

Intro to NodeJS

DS4KP

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My Introduction

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Level 2 Seller



Course Outline

- Introduction to NodeJS
- Node's Module
- File System
- NPM

Intro to NodeJS

- Node.js is an open source server environment
- NodeJs is free
- Node.js runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- Node.js uses JavaScript on the server

Installing NodeJs

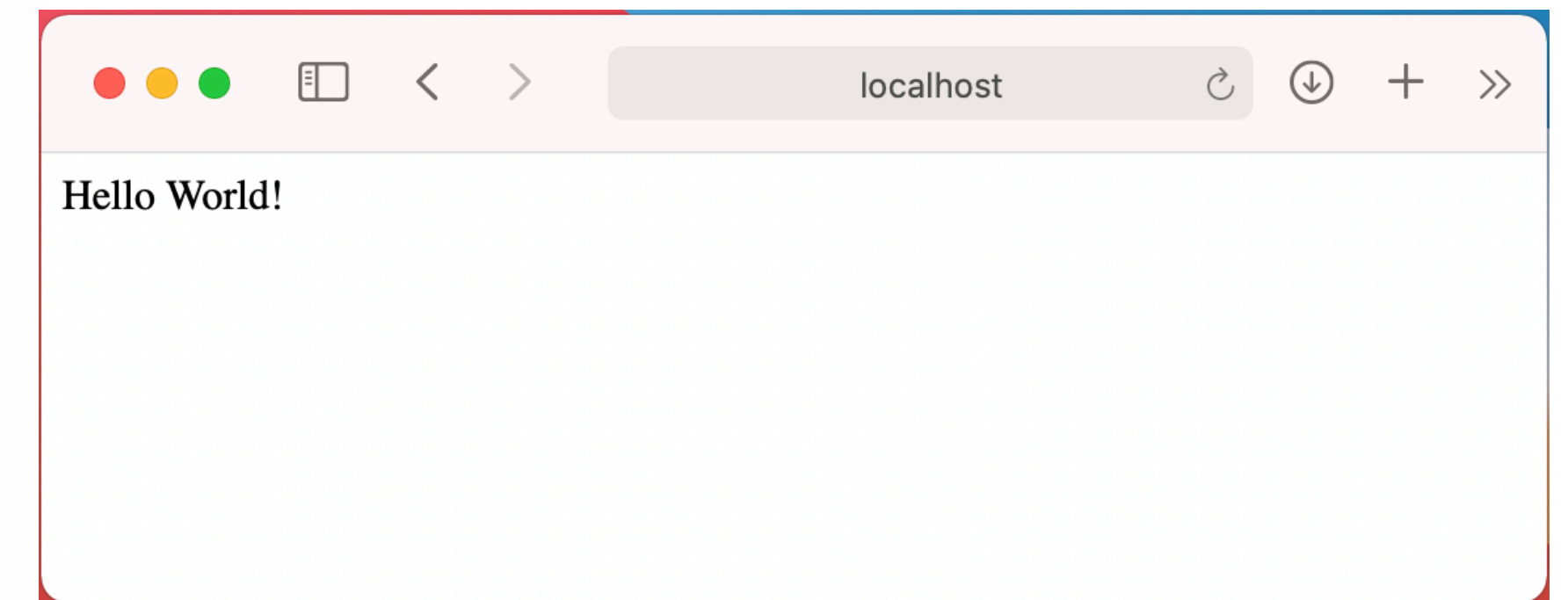
- Go to <https://nodejs.dev>
- Click Download
- Install it.
- Type “node -v” in the terminal

First Program



```
var http = require('http');

http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type':
    'text/html'});
  res.end('Hello World!');
}).listen(8080);
```



<http://localhost:8080>

Read File



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

fs.readFile("hello.txt", function (err, data) {
  if (err) {
    console.log("Error occurred: ", err);
  } else {
    console.log(data.toString());
  }
});

console.log("Program ended");
```

Output

```
sami@192 first % node second.js
Program ended
This is second program
sami@192 first %
```


Read File Asynchronously



```
var fs = require("fs");  
  
var data = fs.readFileSync("hello.txt");  
  
console.log(data.toString());  
console.log("Program ended");
```

Output

```
sami@192 first % node fifth.js  
This is second program  
Program ended  
sami@192 first %
```


Writing File

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

fs.writeFile("fourth.txt", "Write this data", function (err) {
  if (err) {
    console.log("Error while writing file: ", err);
  } else {
    console.log("Data written: ");
  }
});

console.log("Program Ended");
```

Output

```
sami@192 first % node fourth.js
Program Ended
Data written:
sami@192 first %
```

Writing File



```
var fs = require("fs");  
  
fs.writeFileSync("fouth.txt", "New data");  
console.log("Data Written");  
  
console.log("Program Ended");
```

Output

```
sami@192 first % node fourth.js  
Data Written  
Program Ended  
sami@192 first % █
```

Open file



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

fs.open("mynewfile2.txt", "w", function (err, file) {
  if (err) {
    console.log("Error", err);
  }
  console.log("Saved!");
});
```

Output

```
sami@192 first % node six.js
Saved!
sami@192 first %
```

Delete File



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

fs.unlink("mynewfile2.txt", function (err) {
  if (err) {
    console.log("Error", err);
  }
  console.log("File deleted!");
});
```

Output

```
sami@192 first % node seven.js
File deleted!
sami@192 first % █
```

NPM - Node Package Manager

- Project should be initialized
 - `npm init`
- Install Server
 - `npm install express --save`

Express Server



```
const express = require("express");
const app = express();
const port = 3000;

app.get("/", (req, res) => {
  res.send("Hello World!");
});

app.listen(port, () => {
  console.log(
    `Example app listening at http://localhost:${port}`
  );
});
```

Output

