

Babel and Webpack

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Какую задачу решаем?

ECMA Script 2015



Современные
браузеры и Node.js



Классический JS



Старые браузеры



<http://kangax.github.io/compat-table/es6/>

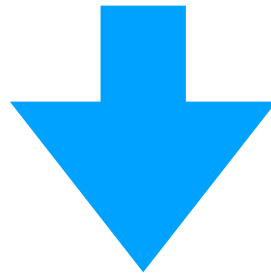
Transpiling || Polyfilling

Feature	Transpiled	Polyfilled	Nope
class	✓		
const and let	✓		
Object rest/spread	✓		
Arrow functions () => {}	✓		
Map		✓	
Promise		✓	
Fetch		✓	
String.prototype.padEnd()		✓	
Array.prototype.includes()		✓	
URLSearchParams		✓	
requestIdleCallback		✓	
Service Worker			✓
Push API			✓
Bluetooth API			✓
Proxy			✓

<https://hackernoon.com/polyfills-everything-you-ever-wanted-to-know-or-maybe-a-bit-less-7c8de164e423>

Transpiling

```
1 // ES6
2 const a = 1;
3 let f = (r={}) => r;
4
```

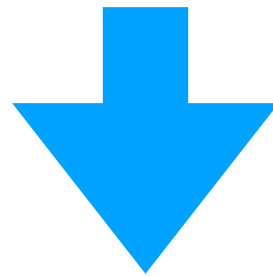


```
1 // ES5
2 'use strict';
3 var a = 1;
4 var f = function f() {
5   var r = arguments.length > 0 && arguments[0] !== undefined
6   ? arguments[0] : {};
7   return r;
8 };
9
```

<https://babeljs.io/repl>

Polyfilling

```
1 // ES6
2 [1, 2, 3].includes(2); // true
3
```



```
1 // ES5
2 if (!Array.prototype.includes) {
3   Object.defineProperty(Array.prototype, 'includes', {
4     value: function(searchElement, fromIndex) {
5       // some code ...
6     }
7   })
8 }
9
10 [1, 2, 3].includes(2); // true
11
```

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/includes#Polyfill

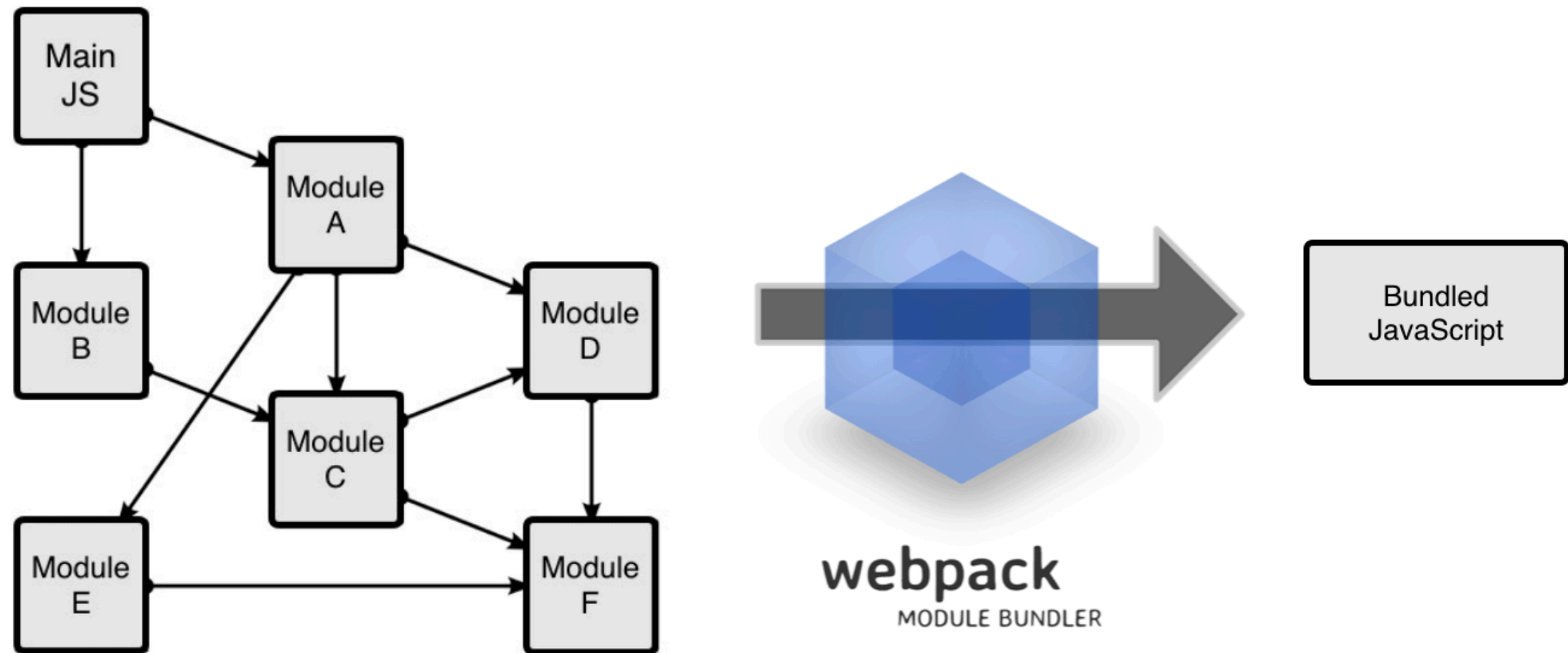
How Babel Works

- `npm i babel-cli --save-dev`
- `.babelrc` файл with **plugins** or **presets**
- `npm script: babel ./src --out-dir .build/`

<https://github.com/Elbrus-Bootcamp/babel-webpack-skeleton>

What about Browser?

=> Webpack



How Webpack Works

- `npm i webpack webpack-cli copy-webpack-plugin --save-dev`
- **webpack.config.js** файл с конфигурацией
- `npm script: webpack --config webpack.config.js --mode development`