

俺的フロントレンド 2013総括

と、コラボ 2013/12/18

CyberAgent, Inc. Ayumu Sato

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FRONTREND

新・3大 2013 フロンティアンド



新・3大「Frontendのトレンド」

2013年7月6日

High Performance Web Frontend



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スマートフォンサイトの読み込み速度を改善するために

2013年8月16日金曜日 | 19:50

多くのユーザーがその手軽さや利便性から、スマートフォンからの検索を行っています (英語)、携帯端末向けのページではその読み込みに平均して 7 秒以上かかっていることがわかっています (英語)。この読み込み時間が 1 秒以下になることはユーザーにとっても理想的ですが、多くのユーザーがスマートフォンでウェブサイトを高速化するためのガイドライン (日本語も準備されています) を開発しました。このガイドラインに従つて、PageSpeed インサイトツールでも見ました。

<1000ms 死守説@モバイル

"above the fold" コンテンツを優先的に扱う

たとえばこちらのレポート (英語) によると、ページの読み込みに 1 秒以上かかった場合、

体験を提供してサイトを利用もらうため、今回策定したガイドラインではいわゆる "above the fold" と呼ばれる、ユーザーが最初に目にする、スクロールしなくとも表示されるエリアのコンテンツを少しでも早く提供する（その他のコンテンツはバックグラウンドで読み込みを進める）ことを重視しました。また "above-the-fold" エリアをレンダリングするのに必要な HTML や CSS, JavaScript は非常に重要なレンダリングパス ([critical rendering path](#) (英語)) として知られています。

携帯端末上でのユーザーに最初に見えるコンテンツの読み込み時間を 1 秒未満にするためのベストプラクティスをここでご紹介します。

- 200 ms 以内にレスポンスを返すようにする
- リダイレクトの数は極力少なくする
- 最初のレンダリング時のデータのやり取りを極力少なくする
- ユーザーに最初に見えるコンテンツを表示するのに必要となる JavaScript および CSS を外部参照せずにインライン化する
- ブラウザのレイアウト、レンダリング時間を考慮に入れる (200 ms)
- JavaScript の実行とレンダリング時間を最適化しておく

[今回公開したガイドライン](#) では上記のような項目についてより詳しくご紹介していますのでぜひ御覧ください。また、ご自身のサイトでの改善状況については [PageSpeed インサイトツール](#) でご確認いただけます。

ご意見・ご感想は、[ウェブマスター ヘルプ フォーラム](#) までお寄せください。

ブログ内を検索

アーカイブ

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1月 (1)

2月 (1)

3月 (1)

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A dynamic photograph of two horses racing on a track. The horse in the foreground is dark-colored with a white blaze on its forehead and a green star pattern on its nose. A jockey in a white cap and goggles is mounted on it. Behind it, another horse with a yellow saddle cloth featuring the number '6' is also in motion. The background shows the blurred green grass and wooden railings of the racetrack.

HIGH PERFORMANCE WEBFRONTEND



Network



Render



Compute

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訴えたいのは**

カッコ良くても
遅いサイトはクソ

クソなので
あります



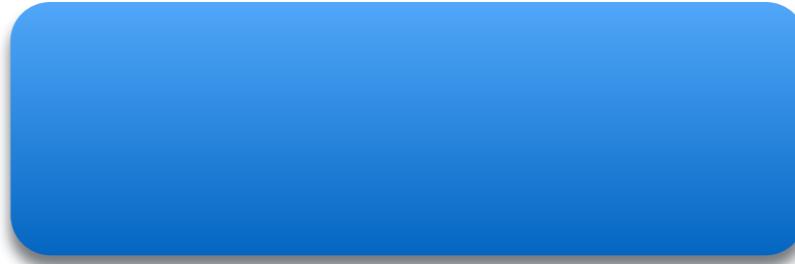
Web Frontend

Rendering Performance

Knowledge & Tips

非力なWebと 装飾コスト

The Button



The_Button.css

```
.the_button {  
    width: 200px;  
    height: 50px;  
  
    background: linear-gradient  
        (top, #48a2fb, #005cc2);  
    border-radius: 5px;  
    box-shadow: 0 3px 5px rgba(0,0,0,0.6)  
}
```

Layout

Paint



(none)
100 %



shadow+dotted
403 %



box-shadow
328 %



shadow+radius
2074 %



border-radius
466%



radius+dotted
9892 %



dotted-border
125 %



all mix!!
11654 %

[http://havelog.ayumusato.com/develop/performance/e560-
css_rendering_with_skia_debugger.html](http://havelog.ayumusato.com/develop/performance/e560-css_rendering_with_skia_debugger.html)

パフォーマンス

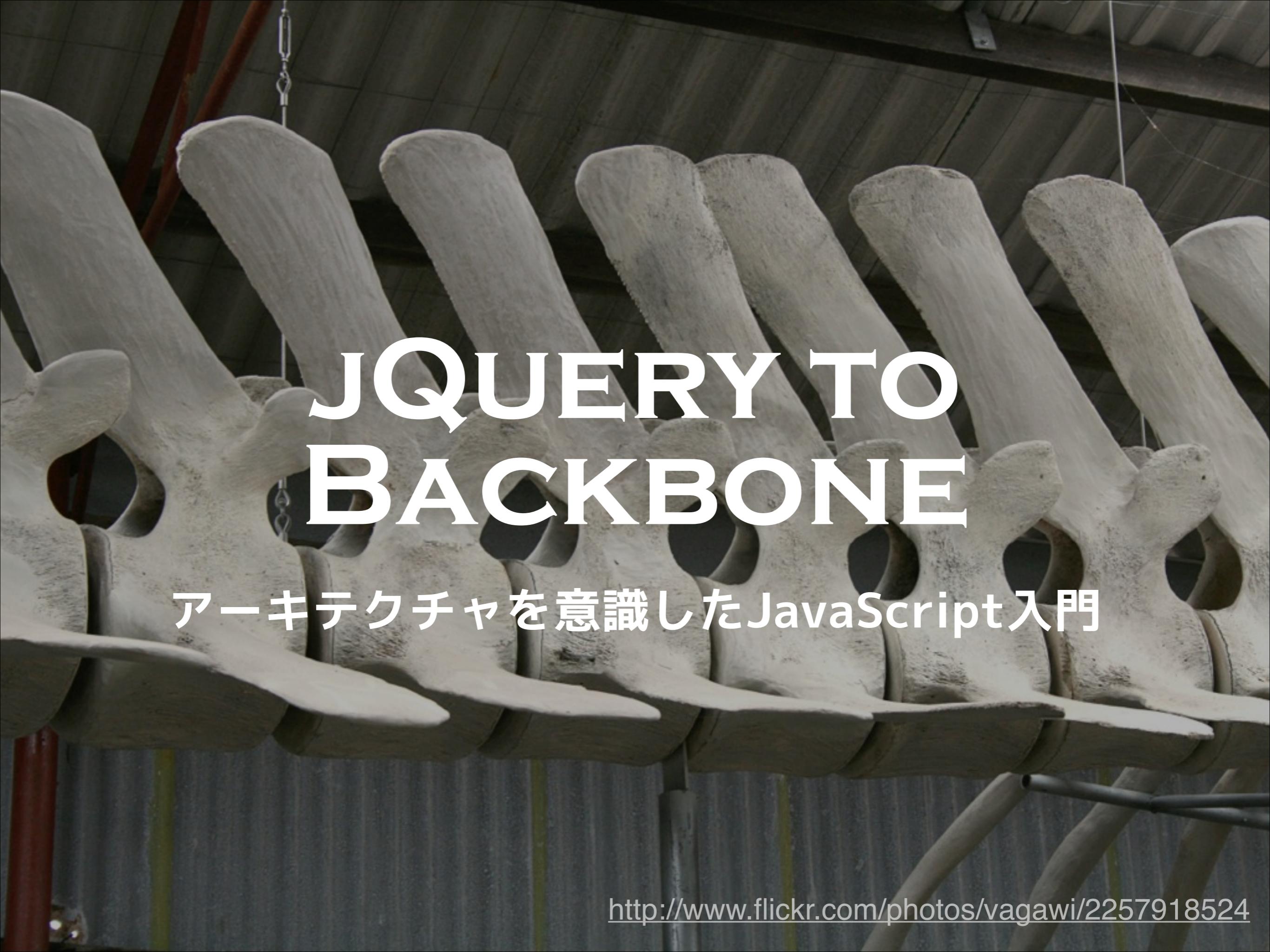
&

実行環境の理解

新・3大「Frontendのトレンド」

2013年2月9日

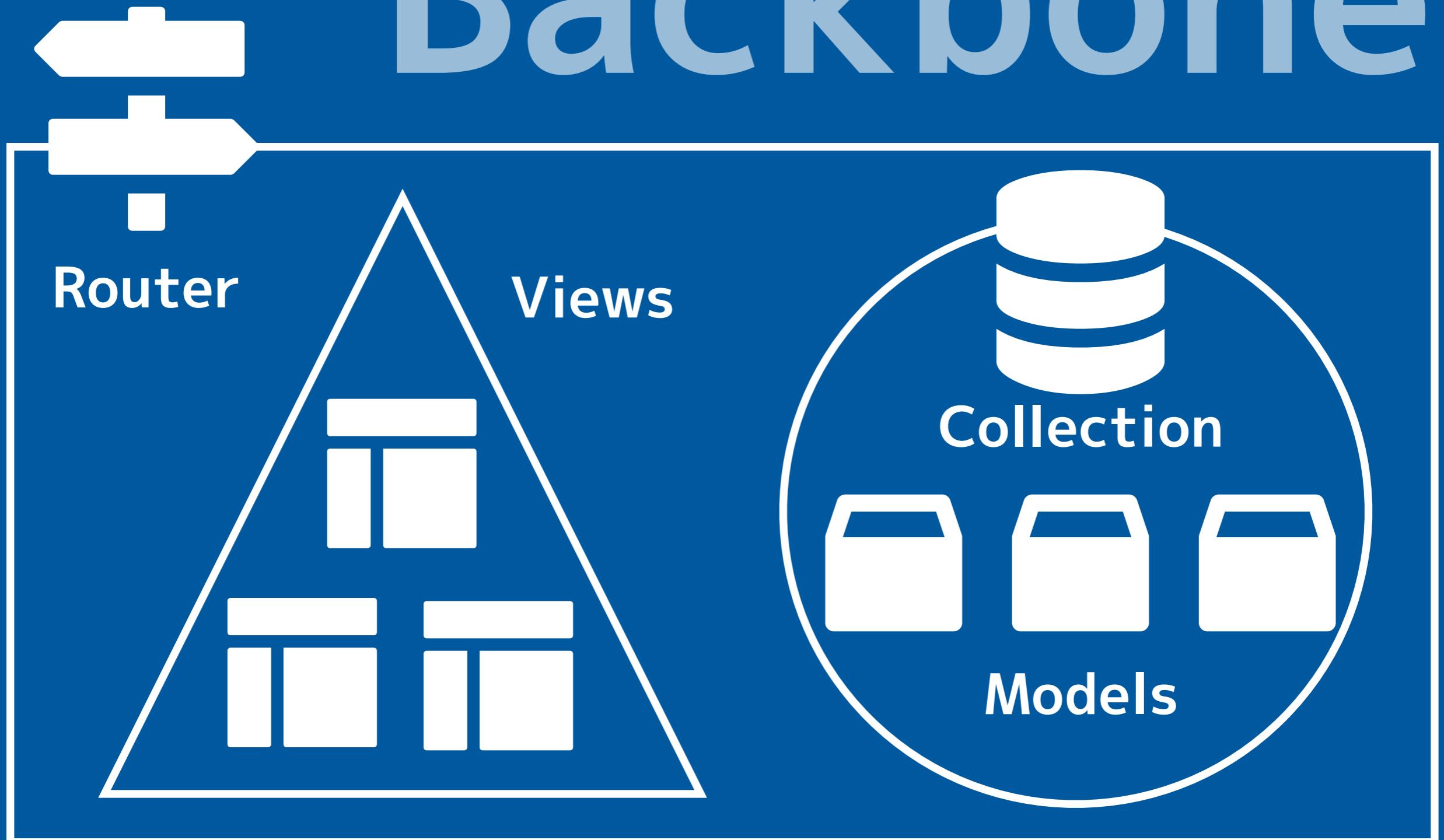
jQuery to Backbone JS Architecture



JQUERY TO BACKBONE

アーキテクチャを意識したJavaScript入門

Backbone



via. Backbonification - Migrating NewsBlur From DOM Spaghetti to Backbone.js

<https://speakerdeck.com/samuelclay/backbonification-migrating-newsblur-from-dom-spaghetti-to-backbone-dot-js?slide=12>

**まず有権者に
訴えたいのは**

**Backbone
Angular
どちらが良いか？**

It Depends

時と場合による

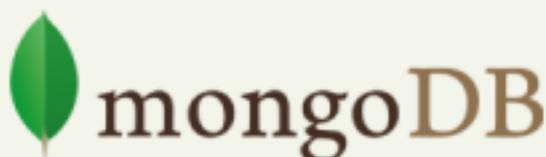
次のトレンドが
すぐに来るだけ
なのであります

JSを巡る
アーキテクチャは
既に境界が曖昧



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The MEAN Stack: MongoDB, ExpressJS, AngularJS and Node.js

APRIL 30, 2013

97 Comments

By Valeri Karpov, Kernel Tools engineer at MongoDB and co-founder of [the Ascot Project](#).

A few weeks ago, a friend of mine asked me for help with PostgreSQL. As someone who's been blissfully SQL- free for a year, I was quite curious to find out why he wasn't just using MongoDB instead. It turns out that he thinks MongoDB is too difficult to use for a quick weekend hack, and this couldn't be farther from the truth. Just finished reading my second book on MongoDB in [Mongo and NodeJS \(the FinTech Hackathon\)](#) (hosted by MongoDB) and am confident that there is no reason to use anything else for your next hackathon or REST API hack.

MEAN Stack

First of all, there are huge advantages to using a uniform language throughout your stack. My team uses a coding with the same language throughout the stack to realize performance gains in both the software itself and in the productivity of our developers. With MongoDB, we can store our documents in a JSON- like format, write JSON queries on our ExpressJS and NodeJS based server, and seamlessly pass JSON documents to our

AngularJS frontend. Debugging and database administration become a lot easier when the objects stored in your database are essentially identical to the objects your client Javascript sees. Even better, somebody working on the client side can easily understand the server side code and database queries; using the same syntax and objects the whole way through frees you from having to consider multiple sets of language best practices and reduces the barrier to entry for understanding your codebase. This is especially important in a hackathon setting: the team may not have much experience working together, and with such little time to integrate all the pieces of your project, anything that makes the development process easier is gold.

Another big reason to go with MongoDB is that you can use it in the same way you would a MySQL database (at least at a high level). My team likes to describe MongoDB as a "gateway drug" for NoSQL databases because it is so easy to make the transition from SQL to MongoDB. I wish someone had told me this when I first starting looking into NoSQL databases, because it would have saved me a lot of headaches. Like many people, I was under the impression that CouchDB would be easier to use, while the performance improvements from MongoDB were something I could take advantage only once I had gotten my feet wet with CouchDB. Instead CouchDB ended up being much more difficult to work with than I anticipated, largely

<http://blog.mongodb.org/post/49262866911/the-mean-stack-mongodb-expressjs-angularjs-and>



CODING

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An Introduction To Full-Stack JavaScript

By [Alejandro Hernandez](#)

November 21st, 2013

JavaScript, Techniques, Tools

68

Comments

<http://coding.smashingmagazine.com/2013/11/21/introduction-to-full-stack-javascript/>

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Smashing Newsletter

Node.js and the new web front-end

Posted at October 7, 2013 07:00 am by Nicholas C. Zakas

Tags: [Architecture](#), [JavaScript](#), [Node.js](#), [Web Server](#)

Front-end engineers have a rather long and complicated history in software engineering. For the longest time, that stuff you sent to the browser was “easy enough” that anyone could do it and there was no real need for specialization. Many claimed that so-called web developers were nothing more than graphic designers using a different medium. The thought that one day you would be able to specialize in web technologies like HTML, CSS, and JavaScript was laughable at best – the UI was, after all, something one could just hand together without much work.

JavaScript was the technology that really started to change the perception of web developers, changing the way we think about the web. When the Ajax boom came along, front-end engineers turned their noses up at became the driving force of the Internet. CSS and HTML then came along for the ride as more browsers were introduced, creating cross-browser incompatibilities that very clearly defined the need for front-end engineers. Today, front-end specialists are one of the most sought after candidates in the world.

The two UI layers

Even after the Ajax boom, the front-end engineer was seen as primarily working with technologies inside of a browser window. HTML, CSS, and JavaScript were the main priorities and we would only touch the back-end (web server) in order to ensure it was properly outputting the front-end. In a sense, there were two UI layers: the one in the browser itself and the one on the server that generated the payload for the browser. We had very little control over the back-end UI layer and were often beholden to back-end engineers’ opinions on how frameworks should be put together – a world view that rarely took into consideration the needs of the front-end.

Node UI Layer

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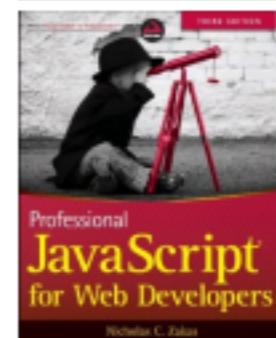
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HTML5
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WEB COMPONENTS CURRENT STATUS

drafts

This page summarizes the relationships among specifications, whether they are finished standards or drafts. Below, each title links to the most recent version of a document.

Web Components

Drafts

http://www.w3.org/standards/techs/components#w3c_all

through the [W3C Recommendation Track](#) process. Others may be published as Group Notes or become obsolete specifications.

Last Call Drafts

2013-10-24

Custom Elements

This document describes the method for enabling the author to define and use new types of DOM elements in a document.

Other Working Drafts

2013-06-06

Introduction to Web Components

Provides an overview of Web Components.

システム全体に
適応する地力

新・3大「Frontendのトレンド」

2013年x月y日

Language Barrier

言語の壁

Language Barrier

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0 votes	0 answers	3 views	what wrong with my java concept?		1m ago	A-U	14
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0 votes	0 answers	3 views	Qt on Beaglebone Black		1m ago	Mat	89.7k
---------	-----------	---------	--	--	--------	-----	-------

0 votes	0 answers	2 views	Fastest scalable Database for “goup by, count” Queries		1m ago	FrankyK	5
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0 votes	0 answers	6 views	Is that true that I can't add fulltext search on different character set column	
---------	-----------	---------	---	--

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Amazon
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VS

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知恵ノート



あければ、パーティ。冬の氷結。



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An Introduction To Full-Stack JavaScript

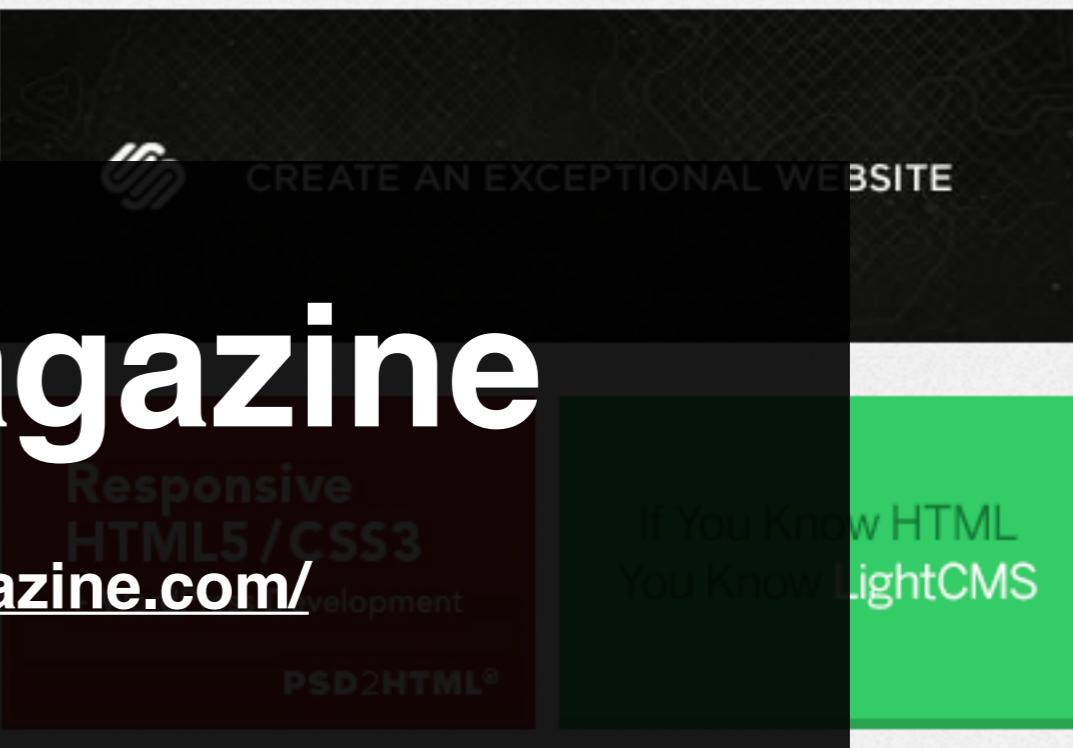
By [Alejandro Hernandez](#)

November 21st, 2013

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Issue N
386

NEW! DEC 04, 2013

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by [MIKE PICK](#) · [16 Comments](#)

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300ms tap delay, gone away

Every click interaction in mobile browsers is hampered with a 300ms delay, but that's gone in Chrome 32 for mobile-optimised sites!



The Front-end of Middle-earth: A walkthrough of multi-device development

In this article we discuss the challenges, problems and solutions we encountered when creating the rest of the HTML5 experience for Middle-earth.



Using Your Terminal From The DevTools

How to access a complete terminal from inside the Chrome Developer Tools

Vim.js

13 Dec 2013 | By Alex Young | 0 Comments | [vim](#) [emscripten](#) [editors](#)



```
1 " Default .vimrc for vim.js
2 " Copyright (c) 2013 Lu Wang <coolwanglu@gmail.com>
3
4 " Use CSS font format
5 " Use monospace fonts only!
6 set guifont=12px\ monospace
7
8 " Only works if you have a terminal
9 " Help me implement file system hooks (for loading external files)
10 colorscheme Darkside
11
12 " To save you from some warning messages
13 " (you know why swap files are not working)
14
15 " Others
16 " Some are actually not yet supported
17 set go=
18
19 " set tabstop=4
20 " set expandtab
21 " set fileencoding=utf8
22 " set backspace=indent,tab,start
23 " set wildmode=longest,list,full
24 syntax on
25
26 set mouse=
27 set smartindent
28 set cindent shiftwidth=4
29
30
31
32
33
34
35
```

Surely the very reason Emscripten was created?

Finally, my worlds have collided! In case you didn't know, I regularly write a [Vim blog](#). It's surprisingly easy to find things to say about this 22 year old text editor, and it's been my main tool for writing code and articles for a long time. [Vim.js](#) ([GitHub: coolwanglu / vim.js](#)) by Lu Wang is an Emscripten port of Vim, allowing you to use Vim in a browser.



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React vs FruitMachine: layout!

by Andrew Betts, 12 October 2013

Facebook's React client-side component layout engine bears a striking resemblance to our own Fruit machine client side component layout engine. We build the same solution using both, compare the approaches and discuss what problem we're both trying to

FT Labs

Thoughts from Edge 2

by Andrew Betts, 2 October 2013

The second iteration of our web technologies conference, Edge, took place in New York City last week. Here, event curator Andrew Betts talks about the motivations for the event, how it went and what we can expect from the third edition.

<http://labs.ft.com/>

About

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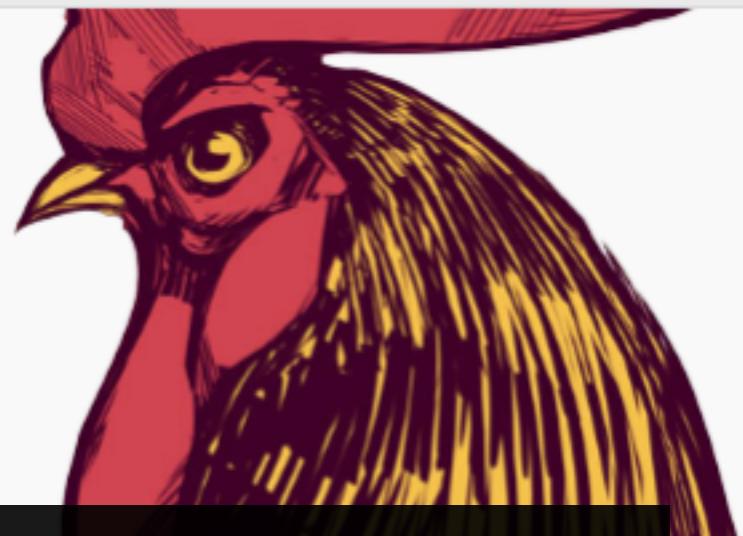
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Discussion

24

Show Your Work

5

MV* Frameworks

1

Libraries

5

Widgets (jQuery, etc)

3

Guides/Tutorials

13

Books

1

Off topic

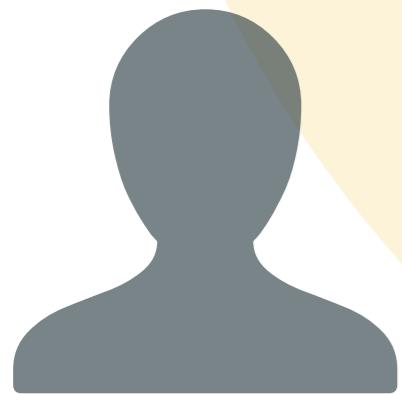
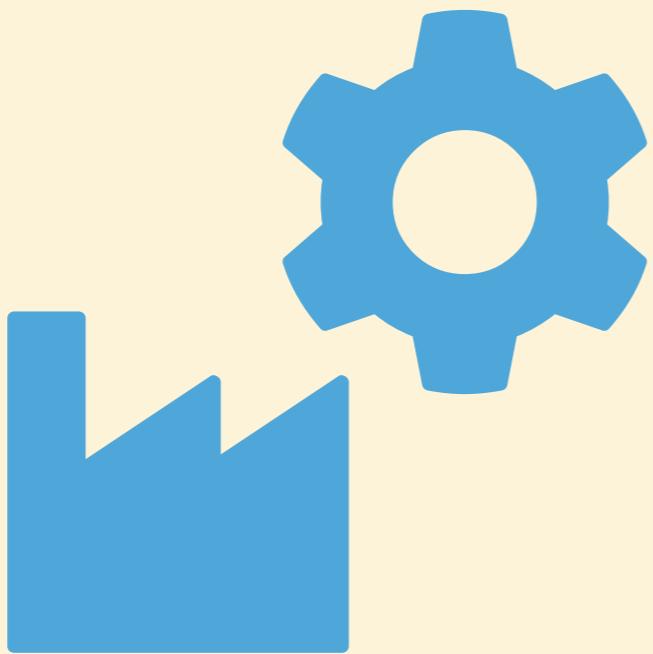
4

がんばろう

總論

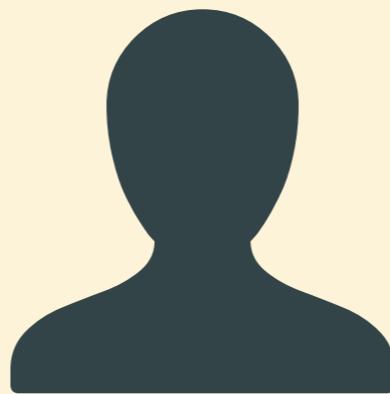
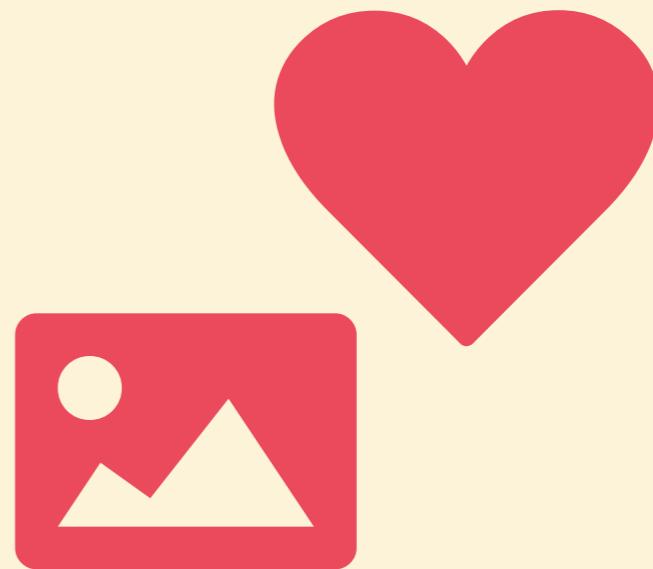


System Architecture

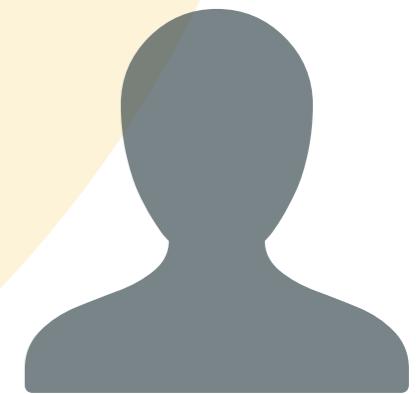


Engineer

Product Quality



Frontend



Designer

フロント生存戦略

- ・フロントの専門性でイニシアチブを持って
- ・仲立ちとバランス感覚を重んじよ
- ・ポートフォリオを見直し続けよ



Thank you

🏠 <http://aho.mu>

🐦 [@ahomu](https://twitter.com/ahomu)

🐱 github.com/ahomu