ES MODULES

What? More?

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1 REACT.JS INTRODUCTION

ES6 MODULES

- When Node.js was introduced (2009), it adopted a module system using require and module.exports, like we know now (influenced by CommonJS spec)
- ECMAScript 6 (2015) approved a native module system for JavaScript using a different set of keywords:
 - import <thing> from '<file>'
 - export <thing>
 - export default <thing>

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2 REACT.JS INTRODUCTION

ES6 MODULES

now

• When Node system usir tell a module ke we know

ECMAScript for JavaScri

import <thin

export <thin

export defa

ule system rds:

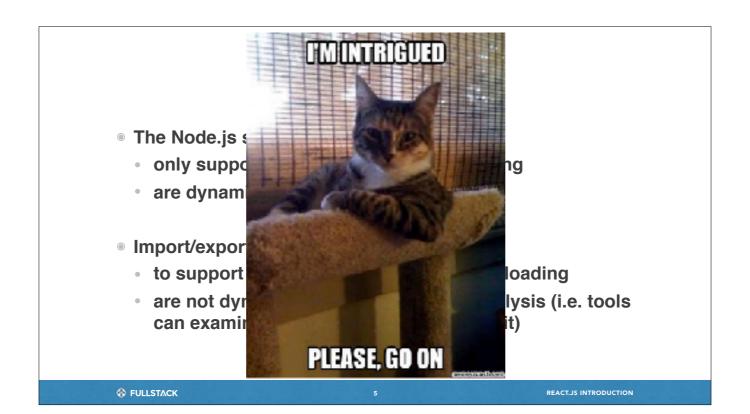
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RATIONALE

- The Node.js style modules:
 - only support synchronous module loading
 - are dynamic
- Import/export were designed:
 - to support both sync and async module loading
 - are not dynamic, which allows static analysis (i.e. tools can examine your code without running it)

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4 REACT.JS INTRODUCTION



a.js

const foo = () => {/* etc */}

module.exports = foo

b.js

const foo = require('./a')

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REACT.JS INTROD

```
a.js

const foo = () => {/* etc */}

module.exports = foo

const foo = () => {/* etc */}

export default foo

pullstack

b.js

const foo = require('./a')

import foo from './a'
```

```
a.js

const foo = () => {/* etc */}
const bar = 'bar'

module.exports = {
   foo: foo,
   bar: bar
}
const {foo, bar} = require('./a.js')
```

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```
a.js

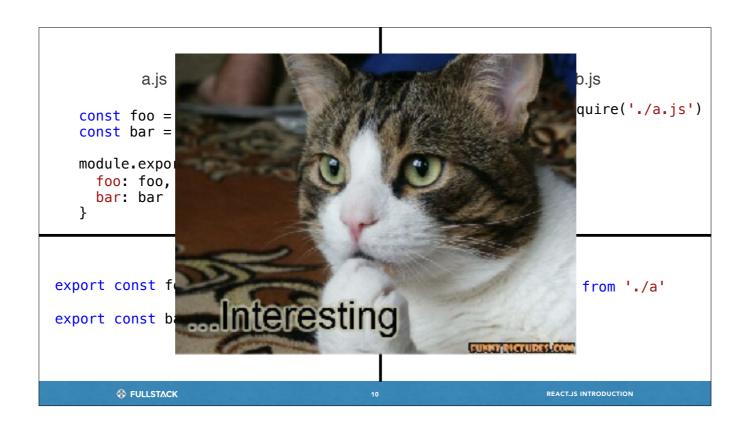
const foo = () => {/* etc */}
const bar = 'bar'

module.exports = {
    foo: foo,
    bar: bar
}

export const foo = () => {/* etc */}
export const bar = 'bar'

import {foo, bar} from './a'

export const bar = 'bar'
```



CAN I USE IMPORT/EXPORT?

- Import/Export has support in the latest versions of some browsers
 - Not quite safe to depend on it without a build tool like webpack
- Node.js does not support import/export natively yet

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11 REACT.JS INTRODUCTION

WHAT SHOULD I USE?

- Browser-side JavaScript: use import/export and use webpack to compile your code
- Node: continue to use require and module.exports

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