
UCS 1611 - Internet Programming Lab

Exercise 8: Program using Node JS

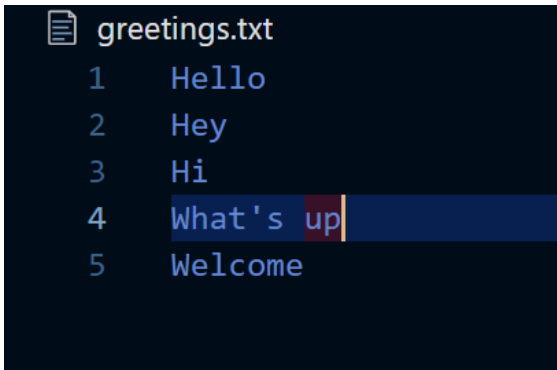
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Learning objective:

- To 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.
- To 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. In other words, if you access `http://localhost:8080/?name=Mike`, then your browser should just display something like "Hello, Mike" when the page loads.

Code

greetings.txt



```
greetings.txt
1 Hello
2 Hey
3 Hi
4 What's up
5 Welcome
```

assign8.1.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("\n");

  rl.question("What is your name? ", function(name) {
    for (var i = 0; i < 1; i++) {
      var n = Math.floor(Math.random() * greetings.length);
      console.log(greetings[n]);
      console.log(name);
    }
    rl.close();
  });
}
```

assign8.2.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("\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);
}
});

```

OUTPUTS:

assign8.1.js

```

C:\Users\Admin\OneDrive\Desktop\Semester VI\Labs and Mini Project\IP Lab\Assignment 8>node assign8.1.js
What is your name? Swetha
Hey
Swetha

C:\Users\Admin\OneDrive\Desktop\Semester VI\Labs and Mini Project\IP Lab\Assignment 8>node assign8.1.js
Hello
Swetha

C:\Users\Admin\OneDrive\Desktop\Semester VI\Labs and Mini Project\IP Lab\Assignment 8>node assign8.1.js
What is your name? Swetha
Hi
Swetha

```

assign8.2.js

```

C:\Users\Admin\OneDrive\Desktop\Semester VI\Labs and Mini Project\IP Lab\Assignment 8>node assign8.2.js

```

localhost:8080/?name=swetha

Hey
, swetha

localhost:8080/?name=swetha

Hello
, swetha

localhost:8080/?name=abi

Hi
, abi