SPA with Spring Web App
// Hooking in Node.js to a Spring Boot web app

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The Maven plugin " frontend-maven-plugin ".

This plugin unites Node.js actions with Maven's lifecycles, allowing us to properly invoke Node.js at the right time to download packages and assemble JavaScript code into a bundle.

open up the pom.xml file created by start.spring.io

Add <plugin> entry

```
<plugin>
  <groupId>com.github.eirslett</groupId>
  <artifactId>frontend-maven-plugin</artifactId>
  <executions>
    <execution>
         …
```

Download Node.js and its package manager npm

Add Execution **install-node-and-npm**

Run: $ ./mvnw generate-resources

Add the parcel - a Node.js package bundler

node/npm install --save-dev parcel

Add react

node/npm install --save react react-dom

Creating a React.js app

Create index.js inside *src/main/javascript* as follows:
         …

Add Execution **npm install**

Add Execution run **npx parcel build**

Edit the **package.json** that npm just created so that Parcel will assemble an ES6 module for us:

```
{
  …
  "source": "src/main/javascript/index.js",
  "targets": {
    "default": {
       "distDir": "target/classes/static"
    }
  },
  …
}
```

The Plug in in pom.xml

```xml
<plugin>
        <groupId>com.github.eirslett</groupId>
        <artifactId>frontend-maven-plugin</artifactId>
        <version>1.15.0</version>

        <executions>
                <execution>
                        <goals>
                                <goal>install-node-and-npm</goal>
                        </goals>
                </execution>
                <execution>
                        <id>npm install</id>
                        <goals>
                                <goal>npm</goal>
                        </goals>
                </execution>
                <execution>
                        <id>npx run</id>
                        <goals>
                                <goal>npx</goal>
                        </goals>
                        <phase>generate-resources</phase>
                        <configuration>
                                <arguments>parcel build</arguments>
                        </configuration>
                </execution>
        </executions>

        <configuration>
                <nodeVersion>v22.12.0</nodeVersion>
        </configuration>
</plugin>
```

Ready to use SPA Spring Web App Basic

cd C:\HONG\JAVAtest2025

git clone **https://github.com/hong1234/demo3springb34base.git**

cd demo3springb34base

.\mvnw spring-boot:run

http://localhost:8080/react

http://localhost:8080

```
.\mvnw clean package
// run
java -jar target/demo3-0.0.1-SNAPSHOT.jar
```