

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

```
labuser@ubuntu2204:~/Desktop/Demo/Demo 9$ node -v
v12.22.9
```

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

```
labuser@ubuntu2204:~/Desktop/Demo/Demo 9$ mkdir webpack
labuser@ubuntu2204:~/Desktop/Demo/Demo 9$ 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:

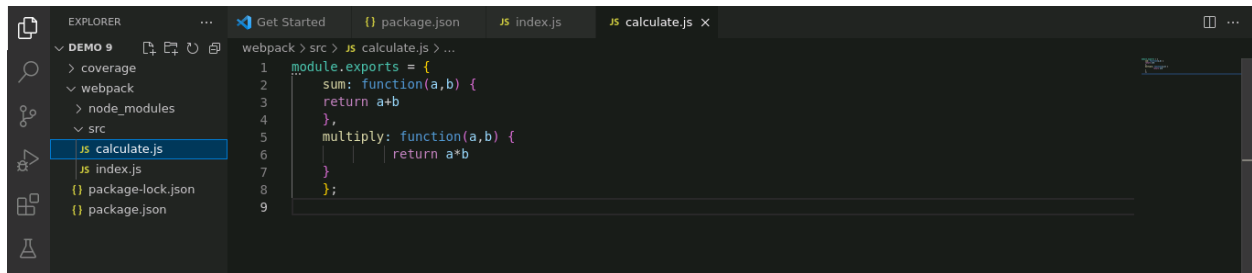
```

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);

```

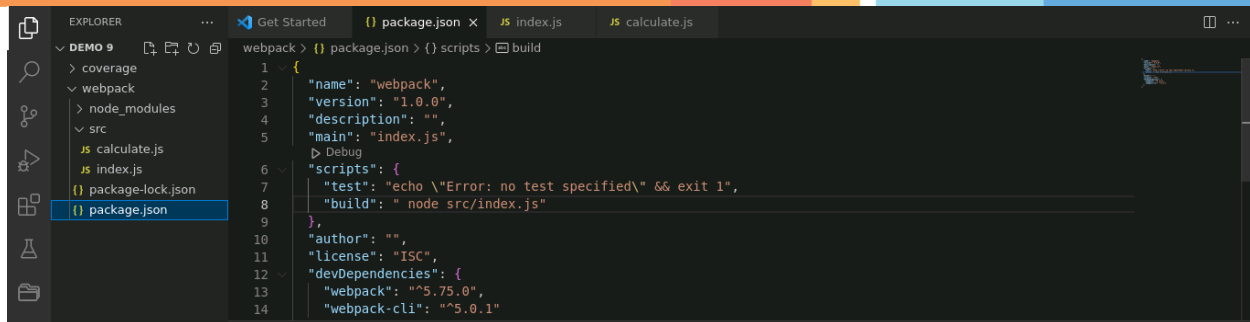


2.3 Open **package.json** and add the following build script:

```

"scripts": {
  "build": "node src/index.js"
}

```



The image shows a VS Code Explorer view of a project named 'DEMO 9'. The file tree on the left includes 'coverage', 'webpack', 'node_modules', 'src' (containing 'calculate.js' and 'index.js'), 'package-lock.json', and 'package.json'. The 'package.json' file is selected and its content is displayed in the main editor area.

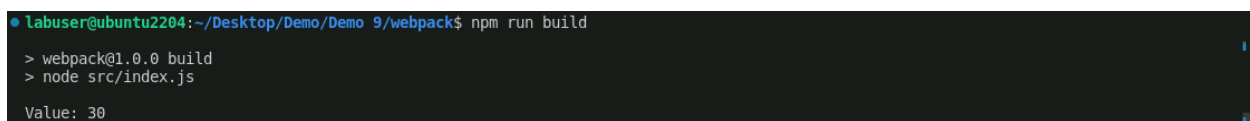
```

1 {
2   "name": "webpack",
3   "version": "1.0.0",
4   "description": "",
5   "main": "index.js",
6   "scripts": {
7     "test": "echo \\\"Error: no test specified\\\" && exit 1",
8     "build": "node src/index.js"
9   },
10  "author": "",
11  "license": "ISC",
12  "devDependencies": {
13    "webpack": "^5.75.0",
14    "webpack-cli": "^5.0.1"
  }
}

```

2.4 Run the build using the following command:

npm run build



The image shows a terminal window with the following output:

```

• labuser@ubuntu2204:~/Desktop/Demo/9/webpack$ npm run build
> webpack@1.0.0 build
> node src/index.js

Value: 30

```