



Laravel- A Centralized framework with authentication API

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ABSTRACT-

As technology has reached at the level on which you can make anything possible, at where few technologies marked one level where certain frameworks are invented to get reliable work with technology and to work with reliable continuity there are frameworks and middleware support to give authenticity to a particular user with auth token and in any digital system there must be an authentication because without any authenticity not a single user can have grant to access the information of a site. Many of web users are demanding for the flexible authentication as well as middleware support to maintain the details and data secure and maintainable for all of this purpose there must be a MVC support framework which can make system reliable as well easy to usable site and for that Laravel is one the best and trending framework which can support API building and security-based API with help of inbuilt migration files to achieve reliable results.

Index Terms- MVC(Model-View-Controller), API, Laravel, Authentication, Middleware, Eloquent.

I. Introduction

This research paper is basically about the authentication API which can reusable to any module, if developer is making authentication module but it cannot be usable anymore after thye insertion of a module and what about middleware and multiple module authentication, at where you can use API with middleware feature just by installing it manually as you will cover in forthcoming content.

These are the following sub content.

- 1) Abstract
- 2) Introduction
- 3) Research Elaborations
- 4) Results or Finding
- 5) Conclusions

In Introduction you can mention the introduction about your research.

II. IDENTIFY, RESEARCH AND COLLECT IDEA

This is the first and foremost priority to give articulate approaches to the research and gathering information regarding the scope of the topic:

1. surfed same frameworks and compared it to existing system.
2. In the differentiation of the authentication, many of research paper has defined passport and JWT for the authentication.
3. Routed files are defined but at the same time, the usage of middleware is not even mentioned.
4. There are no explanations of MVC.

III. WRITE DOWN YOUR STUDIES AND FINDINGS

Now it is the time to illuminating the research work with ideas gathered for the authentication information.

A. MVC Structure (Model-View-Controller)

Many of the e-commerce or big data sites are using the MVC approach

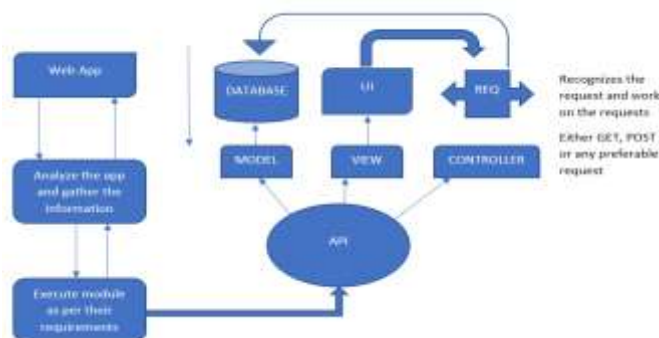
Name	Date modified	Type	Size
confirm-password.blade	27-09-2021 12:05	PHP Source File	1 KB
forgot-password.blade	27-09-2021 12:05	PHP Source File	2 KB
login.blade	28-01-2022 16:04	PHP Source File	5 KB
register.blade	25-01-2022 14:46	PHP Source File	5 KB
reset-password.blade	27-09-2021 12:05	PHP Source File	2 KB
two-factor-challenge.blade	27-09-2021 12:05	PHP Source File	3 KB
verify-email.blade	27-09-2021 12:05	PHP Source File	2 KB

This are the blade files that included after installing Laravel/passport, these files are under auth folder where you can see the files with the help of this you can create one static page which has limited feature with blade file which cannot be expanded with good features because as it has predefined structure of code for authentication now question arise that how you can make your work in executable state in a reliable and flexible way, so there is a middleware where you can make middleware and at the same time you can use multiple middleware at the same time and validate your routes with it.

Now what API is,

API is an Application Program Interface which is initially interface with which you can refers to any website and its content with distinct function and with its functionality it will receive the incoming request from the header then again it will check the requirements of the request (authenticated or not) if requested URL is authenticated then it will link with model which is already being migrated and then responded with JSON format, now what is the JSON format in this response format there will be one array and object which has requested data now let's head into prototype and execution section and how it will be integrated with any front end technology.

B. Use of API (Application Program Interface)



This is the working of API that how it works with incoming and outgoing requests either can be of any http requests from end-user to again response to end-user, now how we can validate a user for the grant of any web application so we will be going to jump onto middleware and how middleware acts like a firewall support to any web application to protect from any unauthenticated user from stealing any sensitive information or data whichever in existing web app or any admin panel, as you can see after installing the passport you will have few boundaries where you can not apply more features as compare to REST API.

How REST API is going to performed?

First REST API will recognize the request either GET and POST and it will work further after recognizing request through routes file it will head into controller where your model is built already as controller has the functional logic regarding the request been requested it will work regarding the request and respond accordingly with the help of model which is connected to a database. (MySQL, Firebase, Postgres are the mainly used databases) and JSON response will be shows and we have to integrate it to our any frontend.

How we can examine API?

With the help of **POSTMAN** and **SWAGGER** tool we can examine any API

Middleware: A central part of workspace.

How you can install middleware with the help of a composer?

Steps to perform API

1. Create one folder named Api in http/controller/Api
2. Go inside that Api folder start making your Api function and then route files according to it
3. Run it with the help of php artisan serve command on your port.
4. And make middleware and configure it.



```

12 //
13
14 use Illuminate\Support\Facades\Route;
15
16 //Admin
17 Route::get('/generateDefaultUser', 'Api\AuthController@generateDefaultUser');
18 Route::get('/generateDefaultAdmin', 'Api\AdminController@generateDefaultAdmin');
19 Route::post('/admin/login', 'Api\AdminController@login');
20

```

Here is the Route file name Api.php.



```

C:\xampp\htdocs\laravel\api> php artisan serve
Starting Laravel development server: http://127.0.0.1:8000
Wed Feb 15 21:01:36 2023: PHP 7.4.19 Development Server (http://127.0.0.1:8000) started

```

Run your file.

IV. GET PEER REVIEWED

Here comes the most crucial step for your research publication. Ensure that the drafted publication must have quality of content and in this research I found that there is no any API being used for the authentication purpose so here is the steps to make API done.

V. IMPROVEMENT AND OUTCOME

After the analysis of research paper, there are certain ways to get authentication but not used API so always try to make your bind flexible as well as unique and after using this REST API there must be chances of code to get reliable and reusable too.

VI. CONCLUSION

As Laravel is the one of the best frameworks among all the frameworks and it has best feature of eloquent models and REST API feature which can be usable for any module you want and make your site reliable as you want as compare to another frameworks.

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