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3nd Year (5th semester)

Experiment No: 12

Aim: - Install Express Js Framework and WAP take first name and last name

Theory :-

Express

- Express is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications.
- It facilitates the rapid development of Node based Web applications.

Express framework –

- Allows to set up middlewares to respond to HTTP Requests.
- Defines a routing table which is used to perform different actions based on HTTP Method and URL.
- Allows to dynamically render HTML Pages based on passing arguments to templates.

Installing Express

Firstly, install the Express framework globally using NPM so that it can be used to create a web application using node terminal.

```
$ npm install express --save
```

The above command saves the installation locally in the node_modules directory and creates a directory express inside node_modules.

Express.js GET Request

GET and POST both are two common HTTP requests used for building REST API's. GET requests are used to send only limited amount of data because data is sent into header while POST requests are used to send large amount of data because data is sent in the body. Express.js facilitates you to handle GET and POST requests using the instance of express.

Fetch data in JSON format:

Get method facilitates you to send only limited amount of data because data is sent in the header. It is not secure because data is visible in URL bar.

Code:

Router.js

```
const express = require ("express");
var app = express();
var port  = 9000;

var router1 = express.Router();
var router2 = express.Router();
var router3 = express.Router();


router1.get("/user", function (re1, res, next) {
    console.log("user router working");
    res.end();
});

router2.get("/student", function (re1, res, next) {
    console.log("Student Router");
    res.end();
});

router1.get("/admin", function (re1, res, next) {
    console.log("Admin router");
    res.end();
```

```
});

app.use(router1);
app.use(router2);
app.use(router3);

app.listen(port, function (err) {
    if(err) console.log(err);
    console.log("Server on port ", port);
});
```

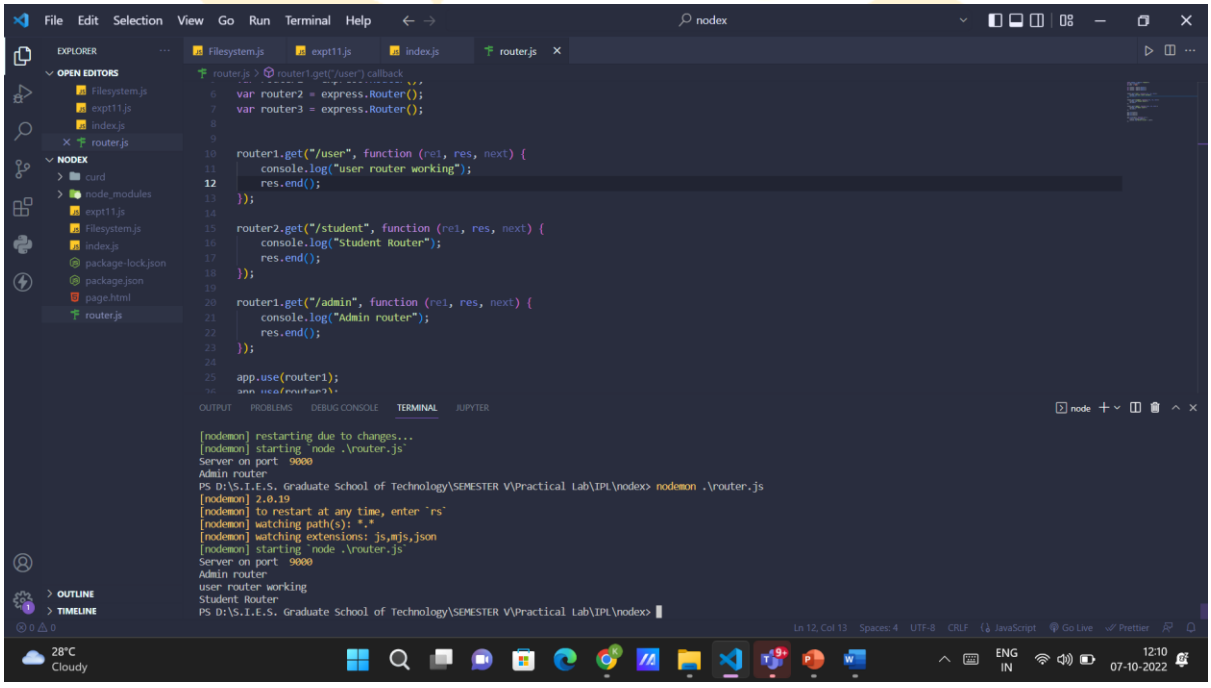
getex.js

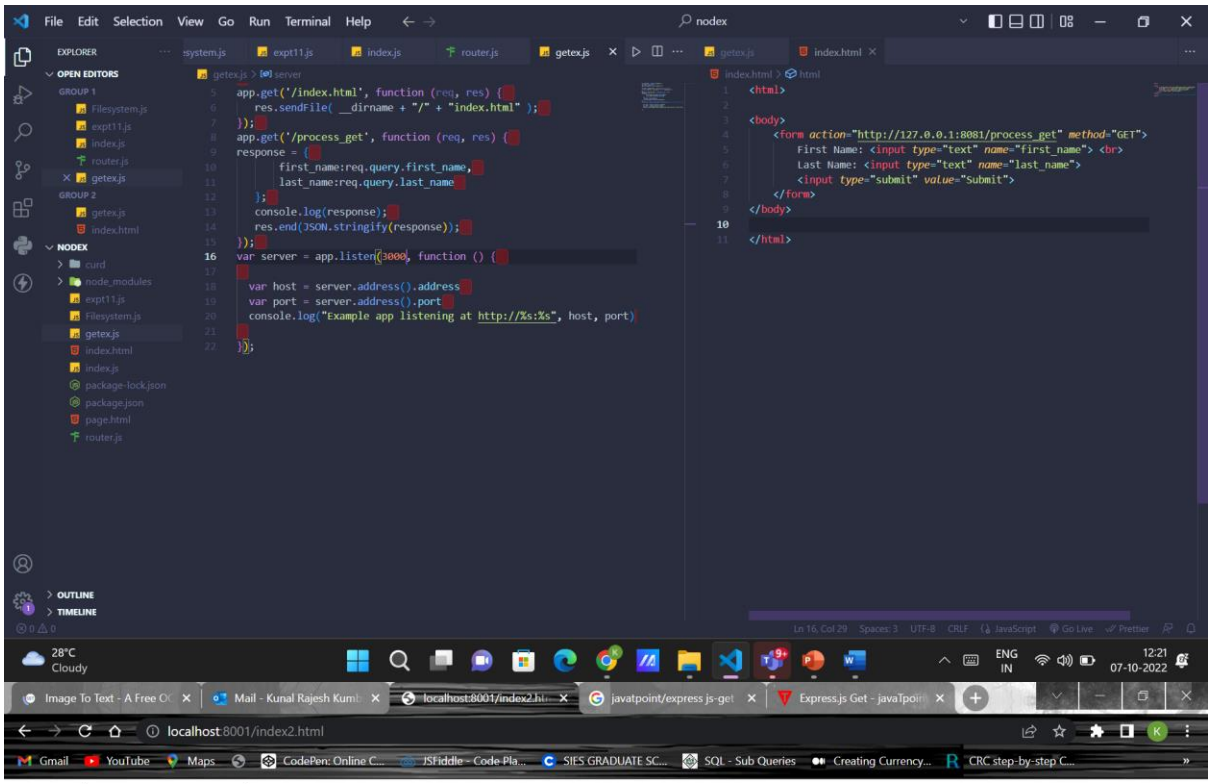
```
var express = require('express');
var app = express();
app.use(express.static('public'));

app.get('/index.html', function (req, res) {
   res.sendFile( __dirname + "/" + "index.html" );
});
app.get('/process_get', function (req, res) {
response = {
       first_name:req.query.first_name,
       last_name:req.query.last_name
   };
   console.log(response);
   res.end(JSON.stringify(response));
});
var server = app.listen(8082, function () {

  var host = server.address().address
  var port = server.address().port
  console.log("Example app listening at http://%s:%s", host, port)

});
```

Index.html

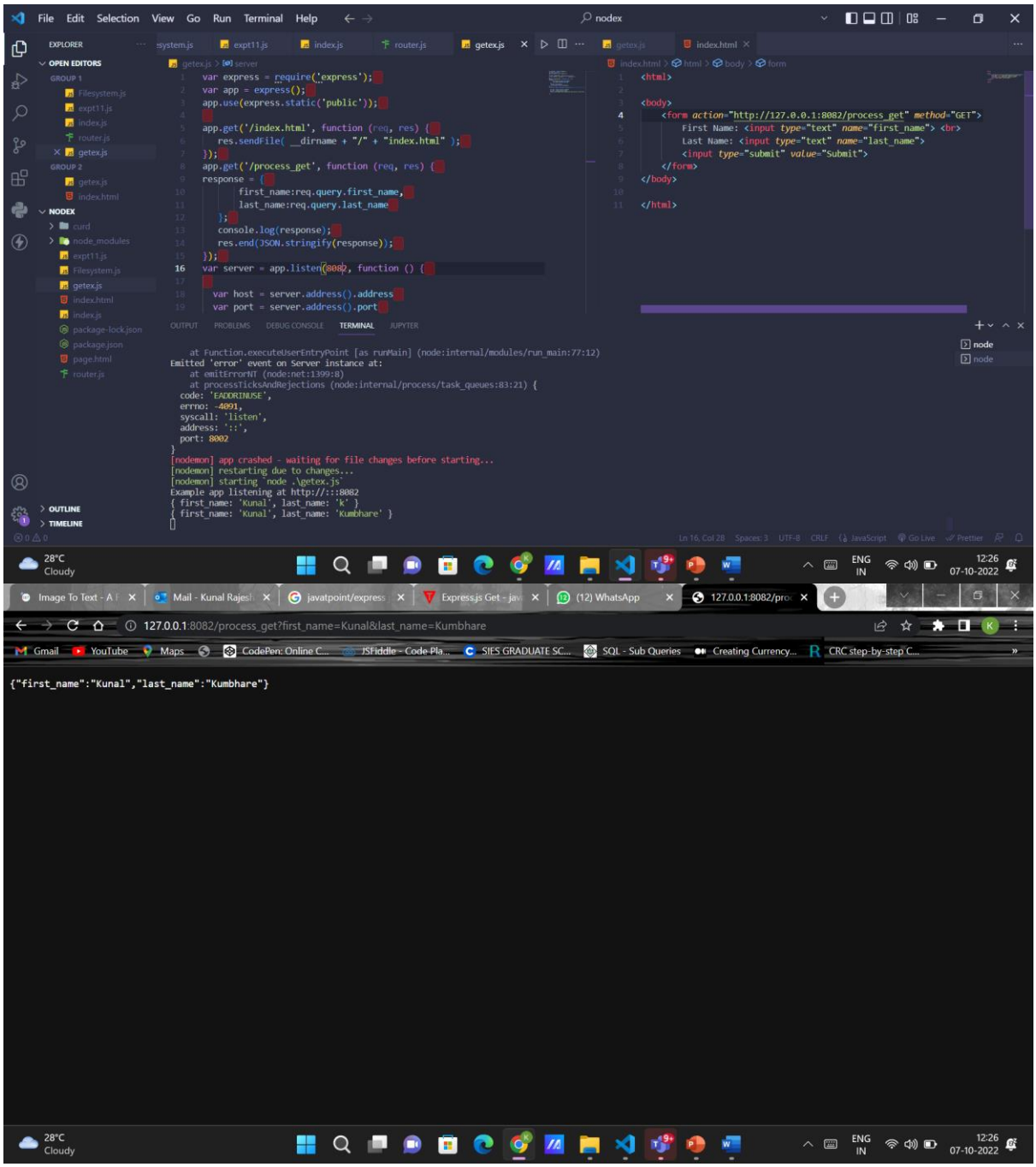
```
<html>

<body>
    <form action="http://127.0.0.1:8082/process_get" method="GET">
        First Name: <input type="text" name="first_name"> <br>
        Last Name: <input type="text" name="last_name">
        <input type="submit" value="Submit">
    </form>
</body>

</html>
```

Output :





First Name: Kunal
Last Name: Kumbhare Submit



Conclusion:

Thus, we have successfully able to Install Express Js Framework and WAP take first name and last name in Json Format.