

# **Webpack pack your web**

Modern Web 2015

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LY



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lyforever

市長給問

watchout沃草

國會無雙



先調查一下

# **Webpack**

module bundler



**Michael Jackson**

@mjackson



Follow

I dreamt that @fbOpenSource hired Tobias Koppers to work on #webpack full-time. I was so excited! Then I woke up.



RETWEETS

5

FAVORITES

14



1:35 PM - 4 Apr 2015

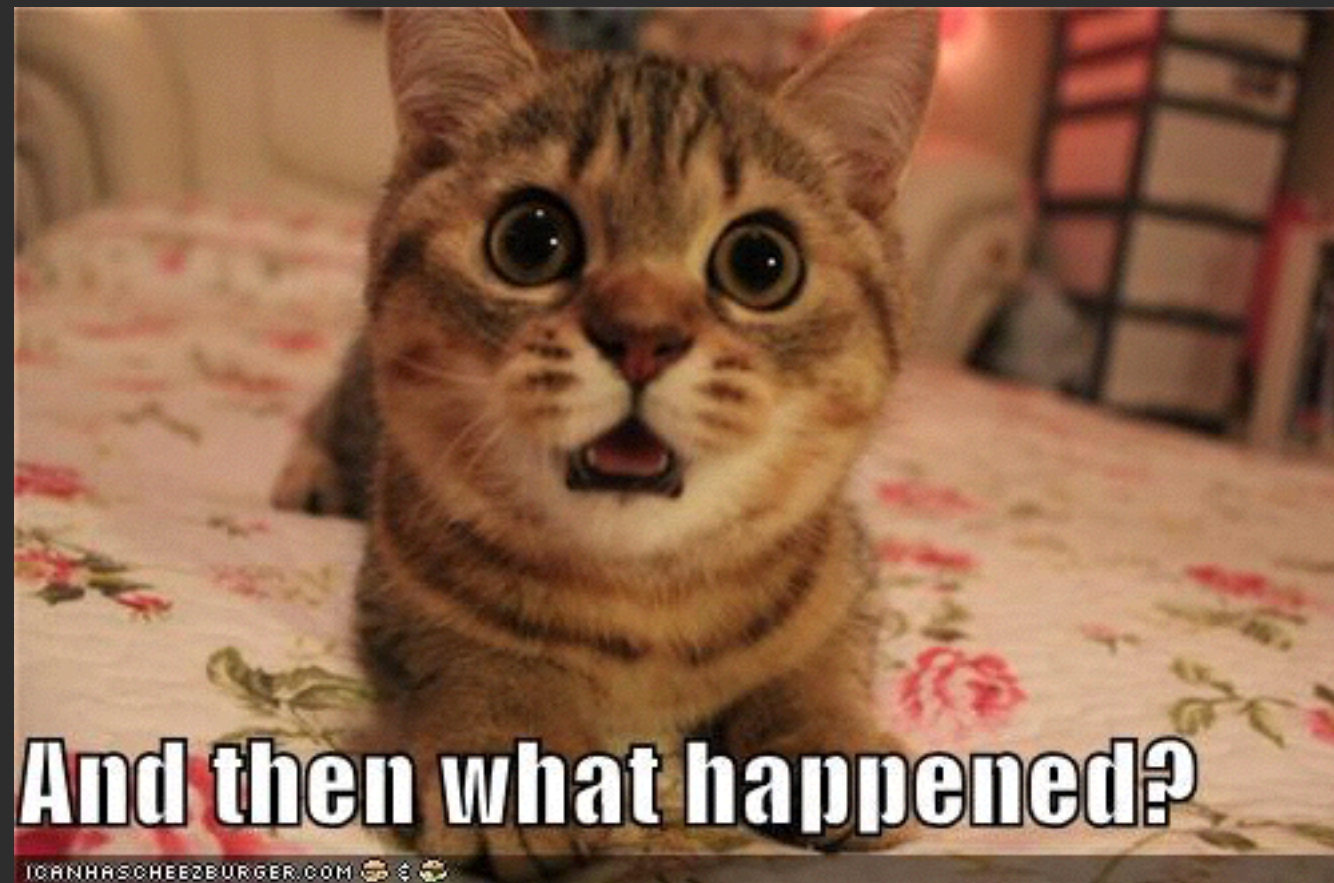
<https://twitter.com/mjackson/status/584227818910777345>

先講一段故事

```
<script src='app.js'></script>  
<script src='jquery.js'></script>
```

Uncaught Referencer Error  
jQuery is not defined





<https://markb4.files.wordpress.com/2013/05/and-then-what-happened.jpeg>

# **CommonJS vs AMD**

Server-side reuse vs Parallel loading

# CommonJS



<http://pichost.me/1835208/>

# AMD



**Works in the  
browser  
without build**

**But**

Finally, you have to build sth.

# ES6 Harmony

not ready for native browser

# **Not Only Javascript**

css, images, fonts, html ....

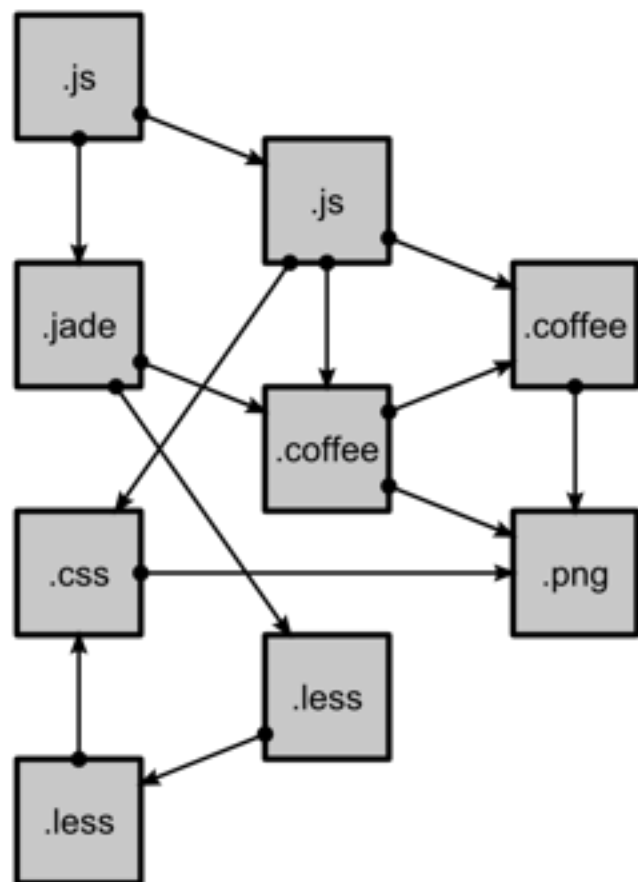
# **Assets pipeline**

In Rails, but now ...

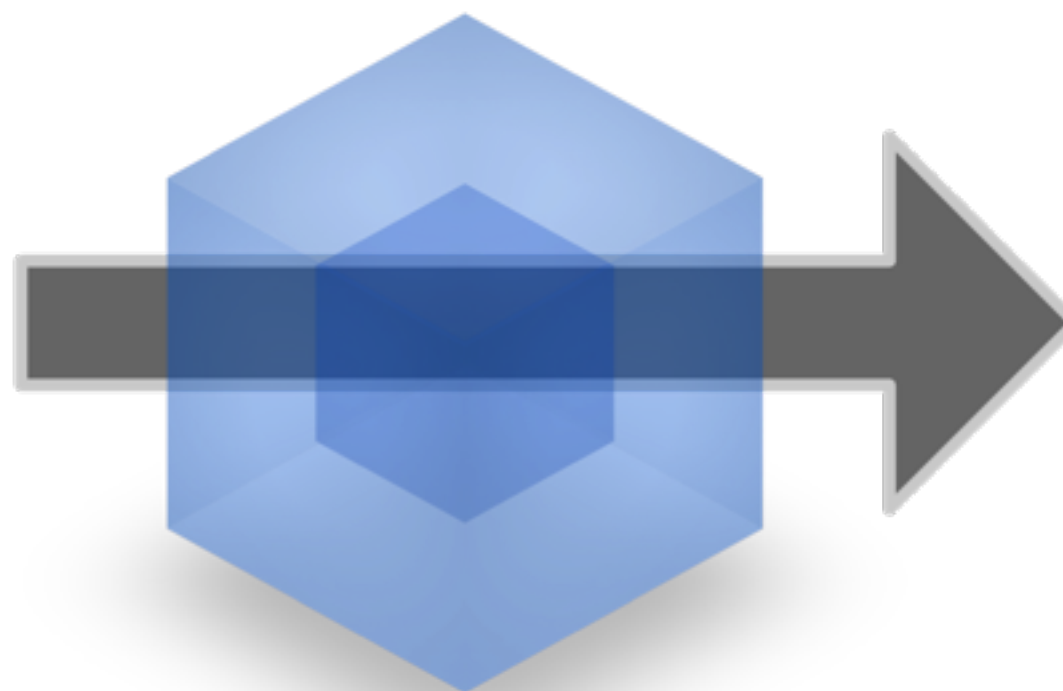


<http://fccowasso.com/wp-content/uploads/2013/09/hope.jpg>

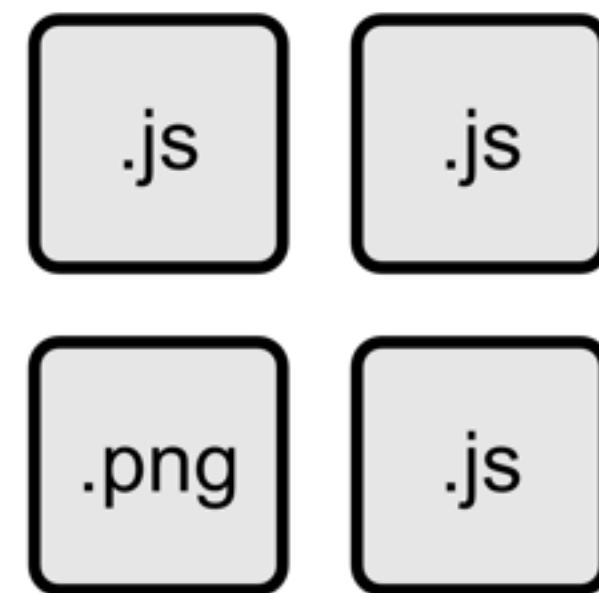




modules  
with dependencies



**webpack**  
MODULE BUNDLER



static  
assets

<http://webpack.github.io/>

# **Webpack has**

Code Splitting

Loaders

Plugins

Hot Module Replacement

# Comparison

## Browserify vs Webpack

<http://webpack.github.io/docs/comparison.html>

[blog.namangoel.com/browserify-vs-webpack-js-drama](http://blog.namangoel.com/browserify-vs-webpack-js-drama)

# Basic Usage

# Configuration

CLI and webpack.config.js

```
1  module.exports = {
2    entry: './modules/main.js',
3    output: {
4      filename: 'bundle.js'
5    },
6    module: {
7      loaders: [
8        { test: /\.js$/, loader: 'jsx-loader?harmony' },
9        { test: /\.less$/, loader: 'style-loader!css-loader!less-loader' },
10       { test: /\.css$/, loader: 'style-loader!css-loader' },
11       { test: /\.(png|jpg)$/, loader: 'url-loader?limit=8192' } // inline
12     ]
13   }
14 };
```

plugins    target    devtool

# loaders

## preprocess files

<http://webpack.github.io/docs/loaders.html>

# loaders

preprocess files

pre-\* / loaders / post-\*

<http://webpack.github.io/docs/loaders.html>



# File loader

filename template

url-loader, json-loader ...

<http://webpack.github.io/docs/loader-conventions.html>

# plugins

make webpack flexible



# **Extract-text**

extract inline css to files

idea from GWT

# Code splitting

load on demand

CommonJS: `require.ensure`

AMD: `require`



6 lines (6 sloc) | 0.139 kb

```
1  var a = require("a");  
2  var b = require("b");  
3  require.ensure(["c"], function(require) {  
4      require("b").xyz();  
5      var d = require("d");  
6  });
```

{c, d} will be an additional chunk.

# Stylesheets

require css

create style element

inline css

extract-text-plugin

css files





# Shimming modules

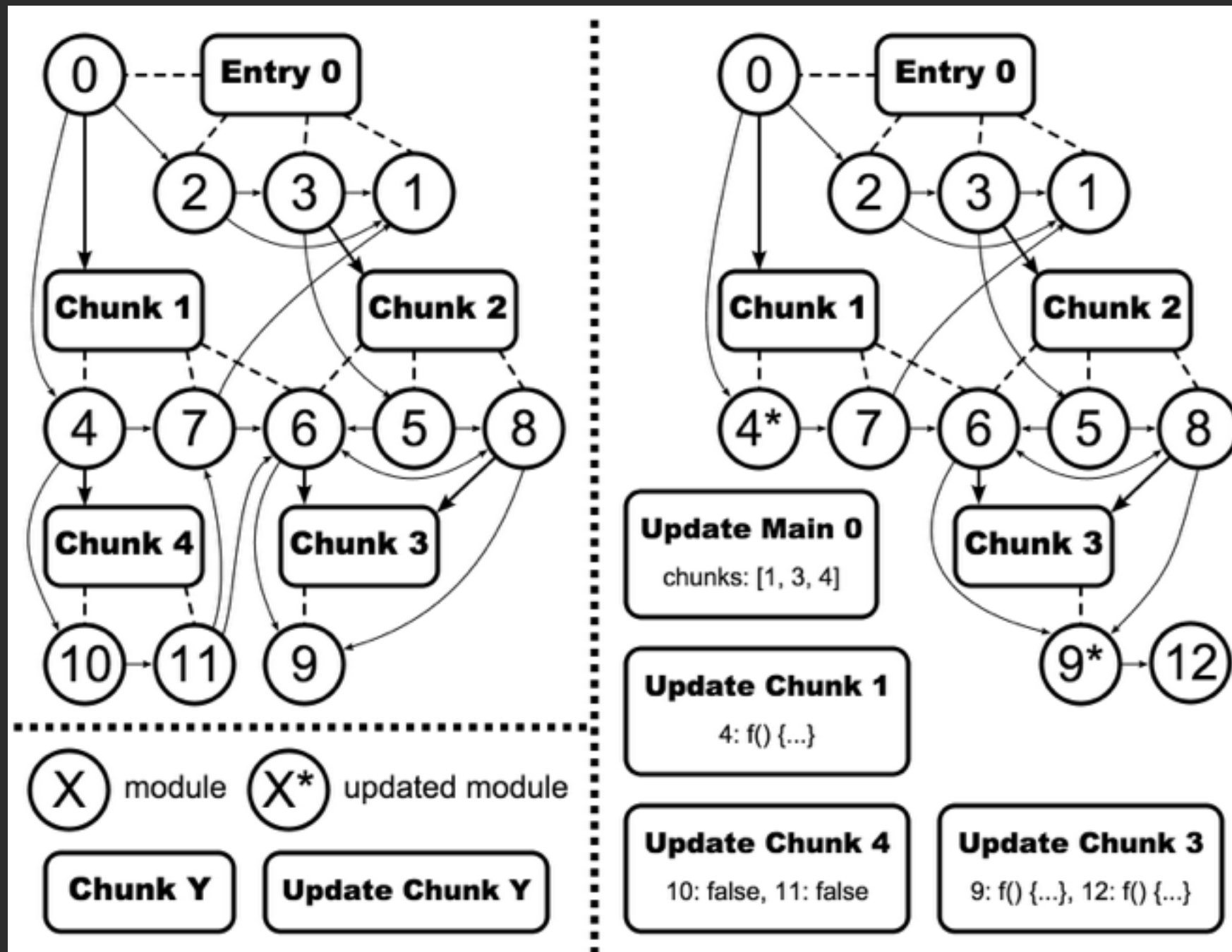
```
require("imports?${=jquery!../file.js")
```

```
var XModule =  
require("exports?XModule!../file.js")
```



# Hot Module Replacement

Livereload for every module



## Entry

webpack-dev-server/client?

http://localhost:2992

webpack/hot/only-dev-server

## Plugins

new

webpack.HotModuleReplacementPlugin()

**Webpack analyze**

[Open](#)[Home](#)[Modules](#)[Chunks](#)[Assets](#)[Warnings](#)[Errors](#)[Hints](#)

# Multiple references to the same module

Refactor this:

```
var a = require("xyz").a;  
var b = require("xyz").b;  
var c = require("xyz").c;
```

To this:

```
var xyz = require("xyz");  
var a = xyz.a;  
var a = xyz.b;  
var c = xyz.c;
```

<http://webpack.github.io/analyse/>

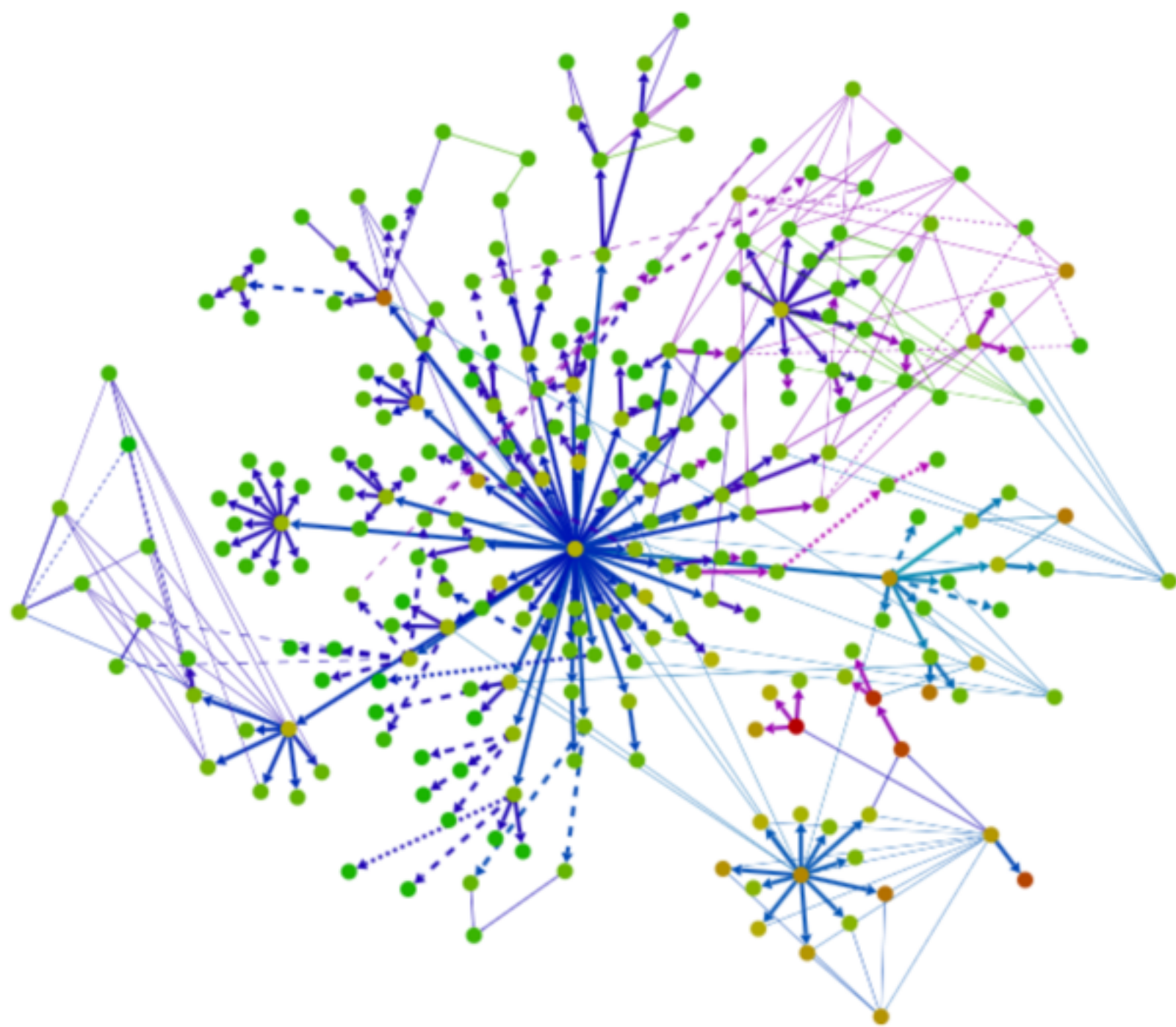


Figure 1



# **Webpack 2**

webpack/concord

# How We Use Webpack


# **Build with React**

[watchout-tw/prototype-seed](https://watchout-tw/prototype-seed)

# Directory Structure

## component-based, SUITCSS

Show data id in app



yhsiang

authored 3 days ago

..

data

Update for sections of questions more than one

App.css

Add App-title

App.jsx

Show data id in app

**How about API**

# Proxy server

webpack-dev-server and express

use proxy option now!

```
7  const targetProxy = new HttpProxy.createProxyServer({
8    target: {
9      host: "localhost",
10     port: process.env.WEBPACK_DEV_SERVER_PORT || 2992
11   },
12 });
13
14 const config = require("../webpack.config");
15 const re = new RegExp(config.output.publicPath);
16
17 const hostServer = http.createServer(function (req, res) {
18   var url = req.url;
19   var isWebpackDevServerRequest = re.test(url) || /hot-update.js(on)?$/i.test(url);
20   // debug(url, isWebpackDevServerRequest);
21
22   if (isWebpackDevServerRequest) {
23     console.log("Webpack Request", url);
24     targetProxy.web(req, res);
25   } else {
26     console.log("Normal Request", url);
27     serverCallback(req, res);
28   }
29 });
```

Special thank to @tomchentw

**Thank you**



# Recommendations

webpack-howto

<https://github.com/petehunt/webpack-howto>

react-starter

<https://github.com/webpack/react-starter>