INTERNET PROGRAMMING LAB

Ex8

Programs using Node.js

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Learning Objective:

To implement programs using Node js.

Specifications:

- a. Write a Node.js program that reads all the greetings from the file greetings.txt, asks the user "What is your name?", then prints a random greeting followed by the given name. Make sure to check for the case where the file doesn't exist! For example, if the greeting is "Hey", then the program will print "Hey, Joe" to the console, then pick some other greeting and do the same until finished. Use Non-blocking I/O.
- b. Write a Node.js program that reads all the greetings as before. When all the greetings are loaded, it creates a server listening on port number 8080. On request, it checks for whether there is a name value in the query string. If there isn't, the value of query.name will be undefined.

Code:

greet.js

```
var fs = require("fs");
var readline = require("readline");

var rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout
});

if(!fs.existsSync("greetings.txt")) {
  console.log("File not found");
  rl.close();
}
```

```
else {
    var greetingsFile = fs.readFileSync("greetings.txt");
    var greetings string = greetingsFile.toString();
    var greetings = greetings string.split("\r\n");
    var count=0;
    var index=[];
    rl.question("What is your name? ", function(name) {
       for(var i = 0; count < greetings.length; i++) {</pre>
            var n=Math.floor(Math.random() * greetings.length);
            var check=index.includes(n);
            if(!check)
                index.push(n);
                var temp=greetings[n]+", "+name;
                console.log(temp);
                count=count+1;
            }
        1
        rl.close();
});
1
greetser.js
var http = require("http");
var fs = require("fs");
var url = require("url");
var greetings;
fs.readFile("greetings.txt", function(err, body) {
  if (err === null) {
    greetings = body.toString().split("\r\n");
    if (greetings.slice(-1) == "") {
       greetings.pop();
    var server = http.createServer(function(req, res) {
      res.writeHead(200);
      var query = url.parse(req.url, true).query;
      var name = query.name;
      var greeting = greetings[Math.floor(Math.random() *
greetings.length)];
      if (name) {
       res.end(greeting + ", " + name);
      } else {
        res.end(greeting);
      }
    });
    server.listen(8080);
  } else {
    console.log(err);
  }
});
```

greetings.txt

Hello

Hey

Hi

What's up

Welcome

Screenshots:

```
PS E:\My Folder\IP Lab\Ex8> node greet.js
What is your name? Viki
Hello, Viki
Welcome, Viki
Hey, Viki
Hi, Viki
What's up, Viki
PS E:\My Folder\IP Lab\Ex8>
```

```
← → C ① localhost:8080/?name=viki
```

Hi, viki

Learning Outcome:

- I have understood the working of Node js server.
- I have learnt to use JSX arrow functions.
- I have learnt to print the output in console.
- I have learnt about random function and arrays in node js.
- I have understood file manipulation using node js.