

Pythonic JavaScript for Web Developers

@Uninen

Ville Säävuori

EuroPython 2017



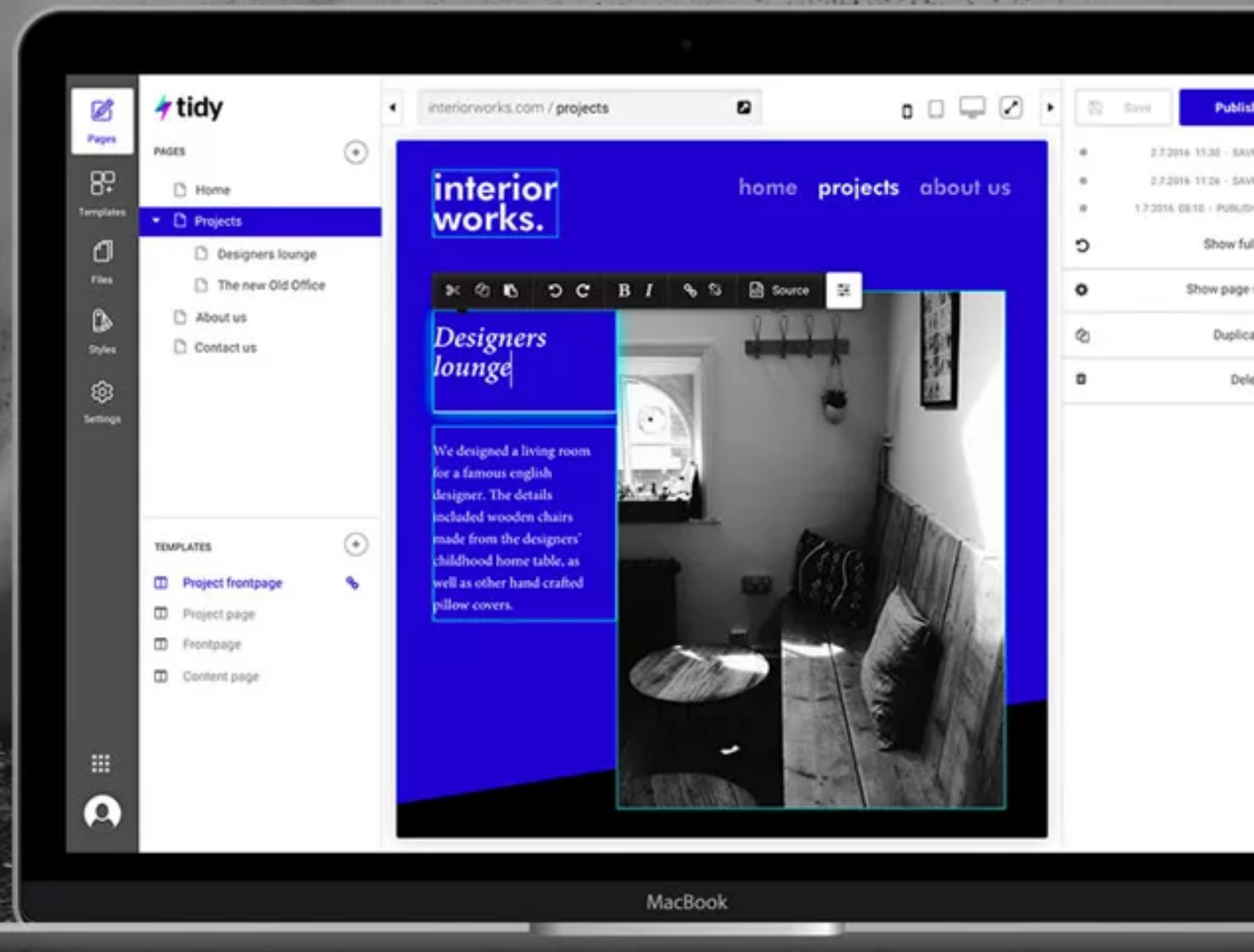
or

**How To Get Modern JavaScript
into Your Python Projects**



@Uninen

Club
ONNITEKKI



do you know one or more of these:

ES6, NPM, React, WebPack

**95% of 10 million most popular
Web pages use JavaScript**

**You NEED to know JavaScript if
You develop for the Web in 2017**

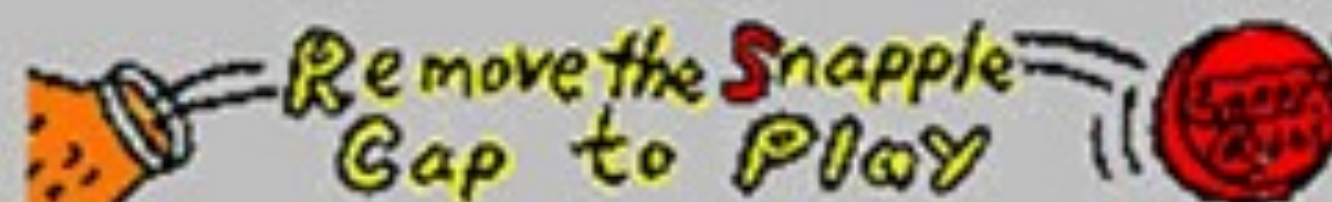
but...



Yahoo - 1995



Now Open:
Yahoo! Surf Shop!



Web Launch

Search

[Options](#)

- **Arts**
Humanities, Photography, Architecture, ...
- **Business and Economy [Xtra!]**
Directory, Investments, Classifieds, Taxes, ...
- **Computers and Internet [Xtra!]**
Internet, WWW, Software, Multimedia, ...
- **Education**
Universities, K-12, Courses, ...
- **Entertainment [Xtra!]**
TV, Movies, Music, Magazines, ...
- **Government**
Politics [Xtra!], Agencies, Law, Military, ...
- **Health**
Medicine, Drugs, Diseases, Fitness, ...
- **News [Xtra!]**
World [Xtra!], Daily, Current Events, ...
- **Recreation**
Sports [Xtra!], Games, Travel, Autos, ...
- **Reference**
Libraries, Dictionaries, Phone Numbers, ...
- **Regional**
Countries, Regions, U.S. States, ...
- **Science**
CS, Biology, Astronomy, Engineering, ...
- **Social Science**
Anthropology, Sociology, Economics, ...
- **Society and Culture**
People, Environment, Religion, ...

[Text-Only Yahoo](#) ~ [Contributors](#)

1999

Netscape: DIGITAL EDITION | Democrat and Chronicle | Rochester, NY

Back Forward Home Reload Images Open Print Find Stop

Location: <http://www.rochesterdandc.com/>

DINOSAURS Sat. 10/3/98 through Mon. 1/11/99
PREHISTORIC ENCOUNTER! AT THE ROCHESTER MUSEUM & SCIENCE CENTER

Monroe County Winter Parks' Guide

DIGITAL EDITION
DEMOCRAT AND CHRONICLE, Rochester, NY

SEARCH FEEDBACK

Sunday, Dec. 20 Home


Cloudy
HIGH: 37 LOW: 34
FULL FORECAST

ROCHESTER NEWS
ROCHESTER GOES OUT
ROCHESTER SPORTS
BULLETIN BOARDS
COMMUNITY
ROCHESTER CAREERS
CLASSIFIEDS
ROCHESTER WHEELS
ROCHESTER HOMES
STREET OF SHOPS
NEWSPAPER INFO
DIGITAL EDITION INFO
INTERNET ACCESS

Clinton impeached

A House bitterly divided along party lines impeached Bill Clinton on Saturday for lying and obstructing justice to conceal an extra-marital affair, hurling America into the spectacle of a Senate trial of a president for only the second time in the 209-year history of the office.



[MORE NEWS...](#)

What do you think?
Visit [The Exchange](#) and share your opinion on the impeachment debate.

[Weather](#) | [News](#) | [Goes Out](#) | [Sports](#) | [Bulletin Boards](#) | [Community](#) | [Employment](#)

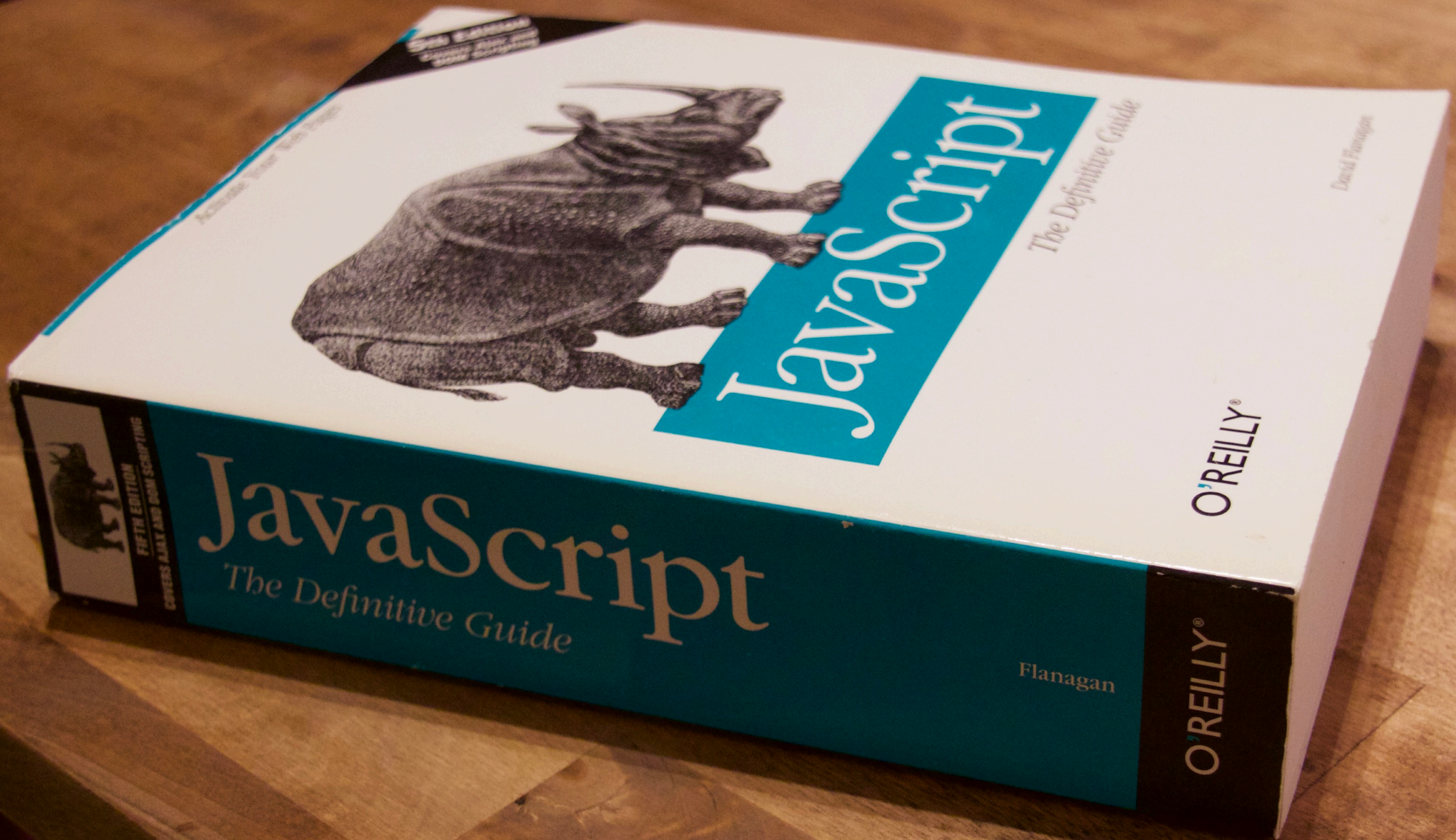
Copyright 1998 Rochester Democrat and Chronicle.

ROCHESTER GOES OUT
 Leslie Wu's exhibit

ROCHESTER SPORTS
 Flutie's not finished

ROCHESTER WHEELS
 1999 Corvette hardtop

LEND-A-HAND
 Support four area charities



Spoke Publishing
Copyright 2010, 2009, 2008
All rights reserved.

Activate Your Free Trial



JavaScript

The Definitive Guide

David Flanagan

O'REILLY®



FIFTH EDITION
COVERS AJAX AND DOM SCRIPTING

JavaScript

The Definitive Guide

Flanagan

O'REILLY®



JavaScript: The Good Parts

Crockford



O'REILLY®



FIFTH EDITION
COVERS AJAX AND DOM SCRIPTING

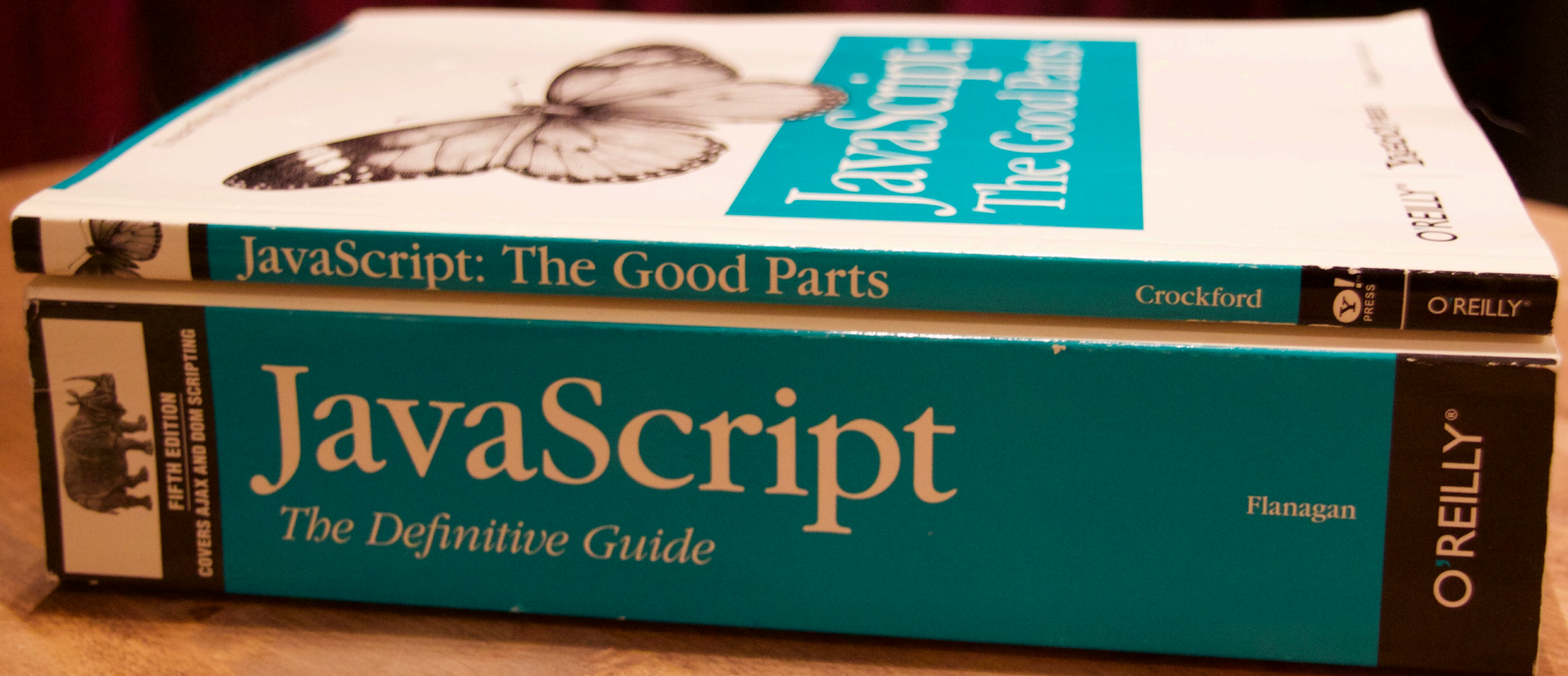
JavaScript

The Definitive Guide

Flanagan

O'REILLY®

ES6 / ES2015



New ES6+ features

- **let, const**
- **classes**
- **object literals**
- **modules**
- **iterators, generators**
- **map, set, weakmap, weakest**
- **promises**
- **template strings**
- **destructuring**
- **async / await**

Oldskool JS Development



Oldskool JS Development

jQuery + `<script>`

Modern JS Development





package manager

BABEL

transpiler



ESLint

linter

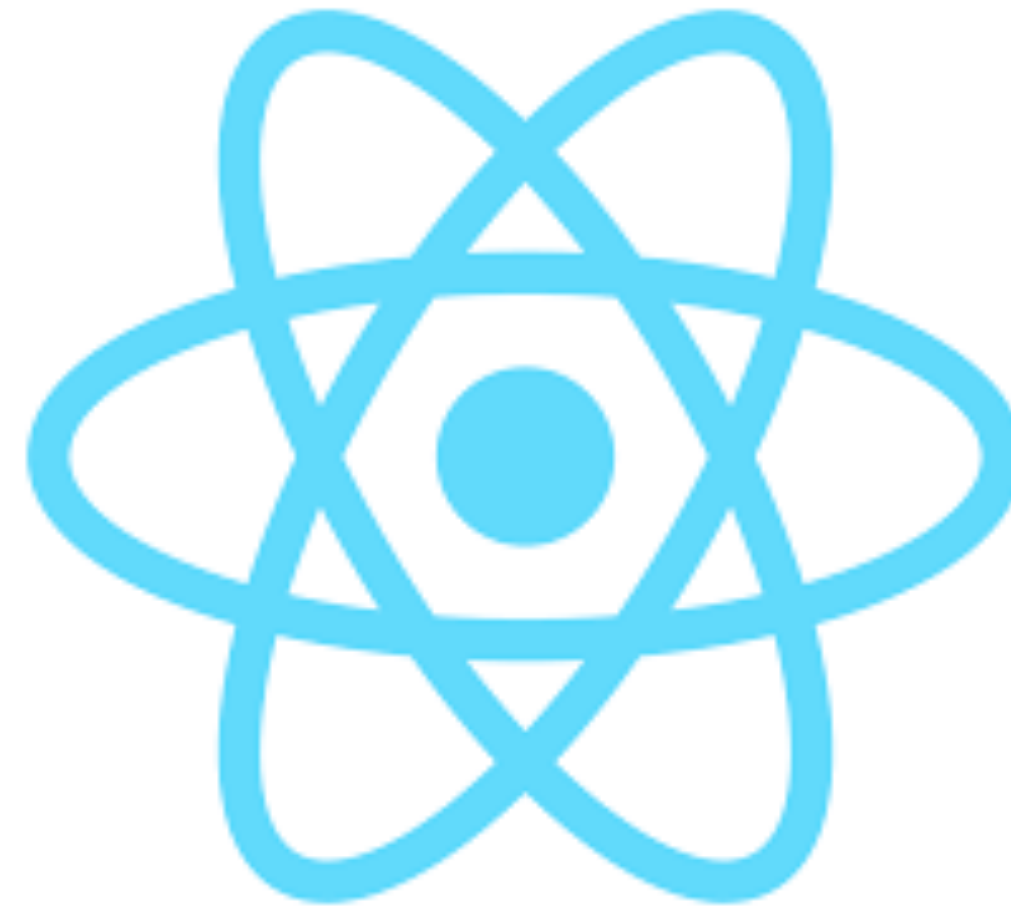


webpack

bundler



Angular(JS)



React



Vue

framework



Vue.js



requires new tools



requires new tools
...and configuration

GREETINGS, STRANGER.

WHATEVER QUEST DRIVES YOU,
ABANDON IT.

YOU SHALL FIND NO ANSWERS
IN THESE DESOLATE WASTES.

I KNEW I WOULDN'T.

I GUESS I ... JUST
HAD TO SEE.



I HATE FEELING DESPERATE ENOUGH TO VISIT
THE SECOND PAGE OF GOOGLE RESULTS.

gitlab.com/uninen/ep2017



PYTHONIC JS?


```
import feature from package
```



```
<script src="jquery.js"></script>  
<script src="jquery-plugin1.js"></script>  
<script src="jquery-plugin2.js"></script>  
<script src="another-library.js"></script>
```

```
<script>  
|    // insert horrible JS spaghetti here  
</script>
```




```
1  'use strict'
2
3  window.$ = require('jquery')
4  require('jquery-plugin1')
5
6  import Plugin2 from 'jquery-plugin2'
7  import AnotherLibrary from 'another-library'
8
9
10  ✓ ;(function () {
11      |
12      |     // insert Pythonic ES6+ JavaScript here
13      |
14      | }())
```



```
<script src="my-awesome-javascript.js"></script>
```


Coding Guidelines



Pythonic JavaScript is:

- **modular**
- **testable**
- **linted**

DEMO

Recap



Thank You!

@Uninen

