

# Minify Resources (HTML, CSS, and JavaScript)

Minification refers to the process of removing unnecessary or redundant data without affecting how the resource is processed by the browser - e.g. code comments and formatting, removing unused code, using shorter variable and function names, and so on.

Plugin Used: [com.samaxes.maven:minify-maven-plugin:1.7.4:minify](https://mvnrepository.com/artifact/com.samaxes.maven/minify-maven-plugin/1.7.4)

Usage: No external dependencies are required. Add maven plugin in pom.xml and place unminified cs and js resources in source directories as specified below. Minification is done during the maven install phase.

The following rules for file order are applied when input CSS files are merged and minified into a single output file:

1. Input files defined in `cssSourceFiles` are merged before files defined in `cssSourceIncludes`.
2. Input files defined in `cssSourceIncludes` are sorted by filename before merging.
3. If a file is configured both in `cssSourceFiles` and `cssSourceIncludes` then only the one defined in `cssSourceFiles` will be processed.

Default Configuration:

- Source Directory:
  - `webappSourceDir`: `${basedir}/src/main/webapp`
  - `cssSourceDir`: `resources/css` (Relative to `webappSourceDir`)
  - `jsSourceDir`: `resources/js` (Relative to `webappSourceDir`)
- Target Directory:
  - `webappTargetDir`: `${basedir}/src/main/webapp`
  - `cssTargetDir`: `resources/css/minified` (Relative to `webappTargetDir`)
  - `jsSourceDir`: `resources/js/minified` (Relative to `webappTargetDir`)
- Skipmerge: Skip the merge step. Minification will be applied to each source file individually.
- Css Compressor Engine: Define the CSS compressor engine to use.
  - Default: YUI Compressor
- Js Compressor Engine: Define the JavaScript compressor engine to use.
  - Default: YUI Compressor

## Code Snippet :

```
<plugin>
  <groupId>com.samaxes.maven</groupId>
  <artifactId>minify-maven-plugin</artifactId>
  <version>1.7.4</version>
  <executions>
    <execution>
      <id>minify</id>
      <phase>process-resources</phase>
      <goals>
        <goal>minify</goal>
      </goals>
      <configuration>
        <charset>utf-8</charset>
        <skipMerge>false</skipMerge>
        <nosuffix>false</nosuffix>
        <webappSourceDir>${basedir}/src/main/webapp</webappSourceDir>
        <webappTargetDir>${basedir}/src/main/webapp</webappTargetDir>
        <cssSourceDir>resources/css</cssSourceDir>
        <cssTargetDir>resources/css/minified</cssTargetDir>
        <cssSourceIncludes>
          <!-- Specify files/folders to be included for minify -->
          <cssSourceInclude>*.css</cssSourceInclude>
        </cssSourceIncludes>
        <cssSourceExcludes>
          <!-- Specify files/folders to be excluded for minify -->
          <cssSourceExclude></cssSourceExclude>
        </cssSourceExcludes>
        <jsSourceDir>resources/js</jsSourceDir>
        <jsTargetDir>resources/js/minified</jsTargetDir>
        <jsSourceIncludes>
          <!-- Specify files/folders to be included for minify -->
          <jsSourceInclude>*.js</jsSourceInclude>
        </jsSourceIncludes>
        <jsSourceExcludes>
          <!-- Specify files/folders to be excluded for minify -->
          <jsSourceExclude></jsSourceExclude>
        </jsSourceExcludes>
      </configuration>
    </execution>
  </executions>
</plugin>
```

## References:

- [minify-maven-plugin](#)
- [Minify Resources:google docs](#)