WELCOME TO THE JUNGLE!

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NODE.JS

Node.js® is an asynchronous event driven JavaScript runtime built on Chrome's V8 JavaScript engine.

Silnik JS z przeglądarki bez przeglądarki..

NPM

A package manager for JavaScript

PACKAGE.JSON

Zawiera meta-dane na temat projektu

List zależności/skyptów

```
npm init
```

```
npm init -y
```

package.json

```
{
  "name": "front-end-lvlup",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "Konrad Świercz",
  "license": "ISC"
}
```

```
{
  "name": "front-end-lvlup",
  "version": "1.0.0",
  "description": "",
-- "main": "index.js",
++ "private": true,
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "Konrad Świercz",
  "license": "ISC"
}
```

```
npm install package --save
```

```
npm install package --save-dev
```

package.json

```
{
    "name": "front-end-lvlup",
    "version": "1.0.0",
    "description": "",
    "private": true,
    "scripts": {
        "test": "echo \"Error: no test specified\" && exit 1"
    },
    "keywords": [],
    "author": "Konrad Świercz",
    "license": "ISC",
+    "dependencies": {
+        "package": "^4.29.6"
+    },
+    "devDependencies": {
+        "package": "^3.3.0"
+    }
}
```

```
npm install
```

```
npm install --production
```

TASK RUNNERS

- Grunt

  https://gruntjs.com/

- Gulp

  https://gulpjs.com/

- npm scripts

  https://docs.npmjs.com/misc/scripts

package.json

```
      {
        "name": "front-end-lvlup",
        "version": "1.0.0",
        "description": "",
        "private": true,
    +   "scripts": {
    +     "test": "echo \"Error: no test specified\" && exit 1",
    +     "start": "node start.js",
    +     "prebuild": "npm run test && node before-build.js",
    +     "build": "node build.js",
    +     "postbuild": "node cleanup.js"
    +   },
        "keywords": [],
        "author": "Konrad Świercz",
        "license": "ISC",
        "dependencies": {
          "package": "^4.29.6"
        },
        "devDependencies": {
          "package": "^3.3.0"
        }
      }
```

```
npm run build
```

WEB APPLICATION BUNDLER

- Webpack   <<

  https://webpack.js.org/

- Parcell

  https://parceljs.org/

- Rollup

  https://rollupjs.org/

```
npm i webpack webpack-cli -S
```

package.json

```
{
  "name": "front-end-lvlup",
  "version": "1.0.0",
  "description": "",
  "private": true,
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
+   "build": "webpack --config webpack.config.js",
  },
  "keywords": [],
  "author": "Konrad Świercz",
  "license": "ISC",
+ "dependencies": {
+   "webpack": "^4.29.6",
+   "webpack-cli": "^3.3.0"
+ }
}
```

```
|- package.json
|- webpack.config.js
|- /src
  |- index.js
```

webpack.config.js

```
var path = require('path');

module.exports = {
  entry: './src/index.js',
  output: {
    filename: 'main.js',
    path: path.resolve(__dirname, 'dist')
  }
};
```

```
npm run build
```

```
|- package.json
|- webpack.config.js
|- /dist
  |- main.js
|- /src
  |- index.js
```

WEBPACK

---

webpack.config.js

```
var path = require('path');

module.exports = {
  entry: './src/index.js',
  output: {
    filename: 'main.js',
    path: path.resolve(__dirname, 'dist')
  }
};
```

Nie ma HTML?

```
npm install --save-dev html-webpack-plugin
```

```
  var path = require('path');
+ var HtmlWebpackPlugin = require('html-webpack-plugin');

  module.exports = {
    entry: 'index.js',
    output: {
      path: path.resolve(__dirname, './dist'),
      filename: 'index_bundle.js'
    },
+   plugins: [new HtmlWebpackPlugin()]
  };
```

```
npm run build
```

```
  |- package.json
  |- webpack.config.js
  |- /dist
+   |- index.html
    |- main.js
  |- /src
    |- index.js
```

BABEL

A JavaScript compiler

```
npm install --save-dev babel-loader @babel/core @babel/preset-env
```

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

  module.exports = {
    entry: 'index.js',
    output: {
      path: path.resolve(__dirname, './dist'),
      filename: 'index_bundle.js'
    },
    plugins: [new HtmlWebpackPlugin()],
+   module: {
+     rules: [
+       {
+         test: /\.js$/,
+         exclude: /node_modules/,
+         use: {
+           loader: 'babel-loader',
+           options: {
+             presets: ['@babel/preset-env']
+           }
+         }
+       }
+     ]
+   }
  };
```

PRESET-ENV

package.json

```json
{
  "name": "front-end-lvlup",
  "version": "1.0.0",
  "description": "",
  "private": true,
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "build": "webpack --config webpack.config.js",
  },
  "keywords": [],
  "author": "Konrad Świercz",
  "license": "ISC",
  "dependencies": {
    "webpack": "^4.29.6",
    "webpack-cli": "^3.3.0"
  },
  "devDependencies": {
    "@babel/core": "^7.3.4",
    "@babel/preset-env": "^7.3.4",
    "babel-loader": "^8.0.5",
    "html-webpack-plugin": "^3.2.0"
  },
+ "browserslist": "> 0.25%, not dead"
}
```

A CSS?

```
npm install --save-dev css-loader style-loader
```

webpack.config.js

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

    module.exports = {
      entry: './src/index.js',
      output: {
        filename: 'main.js',
        path: path.resolve(__dirname, 'dist')
      },
      module: {
        rules: [
          {
            test: /\.js$/,
            exclude: /node_modules/,
            use: {
              loader: 'babel-loader',
              options: {
                presets: ['@babel/preset-env']
              }
            }
          },
+         {
+           test: /\.css$/,
+           use: ['style-loader', 'css-loader'],
+         }
        ]
      },
      plugins: [new HtmlWebpackPlugin()]
    };
```

```
    |- package.json
    |- webpack.config.js
    |- /dist
      |- index.html
      |- main.js
    |- /src
      |- /styles
        |- style.css
      |- index.js
```

/src/index.js

```
import './styles/style.css';
```

A SASS/LESS/POSTCSS?

Loader

A OBRAZKI/FONTY/INNE ASSETY?

Loader.

A ....?

Loader!

https://webpack.js.org/loaders

WEBPACK MODES

- development

- production

webpack.config.js

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

module.exports = {
  entry: './src/index.js',
  output: {
    filename: 'main.js',
    path: path.resolve(__dirname, 'dist')
  },
+ mode: 'development', // 'production'
  module: {
    rules: [
      {
        test: /\.js$/,
        exclude: /node_modules/,
        use: {
          loader: 'babel-loader',
          options: {
            presets: ['@babel/preset-env']
          }
        }
      },
      {
        test: /\.css$/,
        use: ['style-loader', 'css-loader'],
      }
    ]
  },
  plugins: [new HtmlWebpackPlugin()]
};
```

LINTER

Narzędzie do analizy kodu i oznaczania błędów.

- JSLint

  https://www.jslint.com/

- JSHint

  https://jshint.com/

- ESLint   <<

  https://eslint.org/

PRETTIER

https://prettier.io/

An opinionated code formatter

DEVELOPER ROADMAP

https://github.com/kamranahmedse/developer-roadmap

MAILINGI!

- Codrops Collective
- CSS Weekly
- Frontend Focus
- JavaScript Weekly
- Node Weekly
- React Status
- Web Design Weekly
- Web Tools Weekly

DZIĘKI!