Lesson 05 Demo 06

Working with Webpack and Modern JavaScript

Objective: To work with Webpack and modern JS

Tools required: Visual Studio Code

Prerequisites: NA

Steps to be followed:

1. Writing a JavaScript program for webpack
2. Executing and verifying the working of webpack

Step 1: Writing a JavaScript program for webpack:

1.1 Execute the following command to check the node version:

node -v

1.2 Create a folder *webpack* and write the following command to create the folder and navigate to the ***webpack*** directory:

mkdir webpack
cd webpack

1.3 Initialize a ***package.json*** by running the following command:
npm init

Leave all options as default.

```
labuser@ubuntu2204:~/Desktop/Demo/Demo 9/webpack$ npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (webpack)
version: (1.0.0)
description:
entry point: (index.js)
test command:
git repository:
keywords:
author:
license: (ISC)
About to write to /home/labuser/Desktop/Demo/Demo 9/webpack/package.json:
```

1.4 Write the following command to install the webpack Command Line Interface (CLI):

npm install webpack webpack-cli --save-dev

```
labuser@ubuntu2204:~/Desktop/Demo/Demo 9/webpack$ npm install webpack webpack-cli --save-dev
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: 'webpack-cli@5.0.1',
npm WARN EBADENGINE   required: { node: '>=14.15.0' },
npm WARN EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@webpack-cli/configtest@2.0.1',
npm WARN EBADENGINE   required: { node: '>=14.15.0' },
npm WARN EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@webpack-cli/info@2.0.1',
npm WARN EBADENGINE   required: { node: '>=14.15.0' },
npm WARN EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@webpack-cli/serve@2.0.1',
npm WARN EBADENGINE   required: { node: '>=14.15.0' },
npm WARN EBADENGINE   current: { node: 'v12.22.9', npm: '8.5.1' }
npm WARN EBADENGINE }

added 117 packages, and audited 118 packages in 7s
```

Step 2: Executing and verifying the working of webpack:

Note: Webpack should have an entry point to start building the JavaScript bundle. It will take ./src/index.js as the default entry point.

2.1 Create a folder named *src.* Create a JavaScript file inside the *src* folder named **calculate.js** and add the following code to it:
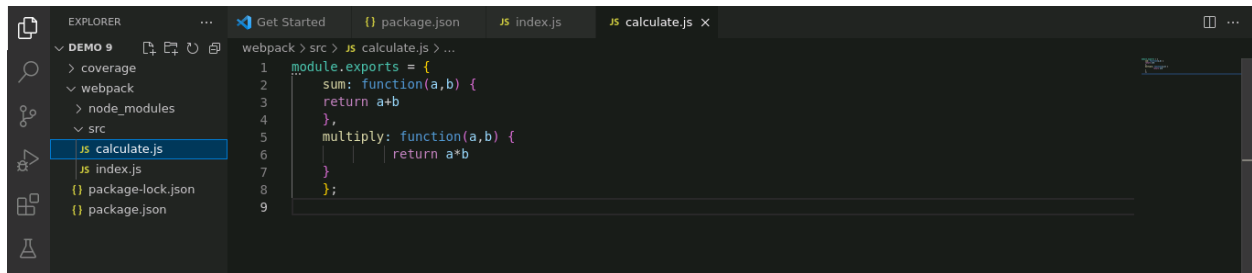
> *module.exports = {*
> *sum: function(a,b) {*

```
        return a+b
    },
    multiply: function(a,b) {
        return a*b
    }
};
```


2.2 Create another JavaScript file named *index.js* and add the following code to it:

```
var tools = require("./calculate");
var value = tools.sum(10,20);
console.log("Value: "+value);
```
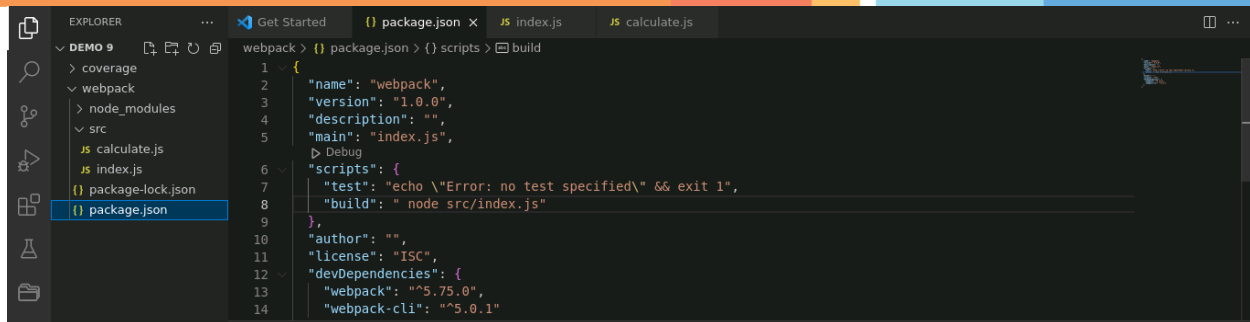

2.3 Open **package.json** and add the following build script:

```
"scripts": {
    "build": "node src/index.js"
}
```
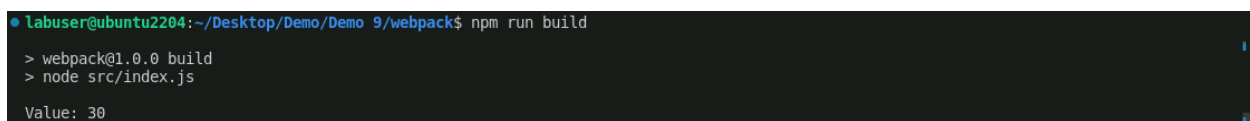
2.4 Run the build using the following command:

npm run build