JavaScript

New Features

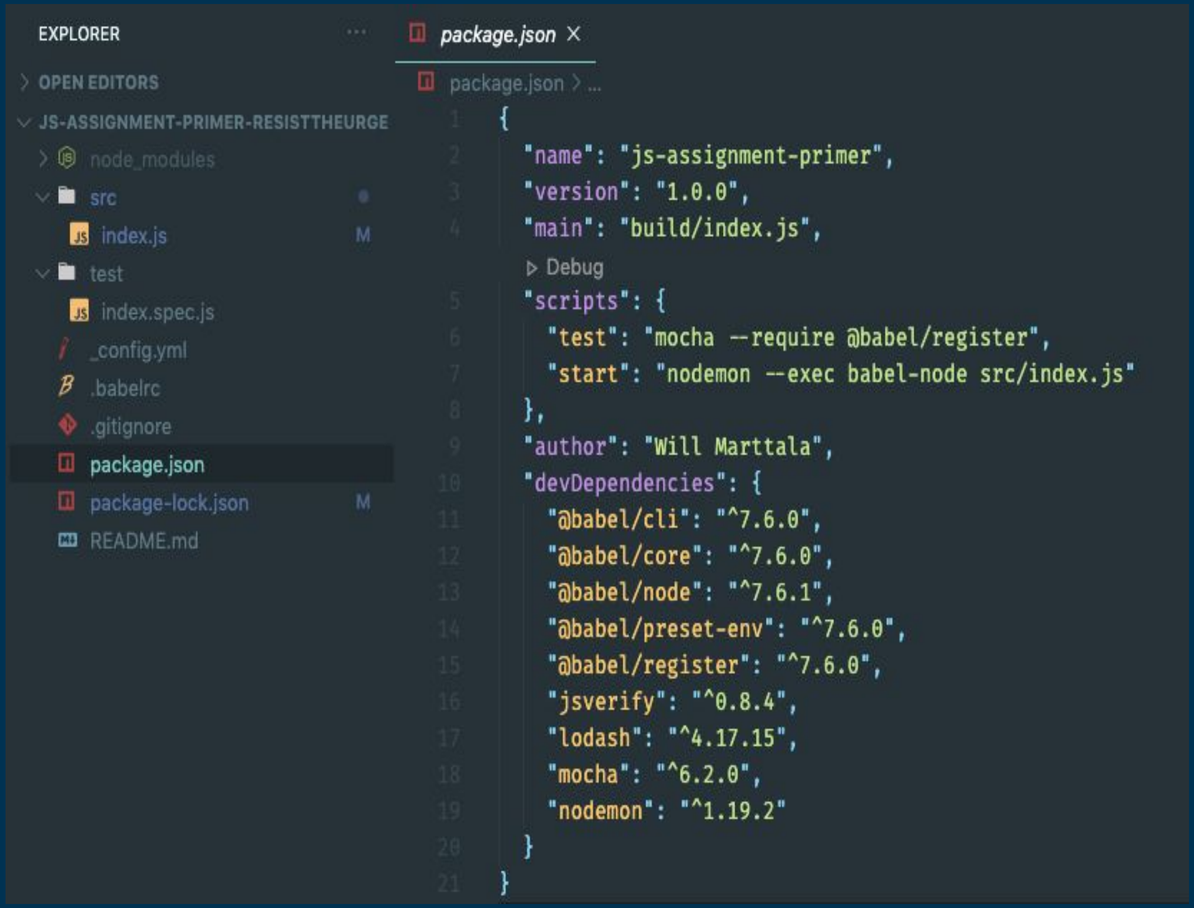
Build Tools and Environments

NPM

Node **P**ackage **M**anager

A dependency management system for Node and JavaScript

✓ Equivalent to Maven



```json
{
  "name": "js-assignment-primer",
  "version": "1.0.0",
  "main": "build/index.js",
  "scripts": {
    "test": "mocha --require @babel/register",
    "start": "nodemon --exec babel-node src/index.js"
  },
  "author": "Will Marttala",
  "devDependencies": {
    "@babel/cli": "^7.6.0",
    "@babel/core": "^7.6.0",
    "@babel/node": "^7.6.1",
    "@babel/preset-env": "^7.6.0",
    "@babel/register": "^7.6.0",
    "jsverify": "^0.8.4",
    "lodash": "^4.17.15",
    "mocha": "^6.2.0",
    "nodemon": "^1.19.2"
  }
}
```

NPM: package.json

- An npm project is defined by the package.json file in the root project folder
- It maintains the core metadata, dependencies, and configuration of the project

NPM: Starting a Project

npm init: initializes a brand-new project

npm install: installs any existing packages listed in the package.json

NPM: Installing Dependencies

NPM INSTALL <PACKAGE NAMES>: INSTALLS PACKAGES IN THE NODE_MODULES FOLDER AND ADDS THEM TO THE PACKAGE.JSON'S MAIN DEPENDENCY LIST

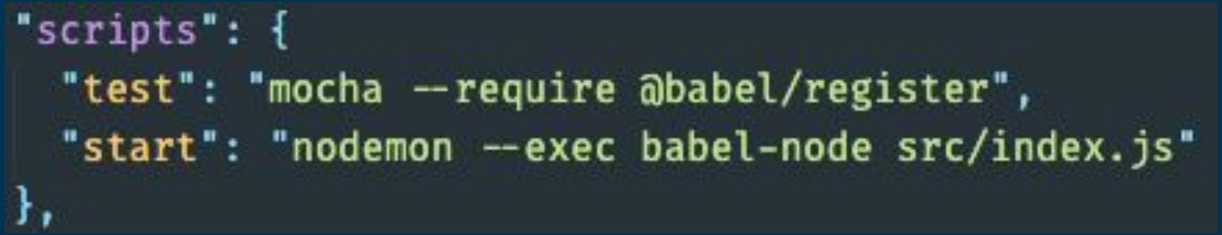
NPM INSTALL –SAVE-DEV <PACKAGE NAMES>: DOES THE SAME, BUT ADDS THE PACKAGES TO A SPECIAL DEVDEPENDENCY LIST INSTEAD OF THE MAIN ONE

When to --save-dev

IF THE PACKAGE IS A DEVELOPMENT TOOL

IF THE PACKAGE IS NOT IMPORTED BY YOUR MAIN APPLICATION CODE

NPM: Scripts



```
"scripts": {
  "test": "mocha --require @babel/register",
  "start": "nodemon --exec babel-node src/index.js"
},
```

- Named command line scripts can be defined in the package.json
- For special names like start, test, and a few others, they can be called with
  npm <script name> in the project root directory

Common Dev Tools

standard
JS