO] Discovering packages.

laravel/pail ..... DONE
laravel/sail ..... DONE
laravel/sanctum ..... DONE
laravel/tinker ..... DONE
nesbot/carbon ..... DONE
nunomaduro/collision ..... DONE
nunomaduro/termwind ..... DONE
```

Migración de base de datos

```
78 packages you are using are looking for funding.
Use the 'composer fund' command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

[INFO] No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
[INFO] Published API routes file.

One new database migration has been published. Would you like to run all pending database migrations? (yes/no) [yes]:
> yes

[INFO] Running migrations.

2024_11_09_003433_create_personal_access_tokens_table ..... 16.19ms DONE

[INFO] API scaffolding installed. Please add the [Laravel\Sanctum\HasApiTokens] trait to your User model.

PS C:\Users\USUARIO\Desktop\helloApi>
```

Peticiones

routes > api.php

```
1  <?php
2
3  use Illuminate\Http\Request;
4  use Illuminate\Support\Facades\Route;
5
6  Route::get('/students', function (){
7      return 'Students List';
8  });
9  Route::get('/students', function (){
10     return 'Getting a Student';
11 });
12 Route::post('/students', function (){
13     return 'Create Students';
14 });
15 Route::put('/students/{id}', function (){
16     return 'Update Student';
17 });
18
19 Route::delete('/students', function (){
20     return 'Delete Student';
21 });
```

PROBLEMS OUTPUT TERMINAL ...

php + - [] [] ... ^ x

```
2024-11-08 20:07:44 /favicon.ico ..... ~ 7s
2024-11-08 20:08:11 /students ..... ~ 1s
2024-11-08 20:08:11 /favicon.ico ..... ~ 2s
2024-11-08 20:08:32 /api/students ..... ~ 506.00ms
2024-11-08 20:08:32 /favicon.ico ..... ~ 1s
127.0.0.1:53079 Invalid request (Unsupported SSL request)
2024-11-08 20:11:51 ..... ~ 0.74ms
2024-11-08 20:12:21 /api/students ..... ~ 505.71ms
```

Pruebas peticiones

The screenshot displays the Thunder Client interface. The top bar shows the file 'api.php' and a 'New Request' tab. The left sidebar contains navigation icons and an 'Activity' panel listing a recent GET request to 'localhost:8000/a...' from '1 min ago'. The main workspace is configured for a GET request to 'http://localhost:8000/api/students'. The 'Query' tab is active, showing 'Query Parameters' with a table for parameters. The status bar indicates a successful response: 'Status: 200 OK', 'Size: 13 Bytes', and 'Time: 238 ms'. The response body contains the text '1 Students List'. At the bottom, the 'TERMINAL' tab shows a log of network activity, including requests to '/students' and '/favicon.ico', and an 'Invalid request (Unsupported SSL request)' message.

THUNDER CLIE...

New Request

GET http://localhost:8000/api/students

Activity Collections Env

filter activity

GET localhost:8000/a...
1 min ago

Query Headers 2 Auth Body Tests Pre Run

Query Parameters

<input type="checkbox"/>	parameter	value
--------------------------	-----------	-------

Status: 200 OK Size: 13 Bytes Time: 238 ms Response

1 Students List

Response Preview Chart

PROBLEMS OUTPUT TERMINAL

php

```
2024-11-08 20:08:11 /students ..... ~ 1s
2024-11-08 20:08:11 /favicon.ico ..... ~ 2s
2024-11-08 20:08:32 /api/students ..... ~ 506.00ms
2024-11-08 20:08:32 /favicon.ico ..... ~ 1s
127.0.0.1:53079 Invalid request (Unsupported SSL request)
2024-11-08 20:11:51 ..... ~ 0.74ms
2024-11-08 20:12:21 /api/students ..... ~ 505.71ms
2024-11-08 20:13:41 /api/students ..... ~ 501.83ms
```

0 0 0 0

FileEditSelectionView...New Request - helloApi - Visual Studio Code

THUNDER CLIE...
New Request
ActivityCollectionsEnv
filter activity
DEL localhost:8000/a...
just now

api.phpTC New Request X
DELETE http://localhost:8000/api/students/1Send
QueryHeaders 2AuthBodyTestsPre Run
Query Parameters
parametervalue
Status: 200 OKSize: 14 BytesTime: 231 msResponse
1 Delete Student
ResponsePreviewChart
PROBLEMSOUTPUTTERMINAL...php
2024-11-08 20:13:41 /api/students ~ 501.83ms
2024-11-08 20:14:13 /api/students/1 ~ 0.39ms
2024-11-08 20:15:10 /api/students/1 ~ 7s
2024-11-08 20:15:18 /api/students ~ 507.89ms
2024-11-08 20:15:56 /api/students/1 ~ 0.34ms
2024-11-08 20:18:20 /api/students/1 ~ 2s
2024-11-08 20:18:43 /api/students/1 ~ 1s
viernes, 8 de noviembre de 2024
vie. 8:18 p. m. (Hora local)

FileEditSelection...

New Request * - helloApi - Visual Studio Code

THUNDER CLIE...
New Request
ActivityCollectionsEnv
filter activity
PUT localhost:8000/a...
just now

api.php
New Request * X

DELETEhttp://localhost:8000/api/students/1Send

QueryHeaders2AuthBodyTestsPre Run

Query Parameters

Status: 200 OKSize: 14 BytesTime: 243 msResponse

1Update Student

ResponsePreviewChart

PROBLEMSOUTPUTTERMINAL

127.0.0.1:53079 Invalid request (Unsupported SSL request)
2024-11-08 20:11:51 ~ 0.74ms
2024-11-08 20:12:21 /api/students ~ 505.71ms
2024-11-08 20:13:41 /api/students ~ 501.83ms
2024-11-08 20:14:13 /api/students/1 ~ 0.39ms
2024-11-08 20:15:10 /api/students/1 ~ 7s
2024-11-08 20:15:18 /api/students ~ 507.89ms
2024-11-08 20:15:56 /api/students/1 ~ 0.34ms

FileEditSelection...New Request - helloApi - Visual Studio Code

THUNDER CLIE...

New Request

api.php

TC New Request X

PUT

Send

http://localhost:8000/api/students/1

Query

Headers2

Auth

Body

Tests

Pre Run

Query Parameters

☐

parameter

value

Status: 200 OK

Size: 14 Bytes

Time: 243 ms

Response

1

Update Student

Response

Preview

Chart

PROBLEMS

OUTPUT

TERMINAL

127.0.0.1:53079 Invalid request (Unsupported SSL request)

2024-11-08 20:11:51 ~ 0.74ms

2024-11-08 20:12:21 /api/students ~ 505.71ms

2024-11-08 20:13:41 /api/students ~ 501.83ms

2024-11-08 20:14:13 /api/students/1 ~ 0.39ms

2024-11-08 20:15:10 /api/students/1 ~ 7s

2024-11-08 20:15:18 /api/students ~ 507.89ms

2024-11-08 20:15:56 /api/students/1 ~ 0.34ms

api.php

TC New Request X

POST

http://localhost:8000/api/students

Send

Query

Headers 2

Auth

Body

Tests

Pre Run

Query Parameters

☐

parameter

value

Status: 200 OK

Size: 15 Bytes

Time: 263 ms

Response

1

Create Students

Response

Preview

Chart

PROBLEMS

OUTPUT

TERMINAL

...

php

+

+

...

^

X

2024-11-08 20:08:32 /favicon.ico ~ 1s

127.0.0.1:53079 Invalid request (Unsupported SSL request)

2024-11-08 20:11:51 ~ 0.74ms

2024-11-08 20:12:21 /api/students ~ 505.71ms

2024-11-08 20:13:41 /api/students ~ 501.83ms

2024-11-08 20:14:13 /api/students/1 ~ 0.39ms

2024-11-08 20:15:10 /api/students/1 ~ 7s

2024-11-08 20:15:18 /api/students ~ 507.89ms

api.php

TC New Request X

GET

http://localhost:8000/api/students/1

Send

Query

Headers 2

Auth

Body

Tests

Pre Run

Query Parameters

☐

parameter

value

Status: 200 OK

Size: 17 Bytes

Time: 265 ms

Response

1

Getting a Student

Copy

Response

Preview

Chart

PROBLEMS

OUTPUT

TERMINAL

...

php

+

+

2024-11-08 20:08:11 /favicon.ico ~ 2s

2024-11-08 20:08:32 /api/students ~ 506.00ms

2024-11-08 20:08:32 /favicon.ico ~ 1s

127.0.0.1:53079 Invalid request (Unsupported SSL request)

2024-11-08 20:11:51 ~ 0.74ms

2024-11-08 20:12:21 /api/students ~ 505.71ms

2024-11-08 20:13:41 /api/students ~ 501.83ms

2024-11-08 20:14:13 /api/students/1 ~ 0.39ms

Creación de tabla

```
PS C:\Users\USUARIO\Desktop\helloApi> php artisan make:migration create_student_table
PS C:\Users\USUARIO\Desktop\helloApi> php artisan make:migration create_student_table

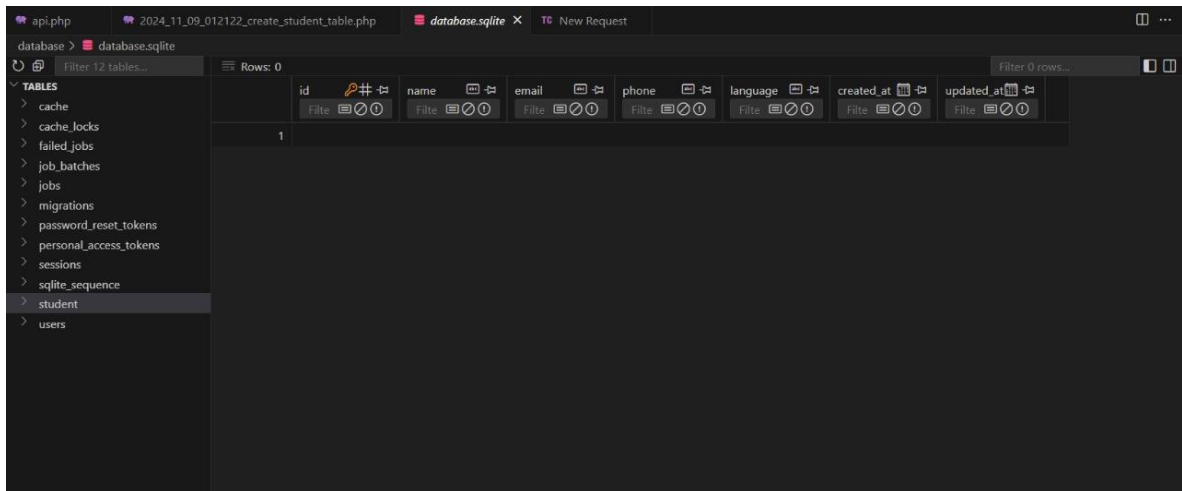
[INFO] Migration [C:\Users\USUARIO\Desktop\helloApi\database\Migrations\2024_11_09_012122_create_student_table.php] created successfully.

PS C:\Users\USUARIO\Desktop\helloApi>
```

```
PS C:\Users\USUARIO\Desktop\helloApi> php artisan migrate

[INFO] Running migrations.

2024_11_09_012122_create_student_table ..... 335.20ms DONE
```



id	name	email	phone	language	created_at	updated_at
1						

```
PS C:\Users\USUARIO\Desktop\helloApi> php artisan make:model Student

[INFO] Model [C:\Users\USUARIO\Desktop\helloApi\app\Models\Student.php] created successfully.
```

Creación de modelo studens

```
class Student extends Model
{
    use HasFactory;

    protected $table = 'student';

    protected $fillable = [
        'name',
        'email',
        'phone',
        'language'
    ];
}
```

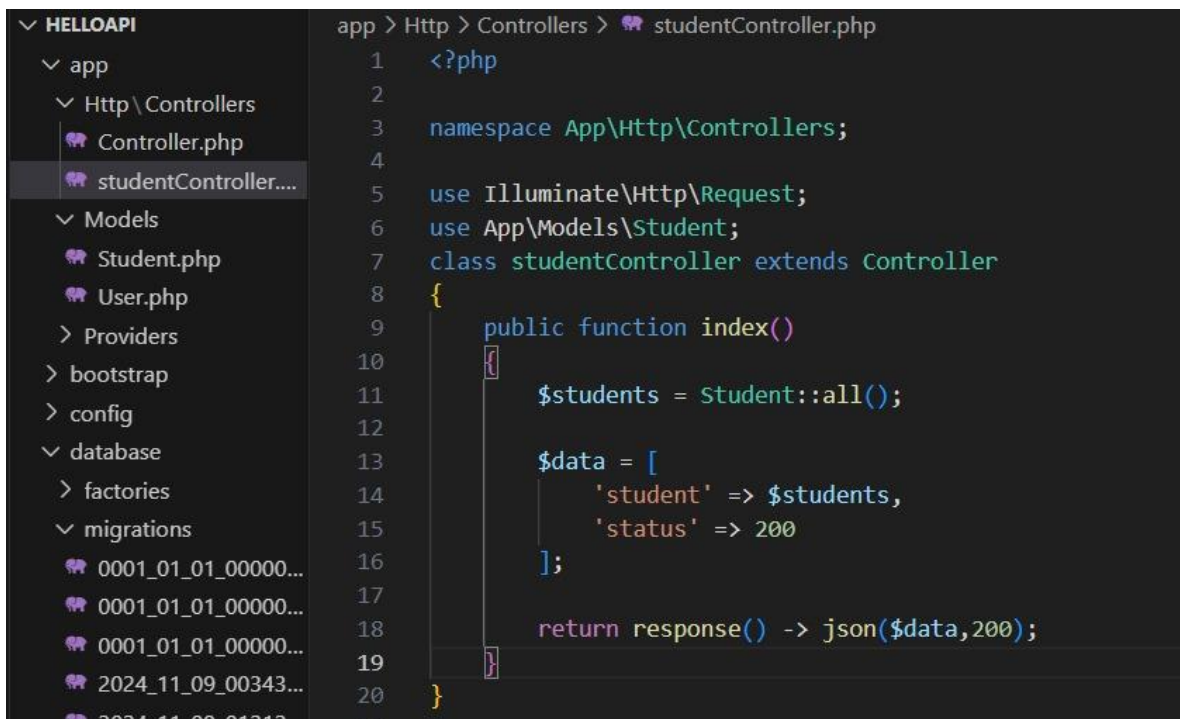
```
PS C:\Users\USUARIO\Desktop\helloApi> php artisan make:controller studentController
```

```
INFO Controller [C:\Users\USUARIO\Desktop\helloApi\app\Http\Controllers\studentController.php] created successfully.
```

```
PS C:\Users\USUARIO\Desktop\helloApi>
```

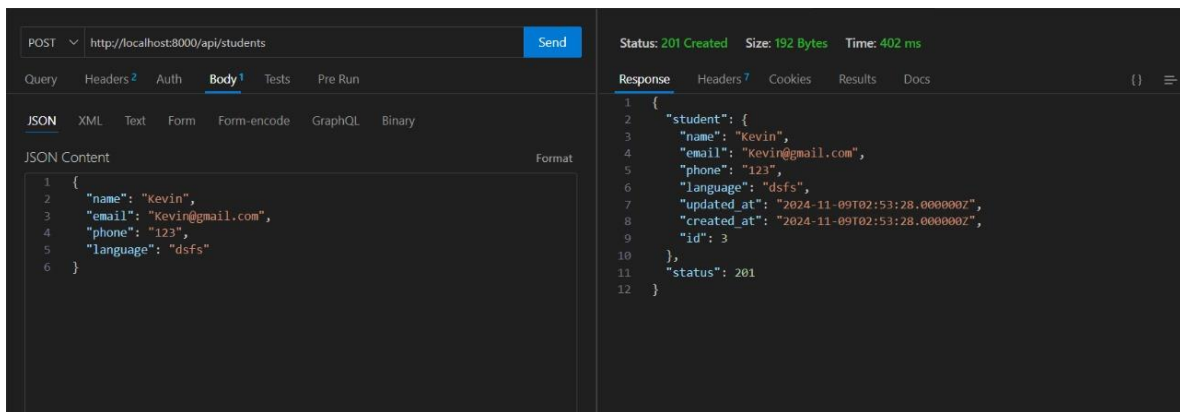


Listar datos



```
app > Http > Controllers > studentController.php
1  <?php
2
3  namespace App\Http\Controllers;
4
5  use Illuminate\Http\Request;
6  use App\Models\Student;
7  class studentController extends Controller
8  {
9      public function index()
10     {
11         $students = Student::all();
12
13         $data = [
14             'student' => $students,
15             'status' => 200
16         ];
17
18         return response() -> json($data,200);
19     }
20 }
```

Agregar Registros



```
POST http://localhost:8000/api/students Send
Status: 201 Created Size: 192 Bytes Time: 402 ms

Query Headers Auth Body Tests Pre Run
JSON XML Text Form Form-encode GraphQL Binary
JSON Content Format
1 {
2   "name": "Kevin",
3   "email": "Kevin@gmail.com",
4   "phone": "123",
5   "language": "dsfs"
6 }

Response Headers Cookies Results Docs {}
1 {
2   "student": {
3     "name": "Kevin",
4     "email": "Kevin@gmail.com",
5     "phone": "123",
6     "language": "dsfs",
7     "updated_at": "2024-11-09T02:53:28.000000Z",
8     "created_at": "2024-11-09T02:53:28.000000Z",
9     "id": 3
10  },
11  "status": 201
12 }
```

api.php
Controller.php
2024_11_09_012122_create_student_table.php
student

```

app > Http > Controllers > studentController.php
9  class studentController extends Controller
10 {
11     public function index()
12     {
13         $students = Student::all();
14
15         $data = [
16             'student' => $students,
17             'status' => 200
18         ];
19
20         return response() -> json($data,200);
21     }
22
23     public function store(Request $request)
24     {
25         $validator = Validator::make($request->all(),[
26             'name' => 'required',
27             'email' => 'required|email',
28             'phone' => 'required',
29             'language' => 'required'
30         ]);
31
32         if($validator->fails()){
33             $data=[
34                 'message' => 'Error data validation',
35                 'errors' => $validator->errors(),
36                 'status' => 400
37             ];
38             return response()->json($data, 400);
39         }
40
41         $student = Student::create([
42             'name' => $request->name,
43             'email' => $request ->email,
44             'phone' => $request ->phone,
45             'language' => $request ->language,
46         ]);
47
48         if(!$student){
49             $data = [
50                 'message' => 'Error create student',
51                 'status' => 500
52             ];
53             return response()->json($data,500);
54         }
55
56         $data = [
57             'student' => $student,
58             'status' =>201
59         ];
60
61         return response ()->json($data,201);
62     }
63 }

```


Consultar todos los registros

The screenshot shows a REST client interface. The top bar indicates a GET request to `http://localhost:8000/api/students` with a status of 200 OK, size of 530 Bytes, and time of 296 ms. The 'Body' tab is selected, showing the JSON response. The response is a JSON array of three student objects, each with fields: id, name, email, phone, language, created_at, and updated_at. The status is 200.

```
1 {
2   "student": [
3     {
4       "id": 1,
5       "name": "Kevin",
6       "email": "Kevin@gmail.com",
7       "phone": "123",
8       "language": "dsfs",
9       "created_at": "2024-11-09T02:50:43.000000Z",
10      "updated_at": "2024-11-09T02:50:43.000000Z"
11    },
12    {
13      "id": 2,
14      "name": "Kevin",
15      "email": "Kevin@gmail.com",
16      "phone": "123",
17      "language": "dsfs",
18      "created_at": "2024-11-09T02:51:40.000000Z",
19      "updated_at": "2024-11-09T02:51:40.000000Z"
20    },
21    {
22      "id": 3,
23      "name": "Kevin",
24      "email": "Kevin@gmail.com",
25      "phone": "123",
26      "language": "dsfs",
27      "created_at": "2024-11-09T02:53:28.000000Z",
28      "updated_at": "2024-11-09T02:53:28.000000Z"
29    }
30  ],
31  "status": 200
32 }
```

Consultar registro específico

```
public function show($id)
{
    $student= Student::find($id);

    if(!$student){
        $data = [
            'message' => 'Student not found',
            'status'=> 404
        ];
        return response()->json($data,404);
    }
    $data = [
        'student' => $student,
        'status' => 200
    ];
    return response()->json($data,200);
}
```

Eliminar registros

```
JSON XML Text Form Form-encode GraphQL Binary
JSON Content Format
1 {
2   "name": "Kevin",
3   "email": "Ke2vin@gmail.com",
4   "phone": "1234567788",
5   "language": "Spanish"
6 }

1 {
2   "student": {
3     "id": 4,
4     "name": "Kevin",
5     "email": "Ke2vin@gmail.com",
6     "phone": "1234567788",
7     "language": "Spanish",
8     "created_at": "2024-11-09T03:24:12.000000Z",
9     "updated_at": "2024-11-09T03:24:12.000000Z"
10  },
11  "status": 200
12 }
```

```
api.php 2024_11_09_012122_create_student_table.php studentController.php Student.php TC New Request X
DELETE http://localhost:8000/api/students/3 Send Status: 200 OK Size: 42 Bytes Time: 290 ms
Query Headers 2 Auth Body 1 Tests Pre Run Response Headers 7 Cookies Results Docs
JSON XML Text Form Form-encode GraphQL Binary
JSON Content Format
1 {
2   "message": "Student deleted",
3   "status": 200
4 }
```

```
82 public function delete($id)
83 {
84     $student= Student::find($id);
85
86     if(!$student){
87         $data = [
88             'message' => 'Student not found',
89             'status'=> 404
90         ];
91         return response()->json($data,404);
92     }
93
94     $student->delete();
95
96     $data =[
97         'message' => 'Student deleted',
98         'status' => 200
99     ];
100     return response()->json($data,200);
101 }
102 }
103
```


Actualizar registros

```
102
103 public function update(request $request, $id){
104
105     $student= Student::find($id);
106
107     if(!$student){
108         $data = [
109             'message' => 'Student not found',
110             'status'=> 404
111         ];
112         return response()->json($data,404);
113     }
114
115     $validator = Validator::make($request->all(),[
116         'name' => 'required|max:255',
117         'email' => 'required|email|unique:student',
118         'phone' => 'required|digits:10',
119         'language' => 'required|in:English,Spanish'
120     ]);
121
122     if($validator->fails()){
123         $data=[
124             'message' => 'Error data validation',
125             'errors' => $validator->errors(),
126             'status' => 400
127         ];
128         return response()->json($data,400);
129     }
130
131     $student->name = $request->name;
132     $student->email = $request->email;
133     $student->phone = $request->phone;
134     $student->language = $request->language;
135
136     $student->save();
137
138     $data = [
139         'message'=>'Student Updated',
140         'student'=>$student,
141         'status'=>200,
142     ];
143
144     return response()->json($data,200);
145
146 }
147
148 }
```

PUT

http://localhost:8000/api/students/2

Send

Query

Headers²

Auth

Body¹

Tests

Pre Run

JSON

XML

Text

Form

Form-encode

GraphQL

Binary

JSON Content

Format

```
1 {
2   "name": "asijdknsjdoias",
3   "email": "ke2vinq@gmail.com",
4   "phone": "123456788",
5   "language": "Spanish"
6 }
```

Status: 200 OK

Size: 241 Bytes

Time: 234 ms

Response

Headers⁷

Cookies

Results

Docs

```
1 {
2   "message": "Student Updated",
3   "student": {
4     "id": 2,
5     "name": "asijdknsjdoias",
6     "email": "ke2vinq@gmail.com",
7     "phone": "123456788",
8     "language": "Spanish",
9     "created_at": "2024-11-09T02:51:40.000000Z",
10    "updated_at": "2024-11-09T04:00:38.000000Z"
11  },
12   "status": 200
13 }
```

PATCH

http://localhost:8000/api/students/2

Send

Query

Headers²

Auth

Body¹

Tests

Pre Run

JSON

XML

Text

Form

Form-encode

GraphQL

Binary

JSON Content

Format

```
1 {
2   "email": "Estiben@gmail.com"
3 }
```

Status: 200 OK

Size: 234 Bytes

Time: 188 ms

Response

Headers⁷

Cookies

Results

Docs

```
1 {
2   "message": "Student Updated",
3   "student": {
4     "id": 2,
5     "name": "Estiben",
6     "email": "Estiben@gmail.com",
7     "phone": "123456788",
8     "language": "Spanish",
9     "created_at": "2024-11-09T02:51:40.000000Z",
10    "updated_at": "2024-11-09T04:09:00.000000Z"
11  },
12   "status": 200
13 }
```

Actualizar registros con patch

```
103 > public function update(request $request, $id){ ...
146 }
147 public function updatePartial(request $request, $id){
148
149     $student= Student::find($id);
150
151     if(!$student){
152         $data = [
153             'message' => 'Student not found',
154             'status'=> 404
155         ];
156         return response()->json($data,404);
157     }
158
159     $validator = Validator::make($request->all(),[
160         'name' => 'max:255',
161         'email' => 'email|unique:student',
162         'phone' => 'digits:10',
163         'language' => 'in:English,Spanish'
164     ]);
165
166     if($validator->fails()){
167         $data=[
168             'message' => 'Error data validation',
169             'errors' => $validator->errors(),
170             'status' => 400
171         ];
172         return response()->json($data,400);
173     }
174
175     if($request->has('name')){
176         $student->name = $request->name;
177     }
178     if($request->has('email')){
179         $student->email = $request->email;
180     }
181     if($request->has('phone')){
182         $student->phone = $request->phone;
183     }
184     if($request->has('language')){
185         $student->language = $request->language;
186     }
187
188     $student->save();
189
190     $data = [
191         'message'=>'Student Updated',
192         'student'=>$student,
193         'status'=>200,
194     ];
195
196     return response()->json($data,200);
197
198 }
199
200 }
```

Creación de la base de datos en MySQL

Create database

apiMine

utf8mb4_general_ci

Create

Tablas de MySQL

```
24 DB_CONNECTION=mysql
25 DB_HOST=127.0.0.1
26 DB_PORT=3306
27 DB_DATABASE=apimine
28 DB_USERNAME=root
29 DB_PASSWORD=
```

phpMyAdmin

Recent Favorites

New

apimine

New

cache

cache_locks

failed_jobs

jobs

job_batches

migrations

password_reset_tokens

personal_access_tokens

sessions

student

users

diytme

information_schema

mysql

performance_schema

phomvadmin

Server: 127.0.0.1 » Database: apimine

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
cache	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
cache_locks	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
failed_jobs	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
jobs	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
job_batches	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
migrations	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
password_reset_tokens	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
personal_access_tokens	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	48.0 KiB	-
sessions	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	48.0 KiB	-
student	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
users	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 KiB	-
11 tables	Sum	5	InnoDB	utf8mb4_general_ci	288.0 KiB	0 B

Inserción de MySQL

POST http://localhost:8000/api/students

Send

Status: 201 Created Size: 204 Bytes Time: 192 ms

Query Headers Auth Body Tests Pre Run

JSON XML Text Form Form-encode GraphQL Binary

JSON Content

1 {

2 "name": "Kevin",

3 "email": "Estiben@gmail.com",

4 "phone": "123456788",

5 "language": "Spanish",

6 }

Response Headers Cookies Results Docs

1 {

2 "student": {

3 "name": "Kevin",

4 "email": "Estiben@gmail.com",

5 "phone": "123456788",

6 "language": "Spanish",

7 "updated_at": "2024-11-09T04:24:29.000000Z",

8 "created_at": "2024-11-09T04:24:29.000000Z",

9 "id": 1

10 },

11 "status": 201

12 }

id name email phone language created_at updated_at

1 Kevin Estiben@gmail.com 123456788 Spanish 2024-11-09 04:24:29 2024-11-09 04:24:29