

Authentication

I've chosen Token-based authentication. Due to scalability and independency.

Implementation: "src/Auth.php"

```
3 namespace ErfanGooneh\T1;
4
5 use ErfanGooneh\T1\Models\User;
6
7 class Auth
8 {
9     private const SECRET_KEY = '9afza5vpuemopj83ffu65gt9sh9v8n9s';
10     static private function getSign($header, $payload)
11     {
12         $sign = hash_hmac('sha256', $header . '.' . $payload, self::SECRET_KEY);
13         return $sign;
14     }
15 }
```

Due to [JWT](#) standards we have a constant SECRET_KEY (I've didn't include it via environmental vars) to sign the data and then hash it ([HMAC](#)).

```
static public function generateToken($payload)
{
    $payload['issued'] = time();
    $payload = base64_encode(json_encode($payload));
    $header = base64_encode(json_encode([
        'alg' => 'HS256',
        'typ' => 'JWT'
    ]));
    $sign = base64_encode(self::getSign($header, $payload));
    return "$header.$payload.$sign";
}
```

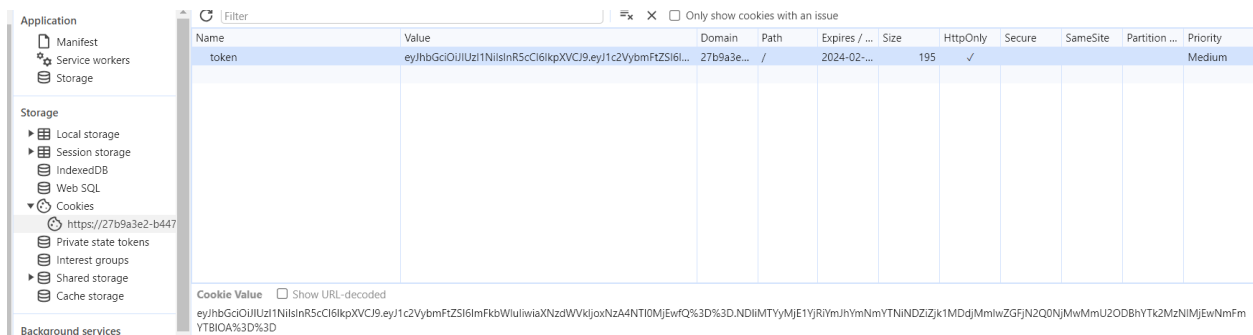
Also we use standard headers(it was not necessary) and adding IssuedTime to payload for hardening it. After that we will encode it to base64

We are setting the token to the cookie with php setcookie() function for next 24 hours.

```
$token = Auth::generateToken(['username'=>$username]);  
setcookie('token', $token, time() + 3600 * 24, '/', '', false, true);
```

Then we will get it in every request. There is a \$user variable in each view. It will be NULL if there isn't any authentication otherwise it will be an instance of User model.

Here is the token saved in the cookie and then we will retrieve it with \$_COOKIE



The screenshot shows the Chrome DevTools Application tab with the 'Storage' section expanded. Under 'Cookies', the cookie for 'https://27b9a3e2-b447' is selected. The table below lists the cookies:

Name	Value	Domain	Path	Expires / ...	Size	HttpOnly	Secure	SameSite	Partition ...	Priority
token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6ImFkbGciLCJ0eXciOiJpYyJ9.eyJ1c2VybmFtZSI6ImFkbGciLCJ0eXciOiJpYyJ9	27b9a3e...	/	2024-02-...	195	✓				Medium

Below the table, the 'Cookie Value' is displayed as: `eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmFtZSI6ImFkbGciLCJ0eXciOiJpYyJ9.eyJ1c2VybmFtZSI6ImFkbGciLCJ0eXciOiJpYyJ9`. The 'Show URL-decoded' checkbox is unchecked.