

Instructions for installing and setting up Node.js and webpack for Javascript app development using Visual Studio Code

- Install Node.js and npm will be installed as part of the node. If you use `node -v` in command line, and you can see the version number, node.js is installed
- Type `npm -v` in command line. If it shows the npm version number, then npm is installed
- Create a folder, which will be your app development folder, such as `my_app`. In this folder, create two sub-folders, `src` and `dist`
- Go to app folder, and type `npm init`. npm will ask several questions. You can use “my_app” as the package name and accept all the default for other questions. npm will automatically generate a set of files and folders for the project. One of them is the `package.json` file
- In the same folder in command line, type `npm install webpack --save-dev` to install webpack
- In the same folder in command line, type `npm install webpack-cli --save-dev` to install webpack cli
- In the same folder in command line, type `npm install webpack-dev-server --save-dev` to install webpack dev server
- In the same folder in command line, type `npm install html-webpack-plugin --save-dev` to install webpack html plug in
- Copy the `webpack.config.js` file to the `my_app` folder

Example of `package.json` file

```
{ "name": "my_app",
  "version": "1.0.0",
  "description": "the web portals for my app",
  "main": "index.js",
  "scripts": {
    "dev": "webpack --mode development",
    "build": "webpack --mode production",
    "start": "webpack-dev-server --mode development --open",
    "compile:sass": "node-sass src/sass/main.scss dist/css/my_app.css -w"
  },
  "author": "Yuan Huang",
  "license": "ISC",
  "devDependencies": {
    "html-webpack-plugin": "^3.2.0",
    "node-sass": "^4.14.1",
    "webpack": "^4.41.5",
    "webpack-cli": "3.3.10", "webpack-dev-server": "3.10.1"
  },
  "dependencies":{
```

```

    "crossfilter2": "^1.5.2",
    "d3": "^5.16.0",
    "d3-tip": "^0.9.1",
    "simple-datatables": "^12.1.10"
  } }

```

Example of webpack.config.js

```

const path = require('path');
const HtmlWebpackPlugin = require('html-webpack-plugin');

module.exports = {
  entry: './src/js/index.js',
  output: {
    path: path.resolve(__dirname, 'dist'),
    filename: 'js/bundle.js'
  },
  devServer: {
    contentBase: './dist'
  },
  plugins: [
    new HtmlWebpackPlugin({
      filename: 'index.html',
      template: './src/index.html'
    }) ]
}

```