JavaScript

New Features

Modules

Modules Basics





Every JavaScript File is a Module

Every Module has its Own Variable Scope

Modules: Node

require(<package path>)

require('./some-qualified-path')

require('some-unqualified-path')

module.exports = ...

Modules: Node

```
Js module-a.js > ...
                                                                Js module-b.js > ...
require('./module-b')
                                                                       console.log('side effects')
const moduleBExports = require('./module-b')
                                                                       const internalVariable = 10
                                                                       function internalFunction () {
                                                                         return 20
console.log(moduleBExports.namedExport2())
                                                                       module.exports = {
                                                                         namedExport: internalVariable,
                                                                        namedExport2: internalFunction
```

Modules: Node



require() is just a function!



module.exports is just a JavaScript value!

Modules: Modern JS



import <package path string>



import <selector> from <package path string>



export <variable or function declaration>



export default <any valid JS expression>

Modules: Modern JS

```
us module-a.js
                                                                Js module-b.js > ...
import './module-b'
                                                                       console.log('side effects')
 import {
  namedExport,
  namedExport2
                                                                       export const namedExport = 10
} from './module-b'
                                                                       export function namedExport2() {
                                                                         return 20
import defaultExport from './module-b'
import * as combinedExports from './module-b'
                                                                       export default function main() {
```

Modules: Modern JS



import and export are keywords in JavaScript



They are *not* plain JS expressions like require() and module.exports = ...