

HENRY

A bright yellow beam of light originates from the left edge of the frame and points towards the letter 'R' in the word 'HENRY'. The beam is wider on the left and tapers as it moves to the right. The word 'HENRY' is written in a bold, black, sans-serif font.



MODULOS



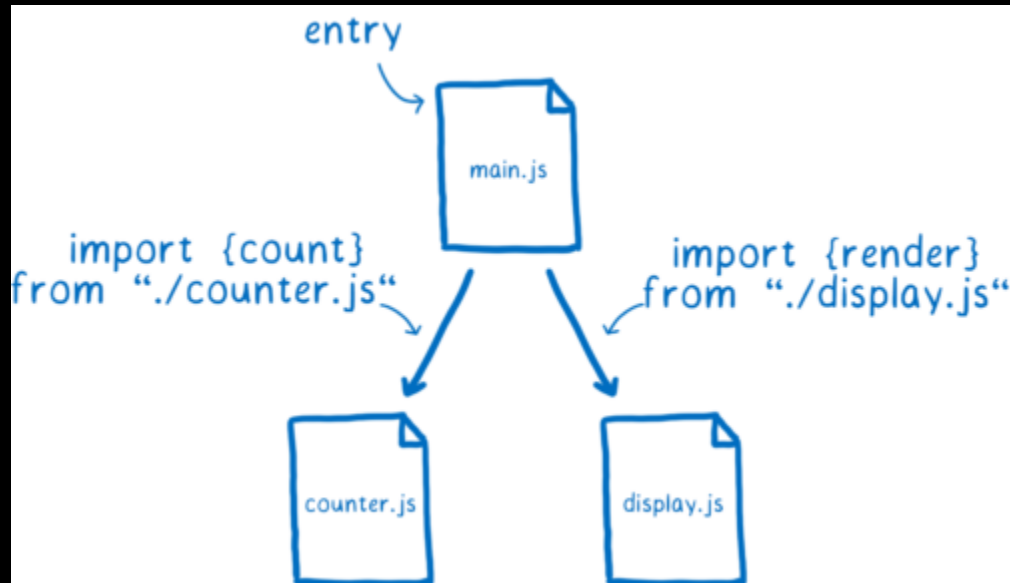
MODULOS



Un **Módulo** es un pedazo de código que cumple una tarea específica y que indica sobre qué piezas de código depende (*dependencias*).



MODULOS



Dependencias



MODULOS

Patrón de módulos IIFE

```
1 const weekDay = function() {  
2   const names = ["Domingo", "Lunes", "Martes", "Miercoles",  
3     "Jueves", "Viernes", "Sabado"];  
4   return {  
5     name: function name(number) { return names[number]; },  
6     number: function number(name) { return names.indexOf(name); }  
7   };  
8 }();  
9  
10 console.log(weekDay.name(weekDay.number("Domingo")));
```



CommonJS

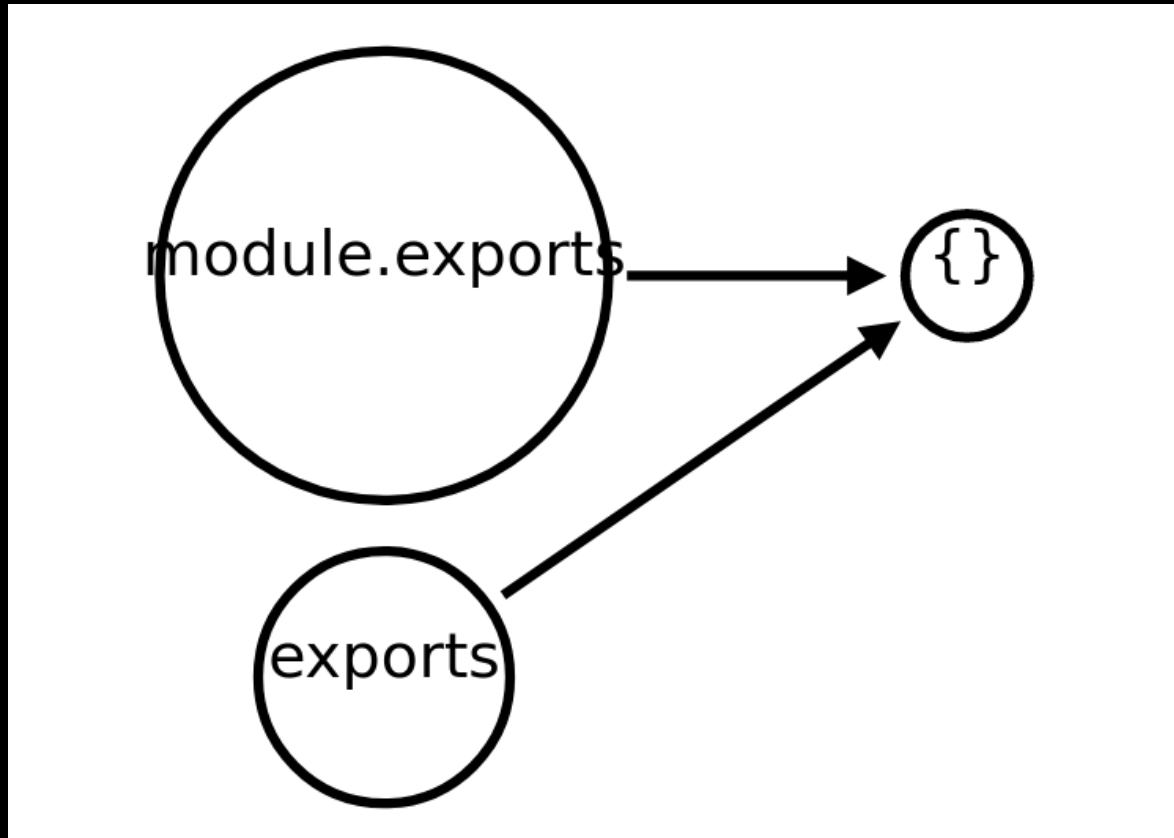
```
1 // WeekDays.js
2
3 var names = ["Domingo", "Lunes", "Martes", "Miercoles",
4             "Jueves", "Viernes", "Sabado"];
5
6 exports.name = function name (number) { return names[number]; };
7 exports.number = function number(name) { return names.indexOf(name); };
```

```
1 // index.js
2
3 var weekDays = require('./WeekDays.js');
4
5 console.log(weekDays.name(weekDays.number("Domingo")));
```



module.exports vs exports

Inicialmente





module.exports vs exports

module.exports

```
1 // module1.js
2
3 module.exports.a = function() {
4     console.log("a");
5 }
6
7 module.exports.b = function() {
8     console.log("b");
9 }
```

```
1 // module2.js
2
3 var example = require('./module1.js');
4
5 example.a(); // "a"
6
7 example.b(); // "b"
```

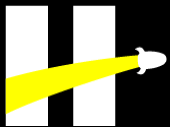



module.exports vs exports

module.exports

```
1 // module1.js
2
3 module.exports.a = function() {
4     console.log("a");
5 }
6
7 module.exports.b = function() {
8     console.log("b");
9 }
10
11 module.exports = function extra() {
12     console.log("Extra function");
13 }
```

```
1 // module2.js
2
3 var example = require('./module1.js');
4
5 example.a(); // TypeError: example.a is not a function
6
7 example.b(); // TypeError: example.a is not a function
8
9 example.extra(); // TypeError: prueba.extra is not a function
10
11 example(); // "Extra function"
```

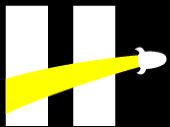


module.exports vs exports

exports

```
1 // module1.js
2
3 exports.a = function() {
4     console.log("a");
5 }
6 exports.b = function() {
7     console.log("b");
8 }
```

```
1 // module2.js
2
3 var example = require('./module1.js');
4
5 example.a(); // "a"
6
7 example.b(); // "b"
```



module.exports vs exports

exports

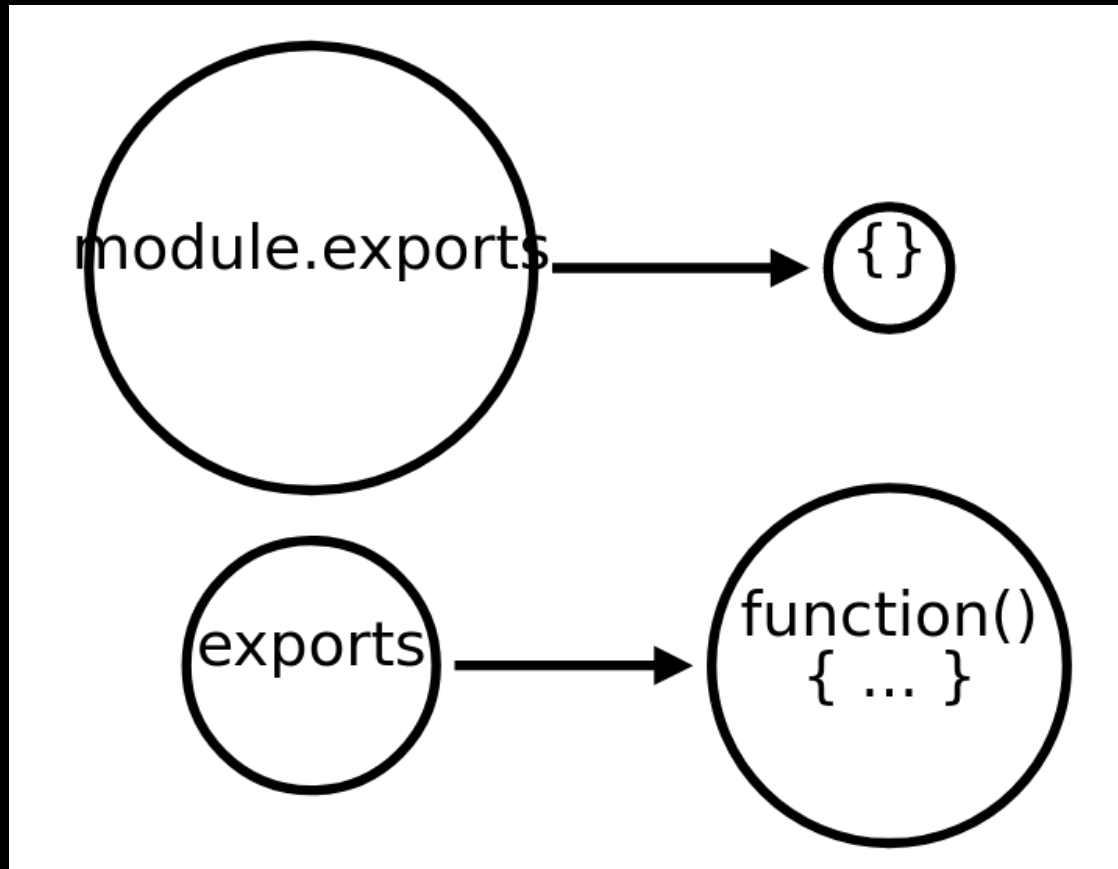
```
1 // module1.js
2
3 exports.a = function() {
4     console.log("a");
5 }
6 exports.b = function() {
7     console.log("b");
8 }
9
10 exports = function extra() {
11     console.log('Extra function');
12 }
```

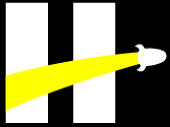
```
1 // module2.js
2
3 var example = require('./module1.js');
4
5 example.a(); // "a"
6
7 example.b(); // "b"
8
9 example.extra() // TypeError: example.extra is not a function
10
11 example(); // TypeError: example is not a function
```



module.exports vs exports

Si "pisamos" la referencia del exports...





ES6

```
1 // WeekDays.js
2
3 var names = ["Domingo", "Lunes", "Martes", "Miercoles",
4             "Jueves", "Viernes", "Sabado"];
5
6 export function name (number) { return names[number]; };
7 export function number(name) { return names.indexOf(name); };
8
9 export default function myDefault () {
10     // otras cosas...
11 }
```

```
1 // index.js
2
3 import { number, name } from './WeekDays.js';
4
5 console.log(name(number("Domingo")));
```

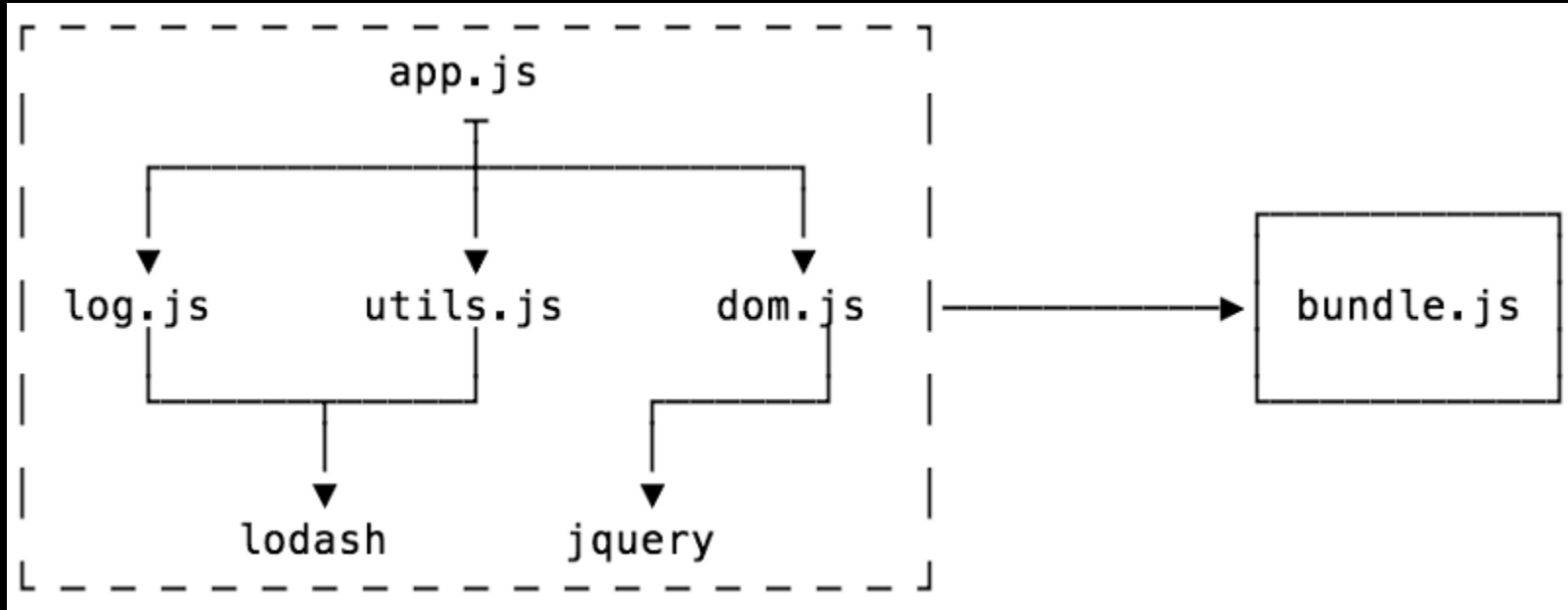


Bundlers

```
<html>
  <head>My Webpage</head>
  <body>
    <script src="script1.js"></script>
    <script src="script2.js"></script>
    <script src="script3.js"></script>
    <script src="script4.js"></script>
  </body>
</html>
```

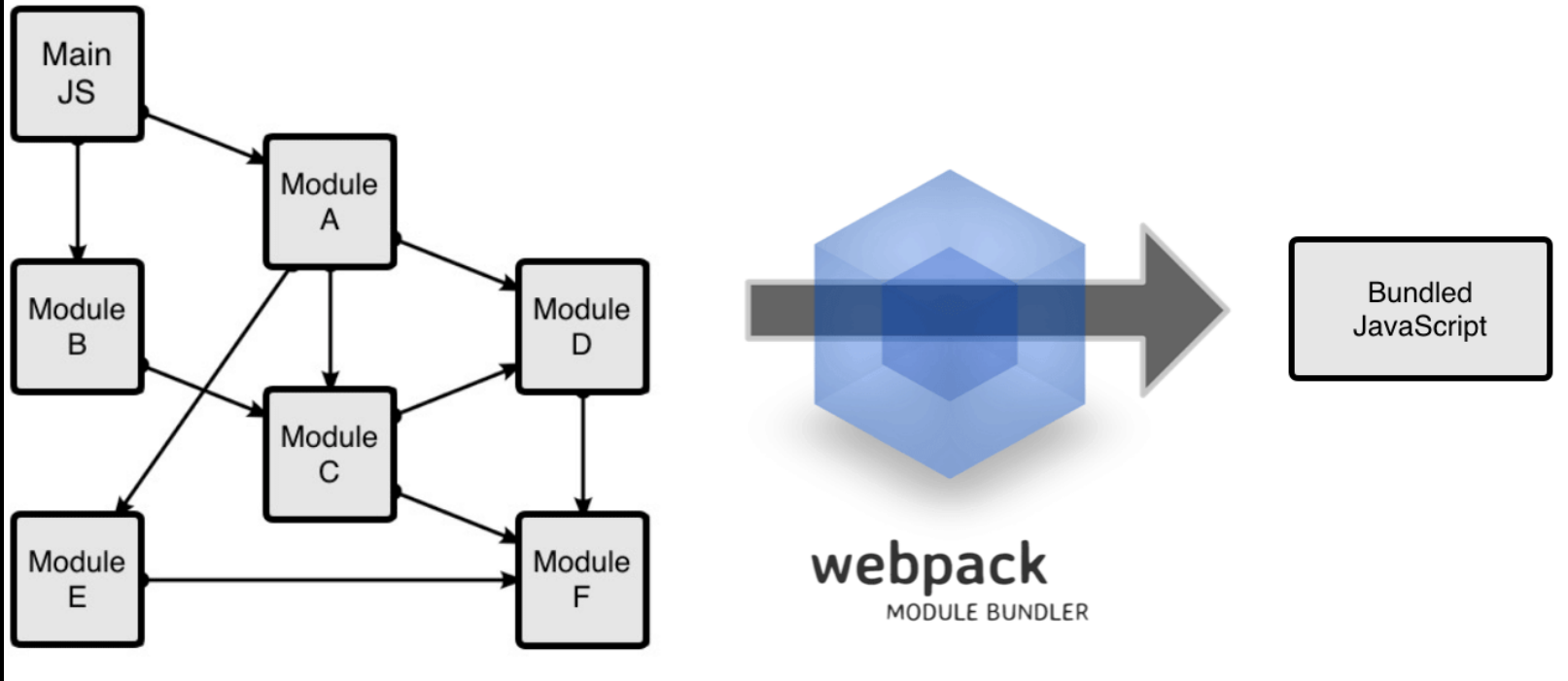


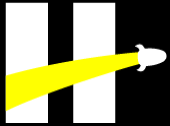
Bundlers





Webpack





Webpack

```
1 npm init
2
3 npm install --save-dev webpack webpack-cli
4
5 // package.json
6
7 "scripts": {
8   "start": "node server.js",
9   "build": "webpack"
10 }
11
12 // crear archivo webpack.config.js`
```



Webpack

```
1 // webpack.config.js`
2
3 module.exports = {
4   entry: './browser/app.js', // el punto de arranque de nuestro programa
5   output: {
6     path: __dirname + '/browser', // el path absoluto para
7       // el directorio donde queremos que el output sea colocado
8     filename: 'bundle.js' // el nombre del archivo que va a contener
9       //nuestro output - podemos nombrarlo como queramos pero bundle.js es lo típico
10   }
11 }
```



Webpack

```
1 // npm run build
2
3 Hash: 43fddf2175fdf6f7923f
4 Version: webpack 2.2.1
5 Time: 72ms
6     Asset      Size  Chunks             Chunk Names
7 bundle.js  3.1 kB      0  [emitted]  main
8    [0] ./browser/app.js 586 bytes {0} [built]
```



Webpack

```
1 <!doctype html>
2 <html>
3   <head>
4   </head>
5   <body>
6
7       <script src="./dist/bundle.js"></script>
8   </body>
9 </html>
10
```

Incluyendo el script en el HTML