Backend Tutorial: Node.Js Introduction and Installation | Web Development Tutorials #63

From this tutorial, we are going to learn the backend part of web development. We will see what Node.Js is and learn how to install it to begin the backend coding.
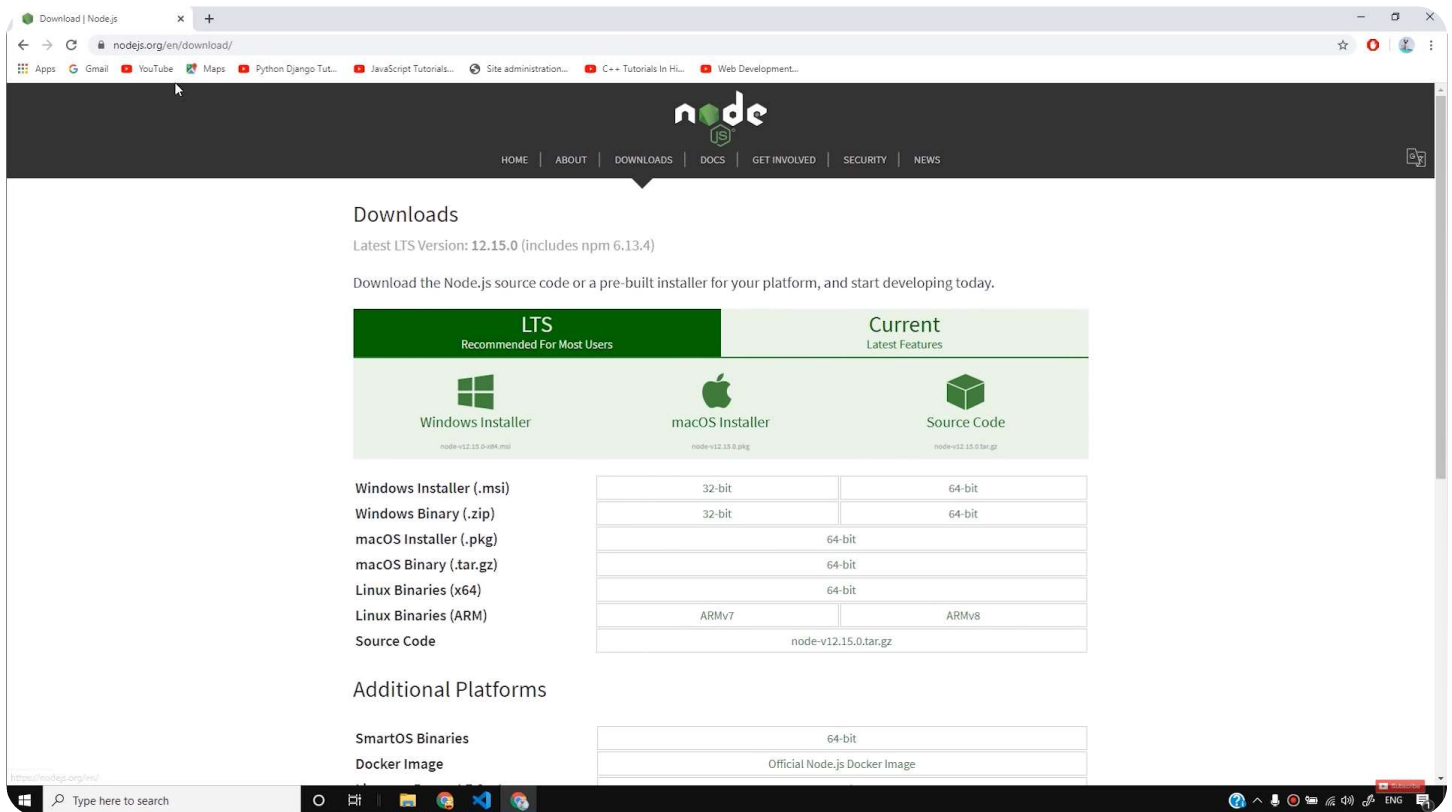
What is Node.Js?

- Node.Js is a JavaScript runtime built on *Chrome's V8 JavaScript engine.*

- Node.Js is designed to build scalable network applications.

- Node.Js can be download from the official Node.js website.

- Node.Js is a free and open-source server environment.

- Node.Js allows us to run JavaScript on the server.

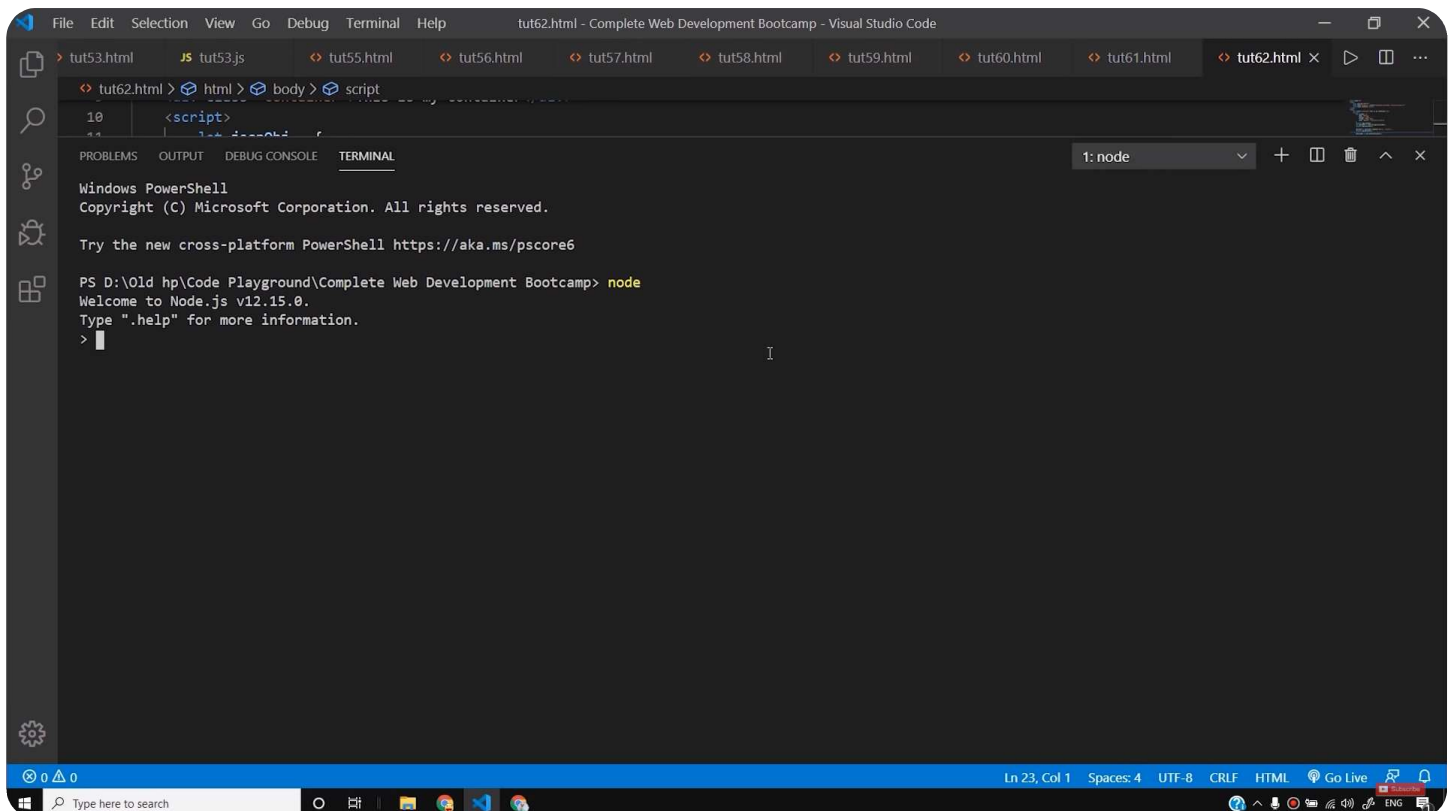- Node.Js can run on multiple operating systems.

Why use Node.Js?

- You can use JavaScript in the entire stack.

- Many famous companies use Node.Js as their backend.

- Node.Js comes with a lot of useful built-in modules.

- Node.Js is fast.

You can download and install Node.Js from its official [website](). You will see a page like this and then can select the compatible version for your operating system.

After the downloading gets completed, you can simply install Node.Js. When the installation gets completed, you can open the VS code, then click on *terminal > new terminal* and write *node.* As soon as you write it you will get the output "**Welcome to Node**" as follows-

This is the Node.Js terminal and we can write the same JavaScript here that we were writing before. Before writing an ideal JavaScript code for Node.Js, let us make a new file as *tut63.js* and write as

follows-

```
console.log("Hello world");
```

To execute it we have to write *Node \tut63.js* in the terminal section. But to run the server with the help of Node.Js, we can simply write the code as follows-
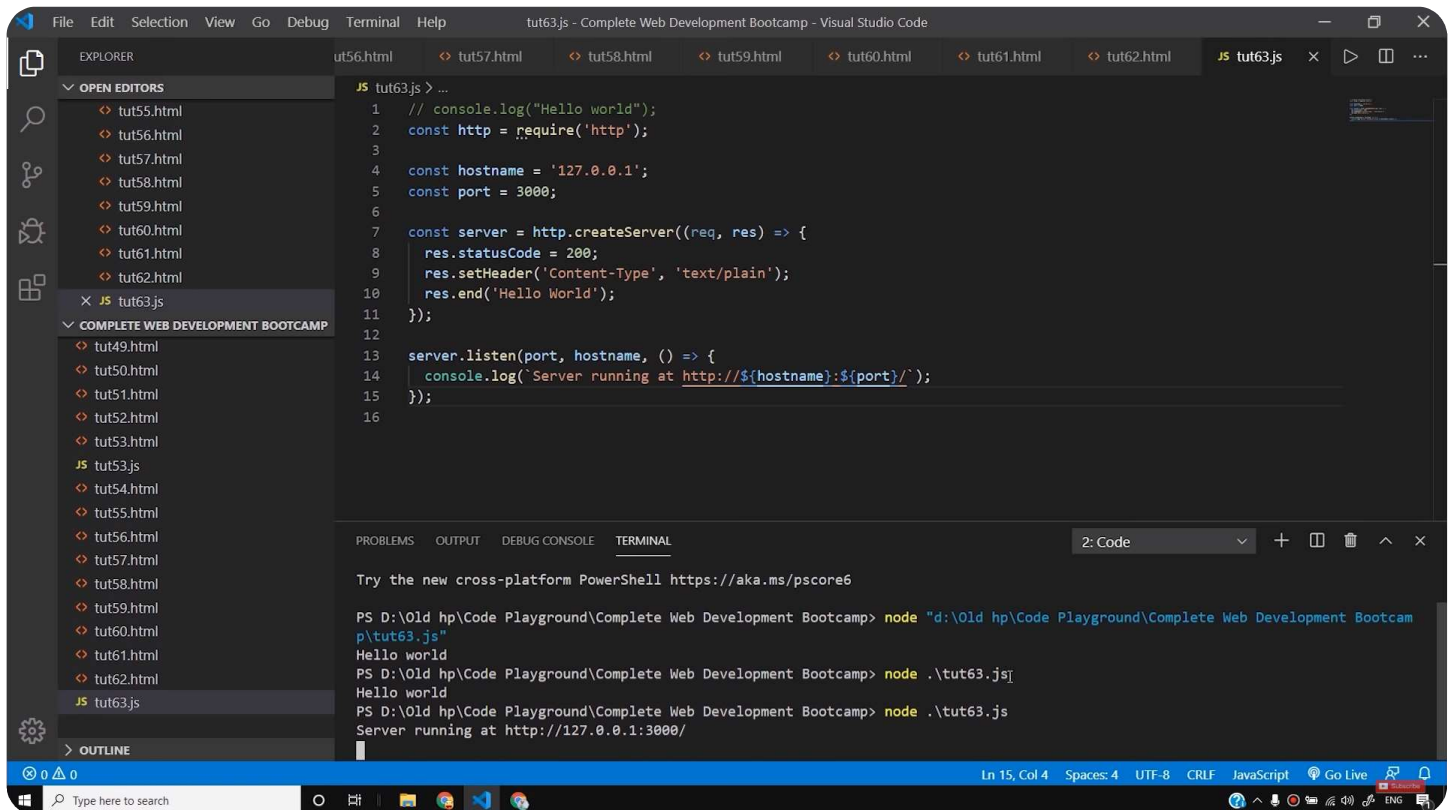
```
const http = require('http');

const hostname = '127.0.0.1';
const port = 3000;

const server = http.createServer((req, res) => {
  res.statusCode = 200;
  res.setHeader('Content-Type', 'text/plain');
  res.end('Hello World');
});

server.listen(port, hostname, () => {
  console.log(`Server running at http://${hostname}:${port}/`);
});
```

If we execute the above code, we get the output as follows-

By clicking it, we see the output as **Hello World.** It means that we have our own server with the help of Node.js. In the same way, we can pass any HTML code in place of "Hello world". By doing so, we can make that page live by staring at our own server.

So I hope, you must have understood what is node and how to install it. In this tutorial, we have also made our own server. In the upcoming videos, we will see some more tools like *express*. Till then stay with the tutorials.

Code as described/written in the video

```javascript
// console.log("Hello world");
const http = require('http');


const hostname = '127.0.0.1';
const port = 3000;


const server = http.createServer((req, res) => {
  res.statusCode = 200;
  res.setHeader('Content-Type', 'text/html');
//   res.end('Hello World this is Rohan Das');
  res.end(`<!DOCTYPE html>
<html lang="en">
```

```html
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Pseudo selectors & more designing</title>
    <style>
        .container{
            border: 2px solid red;
            background-color: rgb(223, 245, 201);
            padding: 34px;
            margin: 34px auto;
            width: 666px;
        }
        a{
            text-decoration: none;
            color: black;
        }
        a:hover{
            color: rgb(5, 0, 0);
            background-color: rgb(221, 166, 38);
        }
        a:visited{
            background-color: yellow;
        }
        a:active{
            background-color:darkblue;
        }
        .btn{
            font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-ser
            font-weight: bold;
            background-color: crimson;
            padding:6px;
            border: none;
            cursor:pointer;
            font-size: 13px;
            border-radius: 4px;
```

```
            }
            .btn:hover{
                color:darkgoldenrod;
                background-color:rgb(223, 245, 201);
                border: 2px solid black;
            }
        </style>
    </head>
    <body>
        <div class="container" id="cont1">
            <h3>This is my heading</h3>
            <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Ob
            <a href="https://yahoo.com" class="btn">Read more</a>
            <button class="btn">Contact us</button>
        </div>
    </body>
    </html>`);
});

server.listen(port, hostname, () => {
  console.log(`Server running at http://${hostname}:${port}/`);
});
```