

St. Francis Institute of Technology
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Class: TE IT A & B

Academic Year: 2023-2024

Experiment – 12

To set, get and delete the cookie using Express.js

Aim: To set, get and delete the cookie using Express.js

Objective: After performing the experiment, the students will be able to set, get and delete the cookie.

Lab objective mapped: Students will be able to create back-end applications using Node.js/Express (PO3, PO5, PSO3, PSO4)

Prerequisite: Express.js

Requirements: The following are the requirements –

- PC/Laptop
- Visual Studio Code
- Browser

Theory:

Cookies are simple, small files/data that are sent to client with a server request and stored on the client side. Every time the user loads the website back, this cookie is sent with the request. This helps us keep track of the user's actions.

To use cookies with Express, we need the cookie-parser middleware. To install it, use the following code –

npm install --save cookie-parser

Now to use cookies with Express, we will require the **cookie-parser**. cookie-parser is a middleware which parses cookies attached to the client request object. To use it, we will require it in our **index.js** file; this can be used the same way as we use other middleware. cookie-parser parses Cookie header and populates **req.cookies** with an object keyed by the cookie names. To set a new cookie, let us define a new route in Express app like –

```
var express = require('express');
var app = express();
app.get('/',
function(req, res){
  res.cookie('name', 'express').send('cookie set'); //Sets name = express
```

```
});
```

```
app.listen(3000);
```

- **Deleting Existing Cookies**

```
var express = require('express');  
var app = express();  
app.get('/clear_cookie_foo',  
function(req, res){  
  res.clearCookie('foo');  
  res.send('cookie foo cleared');  
});  
app.listen(3000);
```

Laboratory Exercise:

A. Procedure

- Check version of node.js (node -v)

```
PS C:\Users\Student\Desktop\Sherwin> node -v  
v18.14.0
```

- Check version of npm (npm -v)

```
PS C:\Users\Student\Desktop\Sherwin> npm -v  
9.3.1
```

- Create package.json file (npm init)
- Install express from terminal using following commands -
 - npm install express --save

```
PS C:\Users\Student\Desktop\Sherwin> npm install express  
  
added 58 packages in 6s  
  
9 packages are looking for funding  
run `npm fund` for details
```

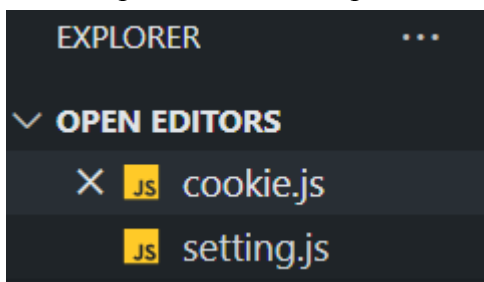
- Install nodemon – the command line tool using the following command:
 - npm install nodemon

```
PS C:\Users\Student\Desktop\Sherwin> npm install nodemon
added 33 packages, and audited 92 packages in 4s

12 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

- Open vs-code and open the folder.



- Create a .js file.
- Write the code.

```
JS cookie.js > ...
1 // Require the 'express' module
2 var express = require('express');
3
4 // Create an instance of the Express application
5 var app = express();
6
7 // Define a route for the root URL '/'
8 app.get('/', function(req, res){
9   // Set a cookie with the name 'name' and value 'express'
10   res.cookie('name', 'express').send('cookie set'); // Sets name = express
11 });
12
13 // Start the Express application on port 3000
14 app.listen(3000);
15
```

- To get the output go to the terminal and execute the command=>
 - nodemon filename.js

```
PS C:\Users\Student\Desktop\Sherwin> node cookie.js
```

- Visit the browser to see the output.



cookie set

B. Program Code

Write a code to set, get and delete the cookie in express.

```

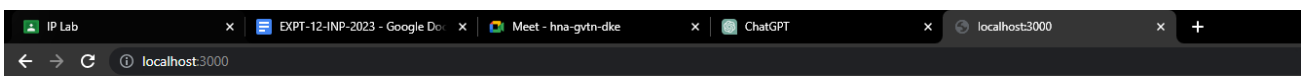
JS cookie.js > ...
17  var express = require('express');
18
19  // Create an instance of the Express application
20  var app = express();
21
22  // Define a route to clear the 'foo' cookie
23  app.get('/', function(req, res){
24    // Clear the 'foo' cookie
25    res.clearCookie('foo');
26    res.send('Cookie "foo" cleared');
27  });
28
29  // Start the Express application on port 3000
30  app.listen(3000);

```

```

PS C:\Users\Student\Desktop\Sherwin> node cookie.js

```



Cookie "foo" cleared

Post Experimental Exercise-

What is cookie-parser in express? Why it is used?

What is the cookie value?

Results/Observations/Program output:

Present the program code and output

Conclusion:

Write what was performed in the experiment.

References:

- https://www.tutorialspoint.com/expressjs/expressjs_cookies
- <https://www.geeksforgeeks.org/express-js-res-clearcookie-function/>
- <https://dirask.com/posts/Express-js-delete-cookie-jvoAb1>
- <https://www.w3jar.com/node-express-js-cookies/>