

March 28, 2019

Documentation

Erply Product API Assignment

Requirements

Write a small API that uses a database backend.

The main data entity in your API is a "product". A product must have the following fields/properties:

- ID (integer, assigned automatically)
- Name (alphanumeric, at most 100 characters)
- Price (decimal, with 2 decimal places)
- 1. Implement API calls for creating, updating and deleting these records.
- 2. Implement API calls for retrieving a list of products, and for searching a product by name.
- 3. Ensure that the API calls have proper error handling, and output sensible error messages.
- Document the API: explain the proper way to use it. Assume that the reader is not familiar with the API, and will be using it as a service (having no access to the source code).

Write the application in PHP. Use a MySQL database.

Please submit:

- API source code (including a README file with deployment instructions);
- SQL schema description;

• Documentation.

Getting Started

These instructions will get you a copy of the project up and running on your local machine for development and testing purposes. However this project was created using docker, you can install as a regular Laravel project in any server that support php/mysql

Requirements

```
PHP 7.1.27

Mysql 5.6

Docker 18.09.2 (build 6247962) (optional if using docker)

libmcrypt-dev mysql-client libmagickwand-dev git

php ext: imagick mcrypt pdo_mysql mbstring zip php-zip
```

If you will use docker run this instructions

```
cd product
docker-compose build
docker-compose up
composer install
composer update
php artisan config:clear
php artisan config:cache
```

```
composer dump-autoload

php artisan key:generate

php artisan migrate

php artisan db:seed
```

The app will be accessible by the port 8080

```
http://127.0.0.1:8080/
```

In order to access the api you will need register in

```
http://127.0.0.1:8080/register
```

Install the project

(replace http://127.0.0.1:8080/ with your server ip and port)

SQL schema db_schema.sql

The SQL Schema is included with the project, however this SQL Schema is loaded by running php artisan migrate

Config file .env

If you are using docker not modification will be needed inside of .env file. If the project is loaded in a regular server (not execute by docker) you can modify the database configuration / APP name / APP Pagination / etc.

Install (no using docker)

In the folder ./product you should run

```
apt install php-dom
```

```
composer install

composer update

php artisan config:clear

php artisan config:cache

composer dump-autoload

php artisan key:generate

php artisan migrate

php artisan db:seed
```

Running PHPUnit (total Test Cases Created) (7 tests, 67 assertions) All test cases passed OK

You will need to replace the ip for your actual ip (domain name) from line 14

```
file tests/Unit/ProductTest.php
```

```
protected $server_ip = '172.20.0.4';
Also replace the line 15 with the full uri of the project
Ex.
protected $uri = 'product/public/api/products';
run inside product folder
php vendor/bin/phpunit
```

After register (http://127.0.0.1:8080/register) you can access your **API Toke** from your dashboard

If you generate a new **API Toke** this will invalidate the previous one.

Documentation

The documentation for the api use is available in

http://localhost:8080/docs/1.0

The documentation was created using SnowBoard project

\$snowboard html -o resources/views/docs/index.blade.php
apiDocs_snowboard.apib

https://github.com/bukalapak/snowboard

https://apiblueprint.org/developers.html

Errors or 500

If you receive any of this error please follow this steps

- First of all check your file permissions.
- To fix file permissions sudo chmod 755 -R your project
- Then chmod -R o+w your project/storage to write file to storage folder.
- php artisan cache:clear
- composer dump-autoload
- php artisan key:generate
- Then check server requirements as per the laravel requirement.
- Many times you got this error because of the php version. Try changing your php version in cpanel.
- Then configure your .htaccess file properly
- Check the properly user and group are assigned to the folder

If you receive and error (Uncaught ReflectionException: Class
config does not exist in)

Mod rewrite is required (more info)

https://www.digitalocean.com/community/tutorials/how-to-rewrite-urls-with-mod rewrite-for-apache-on-ubuntu-18-04

Built With

- Laravel The PHP framework used
- <u>Docker</u> Used for containerization
- <u>Bukalapak/snowboard</u> Documentation Generation
- Api blueprint Documentation API Blueprint

Tested

Url: http://157.230.233.149/erply/product/public/home

Documentation: http://157.230.233.149/erply/product/public/docs/1.0

The project was tested in a new droplet in Digital Ocean (https://digitalocean.com) following this document.

Droplet used Ubuntu Docker

1 GB Memory / 25 GB Disk / NYC1 - Ubuntu 18.04.2 x64



Erply Web Application / Erply Assignment

Resources Activity Settings

DROPLETS (1)

erply-ubuntu-s-1vcpu-1gb-nyc1-01

157.230.233.149



erply-ubuntu-s-1vcpu-1gb-nyc1-01

in Terply / 1 GB Memory / 25 GB Disk / NYC1 - Ubuntu 18.04.2 x64

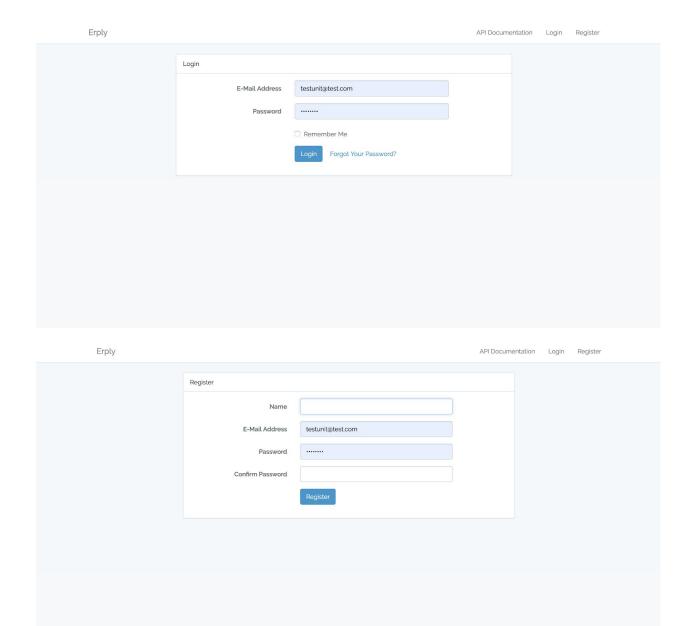
Screenshots

API DOCUMENTATION

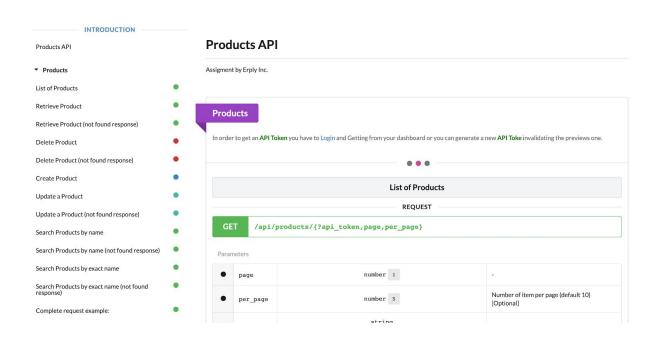
HOME

Erply Product API

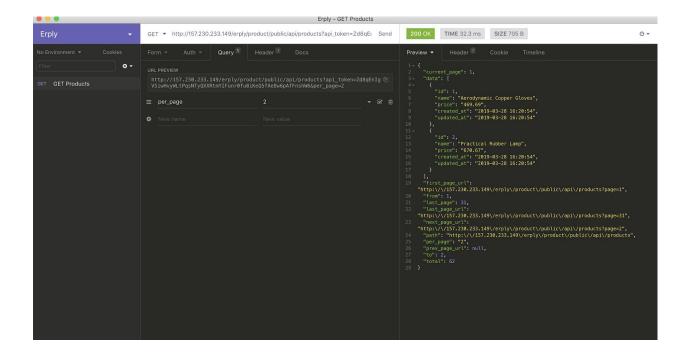
Erply	AF	Pl Documentation testUnit •
	Dashboard You are logged in!	
	API Token: 3EGAgSDLojGKigRwjUp1b4drdZaG1Nx227YJE0zJXG2tBtD5kFth6arEflpf Generate New Token	



Erply Product API



Request GET [products] API Screenshots



PHPUnit result

```
root@erply-ubuntu-s-1vcpu-1gb-nyc1-01:/var/www/html/erply/product# php vendor/bin/phpunit
PHPUnit 6.5.14 by Sebastian Bergmann and contributors.

7 / 7 (100%)

Time: 521 ms, Memory: 16.00MB

OK (7 tests, 67 assertions)
root@erply-ubuntu-s-1vcpu-1gb-nyc1-01:/var/www/html/erply/product#
```