

**What we saw in the first part**

# Modules

- Function/variable/class reusable easily
- Maintability
- Imported with keyword “require/**import**”
- Exported with keyword  
modules.exports/**export** (default)
- scoped => no mainspace pollution

- <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/export>
- <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/import>
- <http://2ality.com/2014/09/es6-modules-final.html>

In bold ESNext syntax

# Modules (ESNext syntax) - example

```
1  function factorial (n) {  
2      if(isNaN(n)) {  
3          return 0;  
4      }  
5  
6      let result = 1;  
7      for (let i = 1; i <= n; i++) {  
8          result *= i;  
9      }  
10     return result;  
11 }  
12  
13 export default factorial;  
14  
15 export const foo = "bar";
```

Default export  
(one per module)

Named export  
(several per  
module)

# Bundle

- File containing every modules of an application into one file
- Creates links to external resources
- Accessible on browser

# Vocabulary

- **Module:** functions, classes, vars scoped and accessible with export keyword
- **Bundle:** file containing multiple modules to be usable on browser
- **Package:** bundle/modules downloadable via npm or git

# Webpack

- Bundle manager for front-end assets
- Browserify on steroids
- Created in 2012 by Tobias Koppers
- Maintained by community (OpenSource)\*
- Version 3.8.1 currently

- \*<https://github.com/webpack/webpack>
- <https://webpack.js.org>

# Loader

- Loaders allow to process more than js files
- Loaders transforms non-js code into js code

- <https://webpack.js.org/concepts/#loaders>
- <https://webpack.js.org/concepts/loaders/>

# Loader

- Loaders allow to process more than js files
- Loaders transforms non-js code into js code

**Loaders are, sort of, tasks in gulp**



# Loader - examples

- extract-loader: Extracts html/css from js files
- babel-loader: Transpiles ESNext to ES5
- eslint-loader: Lints js files (preloader)
- sass-loader: Loads and transforms a SCSS file
- vue-loader: loads and compiles .vue

- <https://webpack.js.org/concepts/#loaders>
- <https://webpack.js.org/concepts/loaders/>