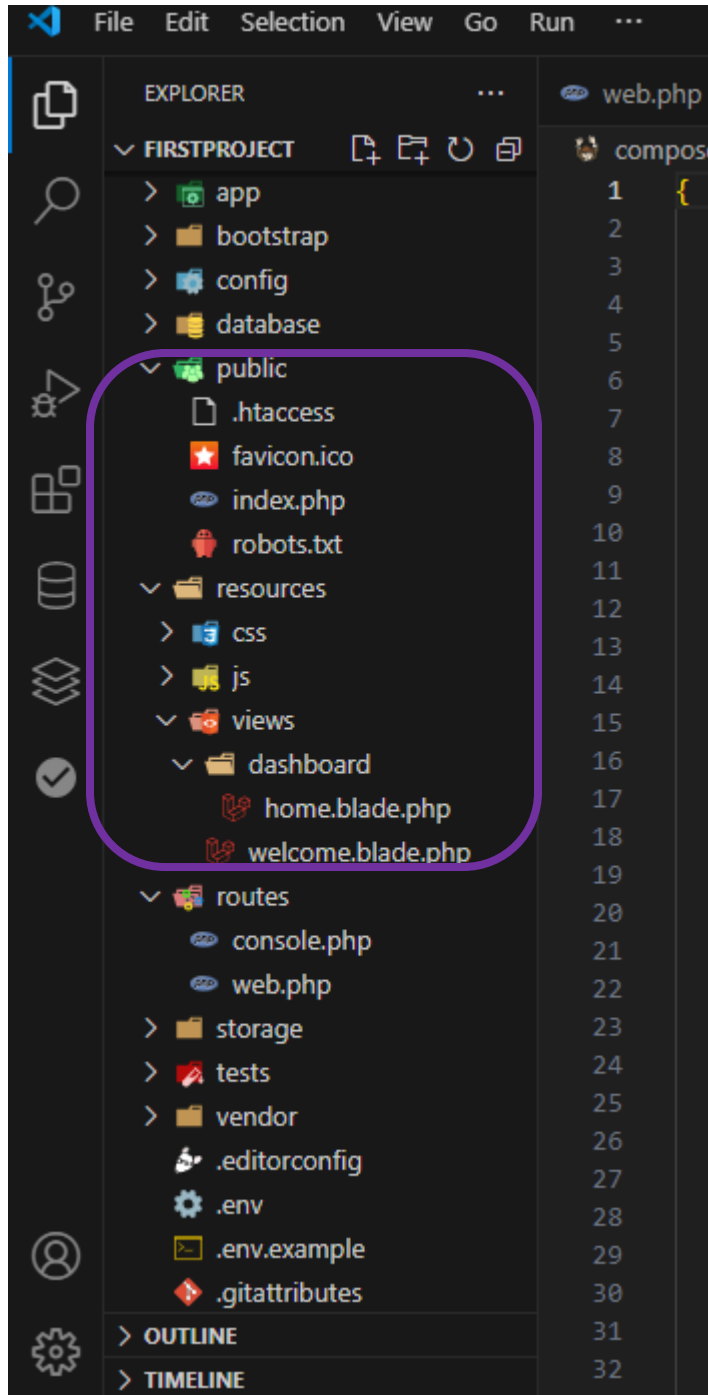


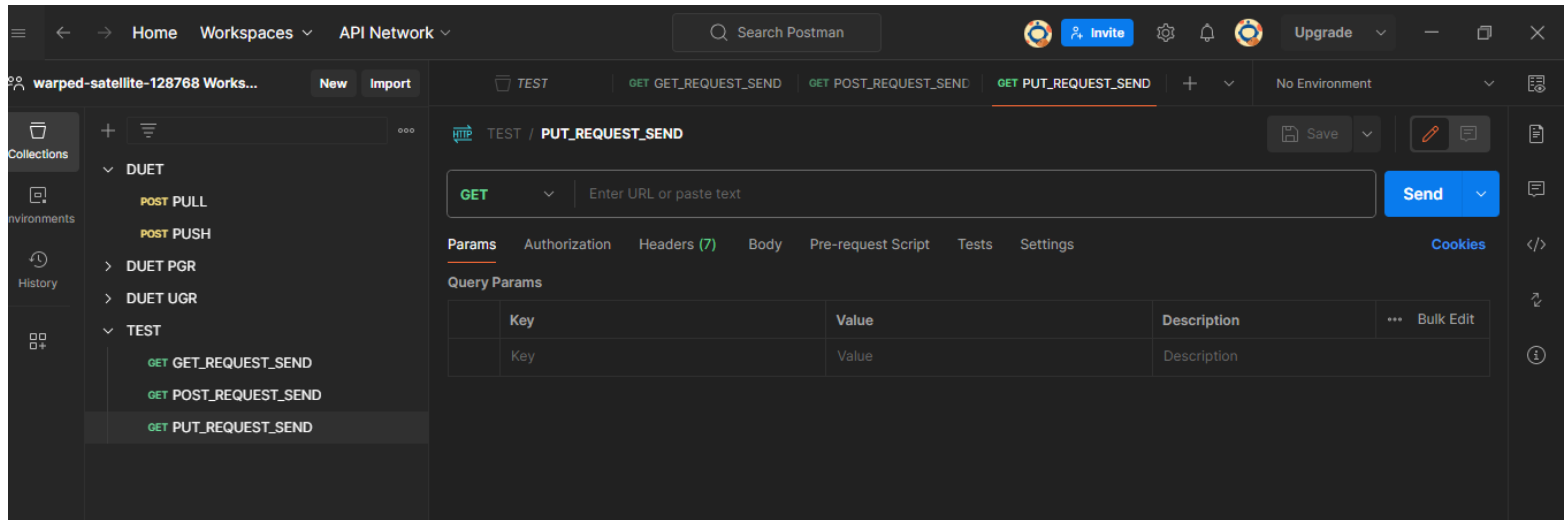
LARAVEL is server site programming Except public, resource folder (public , resource folder হচ্ছে Front End এর জন্য আর বাকি সব সার্ভার End এর জন্য। )



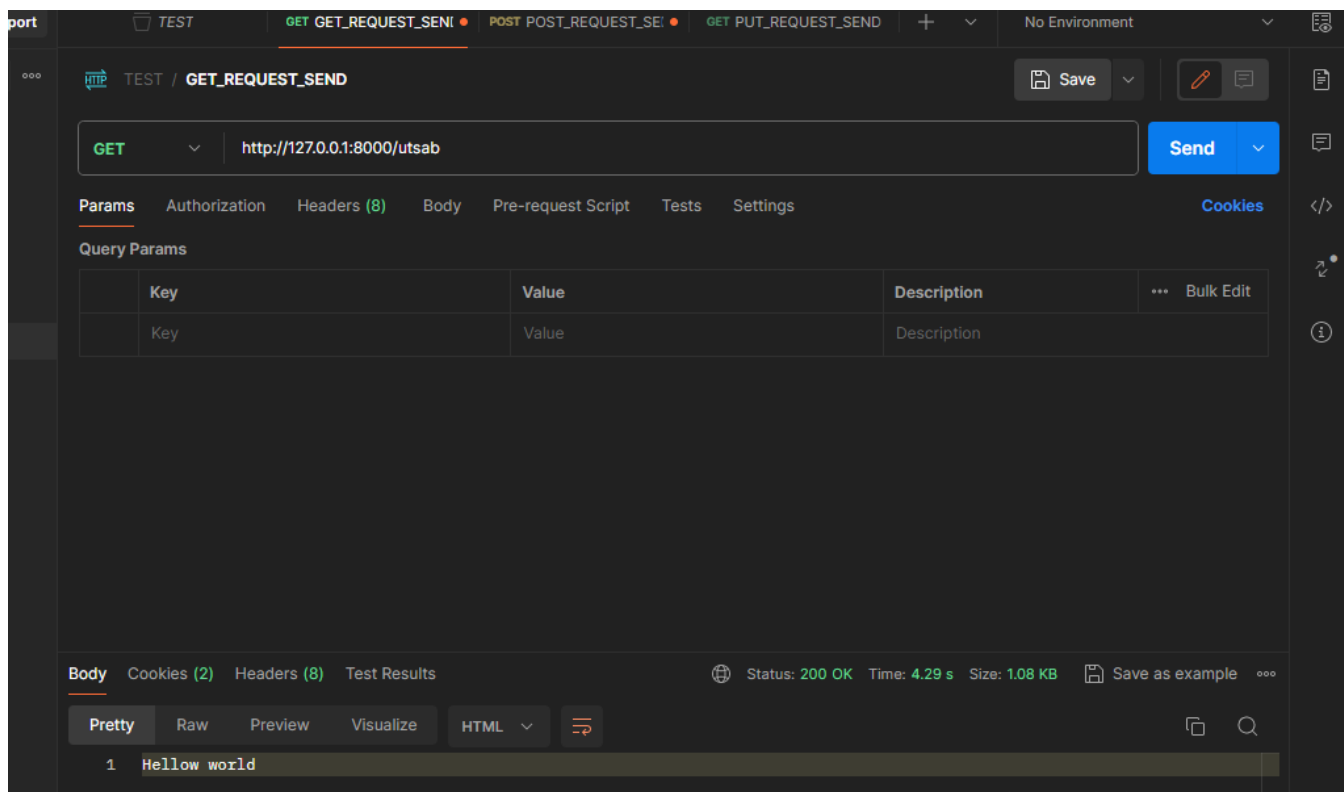
# Request-Response Routing & Controller

- Routing is the URL/URI path to send request to server
- Controller is a function/class/code respond on request and process response
- Controller acts as a bridge between a request and a response.

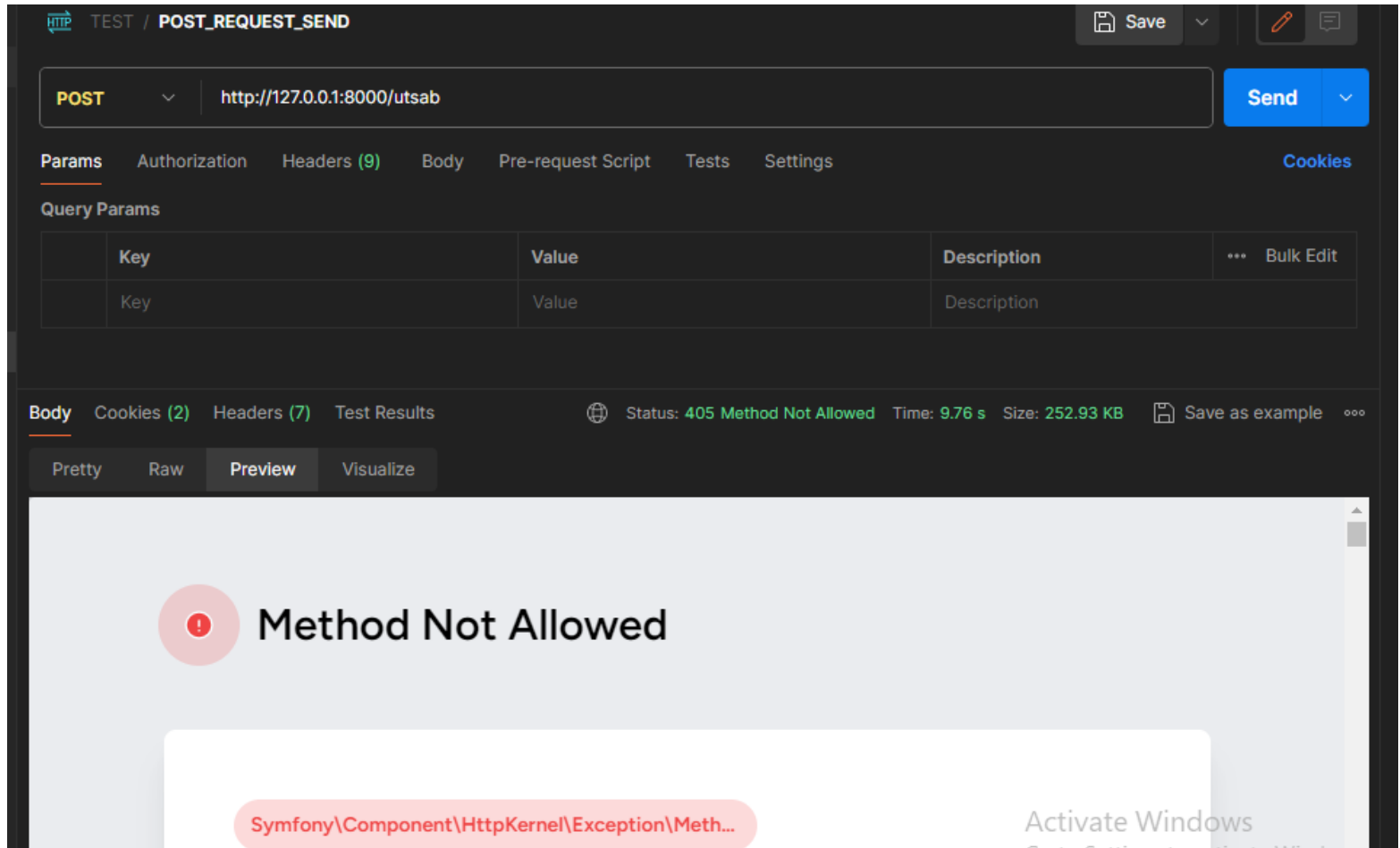
WebBrowser দিয়ে GET Request পাঠানো যায় শুধুমাত্র তবে POST,PUT request পাঠানোর জন্য POSTMAN লাগবে। POSTMAN FrontEnd হিসেবে কাজ করবে।



GET REQUEST পাঠানোর ক্ষেত্রে csrf enable থাকে না তাই GET REQUEST পাঠানোর জন্য কোন ERROR আসবে না।



কিন্তু POST Request পাঠানোর জন্য CSRF enable থাকার কারণে কোন আউটপুট আসবে না।



TEST / POST\_REQUEST\_SEND

POST http://127.0.0.1:8000/utsab

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Query Params

Key	Value	Description	...	Bulk Edit
Key	Value	Description		

Body Cookies (2) Headers (7) Test Results

Status: 405 Method Not Allowed Time: 9.76 s Size: 252.93 KB Save as example

Pretty Raw Preview Visualize

Method Not Allowed

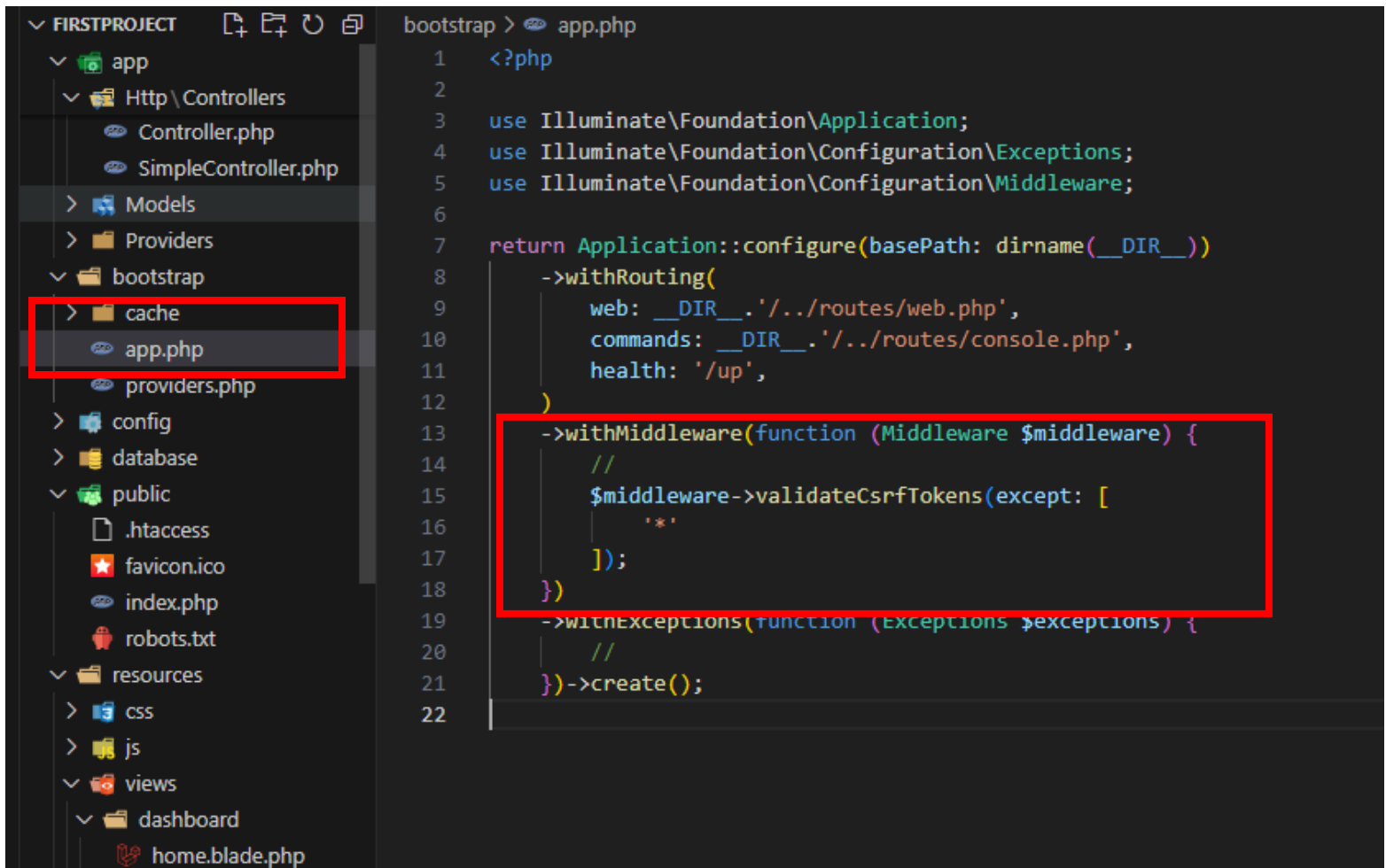
Symfony\Component\HttpKernel\Exception\Meth...

Activate Windows

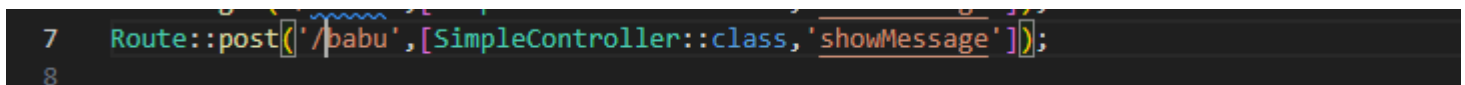
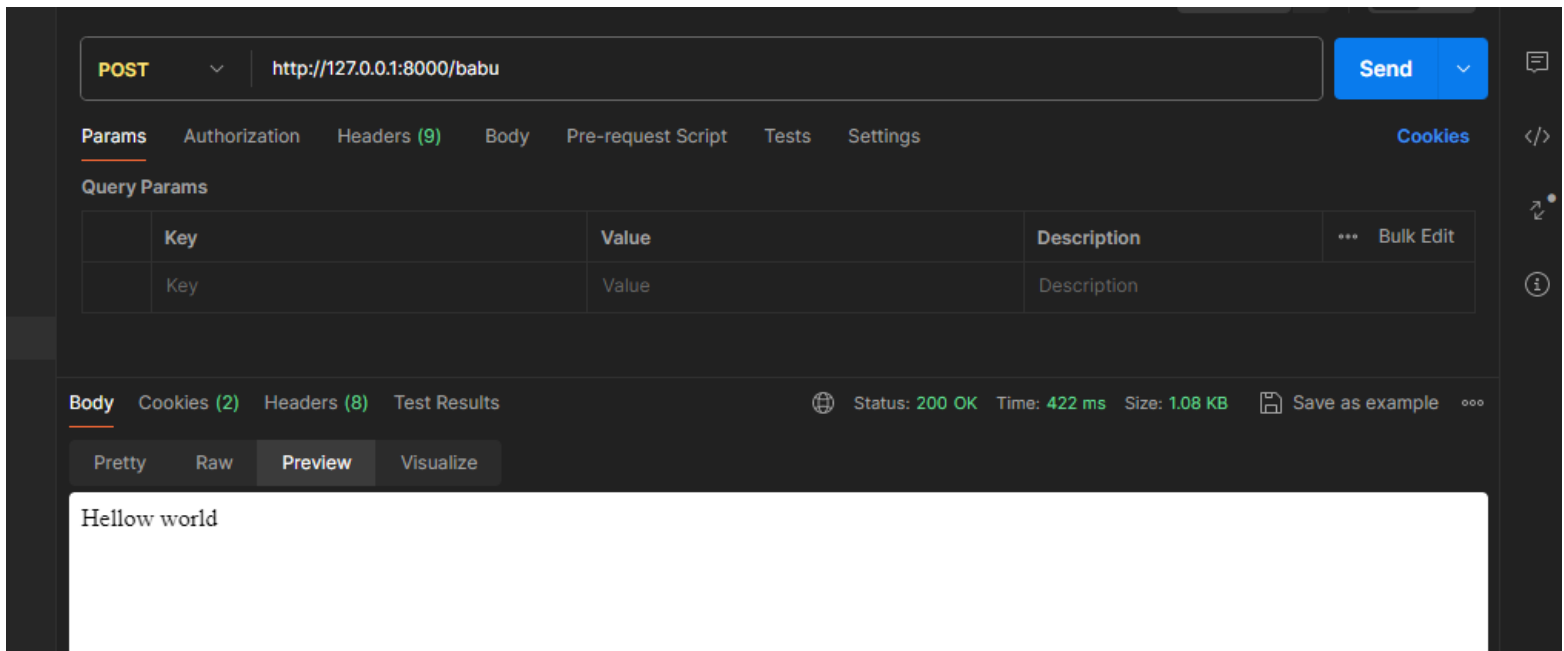
<https://laravel.com/docs/11.x/csrf#csrf-excluding-uris>

Go to above link-> copy code from that link

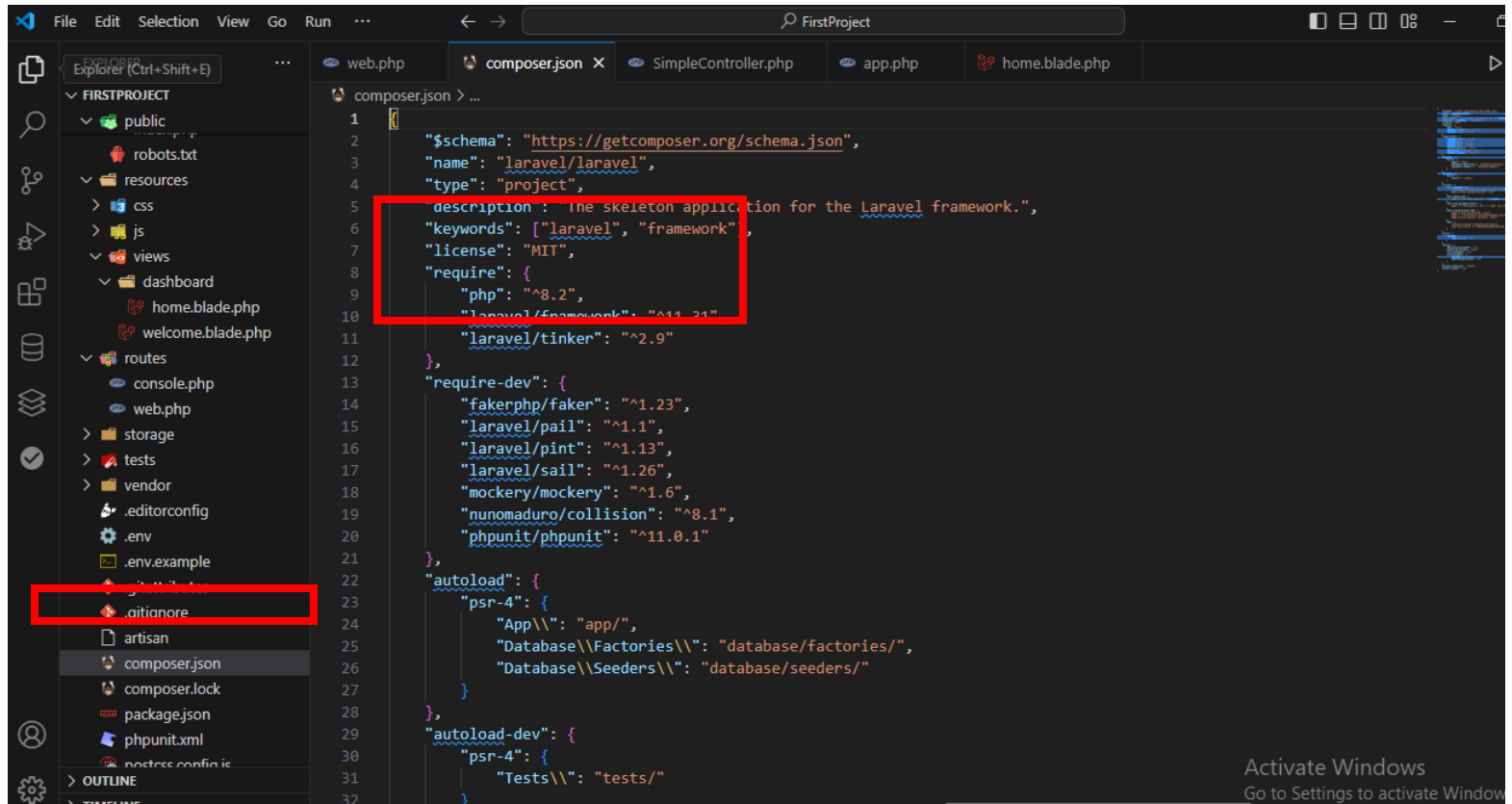
```
->withMiddleware(function (Middleware $middleware) {  
    $middleware->validateCsrfTokens(except: [  
        'stripe/*',  
        'http://example.com/foo/bar',  
        'http://example.com/foo/*',  
    ]);  
})
```



Output:



# Laravel এ Version কিভাবে জানব?



MiddleWare কেন ব্যবহার করব?

Controller এ রিকোয়েস্ট যাওয়ার আগে Middleware এ যাবে , এরপর Controller এ যাবে।

একটু আগে CSRF disable করে দিছি Middleware দিয়ে।

## 1. Filtering HTTP Requests

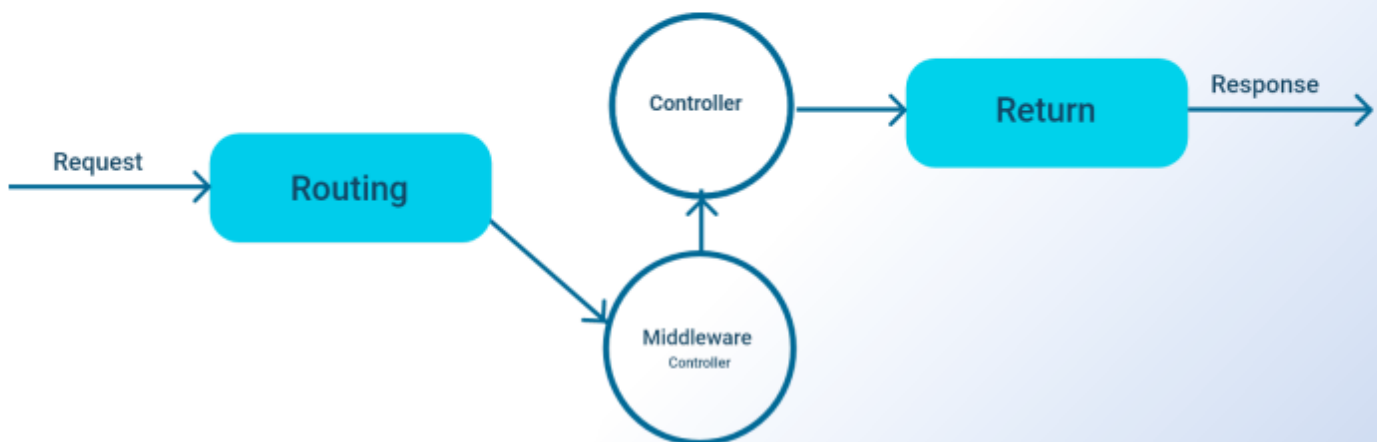
Middleware acts as a filter for incoming HTTP requests. It allows you to:

- Authenticate users before they access certain parts of the application.
- Log or track request data for debugging or analytics.
- Modify request data, such as adding headers or data processing.

**Example:** Laravel's built-in `auth` middleware checks if a user is authenticated before granting access to specific routes.

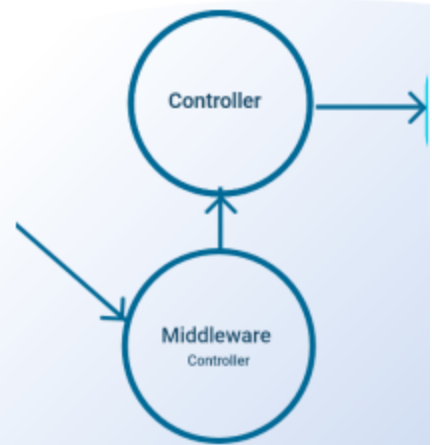
## Middleware

- Middleware is a special types of controller executed after request but before in response.
- It is a type of filtering mechanism to ensure API securities and more.
- Middleware acts as a bridge between a request and a response.



# Uses of Middleware

- Use to implement API key, user-agent restriction, CSRF, XSRF security, token based API authentication.
- Use to implement API request rate limit.
- Logging of incoming HTTP requests.
- Redirecting the users based on requests.
- Middleware can inspect a request and decorate it, or reject it, based on what it finds.
- Middleware is most often considered separate from your application logic.
- Middleware gives you enough freedom to create your own security mechanism.



# JSON Response কিভাবে পাঠাব?

(i) automatically associative array convert হয়ে যাবে json এ।

## 1. Using `response()->json()`

Laravel provides the `response()->json()` helper to send JSON responses. This is the most common approach.

```
1  <?php
2
3  namespace App\Http\Controllers;
4
5  use Illuminate\Http\Request;
6
7  class SimpleController extends Controller
8  {
9      public function showMessage(){
10         return response()->json([
11             "name"=>"utsab",
12             "roll"=>"154061",
13             "result"=>["semester1"=>"3.41","semester2"=>"3.42"]
14         ]);
15     }
16 }
17
```

POST http://127.0.0.1:8000/babu Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Query Params

Key	Value	Description	...	Bulk Edit
Key	Value	Description		

Body Cookies (2) Headers (8) Test Results

Status: 200 OK Time: 1166 ms Size: 1.14 KB Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "name": "utsab",
3   "roll": "154061",
4   "result": {
5     "semester1": "3.41",
6     "semester2": "3.42"
7   }
8 }
```




(ii)

## 2. Returning an Array

If you return an array directly from the controller method, Laravel will automatically convert it into JSON.

php

 Copy code

```
public function exampleResponse()
{
    return [
        'success' => true,
        'message' => 'Data fetched successfully',
        'data' => ['name' => 'John Doe', 'email' => 'johndoe@example.com']
    ];
}
```