Node.js Intro

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Download Code:
https://drive.google.com/drive/folders/1LDniUXgY52ZKE6TQ_Kf111P4gmUHCpil?usp=sharing

Install Node.js

https://nodejs.org/en/download/current/

Install Version 18.10.0+

node -v

Hello Node.js

mkdir zia
cd zia
npm init

// Read https://nodejs.org/api/esm.html#modules-ecmascript-modules

Open VSCode and create File hello.mjs

console.log(“Hello from Zia”);

node hello.mjs

addTwo.mjs File

```
// addTwo.mjs

function addTwo(num) {

  return num + 2;

}

export { addTwo };
```

app.mjs File

```
// app.mjs

import { addTwo } from './addTwo.mjs';


// Prints: 6

console.log(addTwo(4));
```

.mjs versus .js

In this course upto now, we've used .js extensions for our module files, but from now on you may see the .mjs extension used instead. V8's documentation recommends this (https://v8.dev/features/modules#mjs) , The reasons given are:

- It is good for clarity, i.e. it makes it clear which files are modules, and which are regular JavaScript.
- It ensures that your module files are parsed as a module by runtimes such as Node.js, and build tools such as Babel.
- On the Web, the file extension doesn’t really matter, as long as the file is served with the JavaScript MIME type text/javascript. The browser knows it’s a module because of the type attribute on the script element.

Http Simple Server in Node.js

mkdir simpleServer
cd simpleServer
npm init
npm install express

// Check the node_modules directory

Open VSCode and create File index.mjs

node index.mjs

index.mjs

```
//index.mjs

import express from 'express';

const app = express();

app.get('/',(req,res) => {
    res.send('Zia Responding from HTTP Server');
})

const PORT = 5001;

app.listen(PORT,() => {
    console.log(`Running on PORT ${PORT}`);
})
```

User Input in JavaScript

Learn how to accept user input in your Node.js JavaScript programs, this will allow us to create interactive Node.js console programs.

Create Project Directory:

mkdir myUserInputProgram

Now create package.json and node.js project:

npm init

Install prompt-syc Library:

npm install prompt-sync

index.mjs

```
//index.mjs

import promptSync from 'prompt-sync';
const prompt = promptSync();

var name = prompt("What is your name?");

console.log(name);

const num = prompt('Enter a number: ');
console.log('Your number + 4 =');
console.log(Number(num) + 4);
```