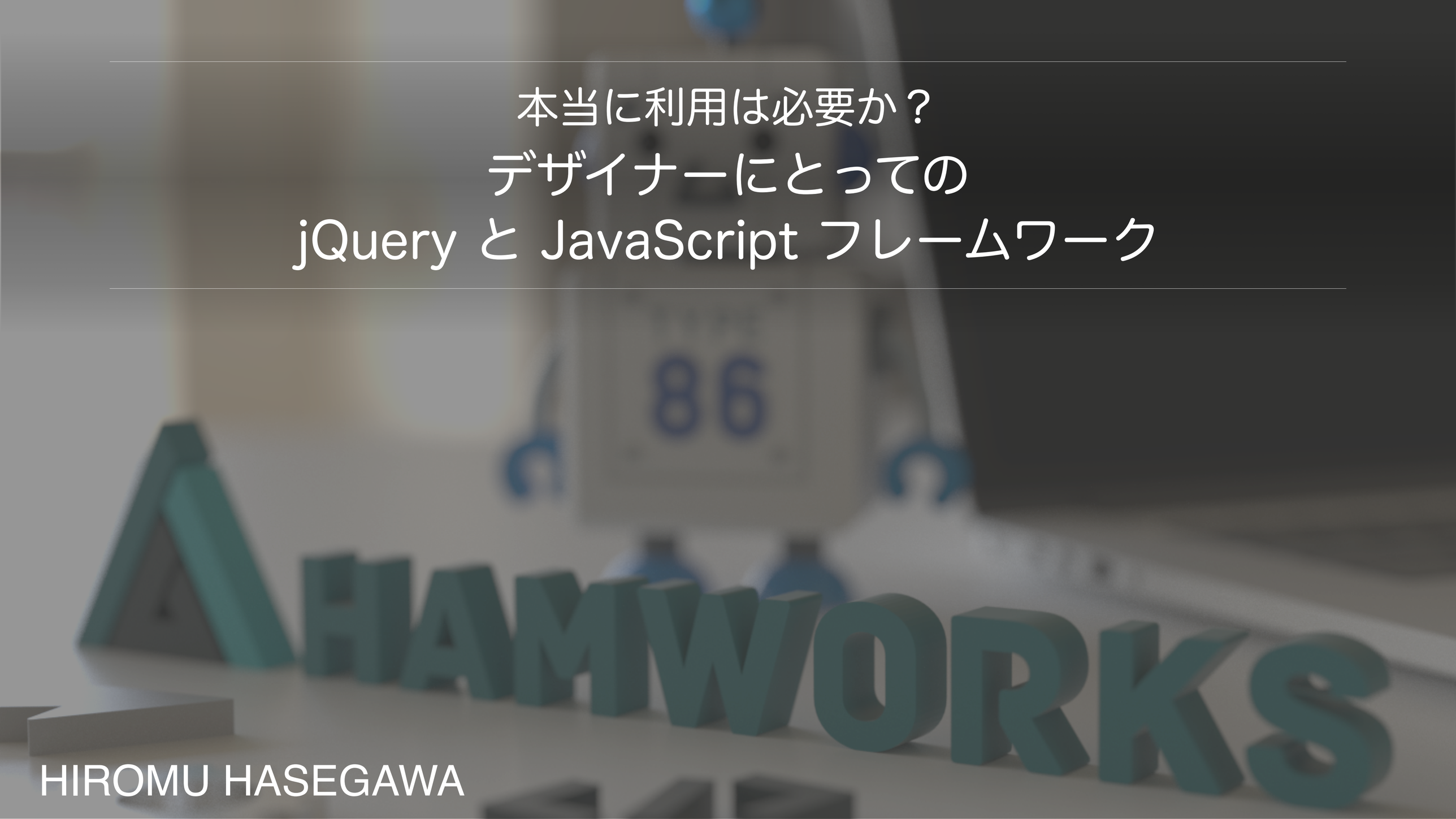
CSS Nite LP47

Coder's High 2016

2016.9.24



本当に利用は必要か？
デザイナーにとっての
jQuery と JavaScript フレームワーク

HIROMU HASEGAWA

自己紹介

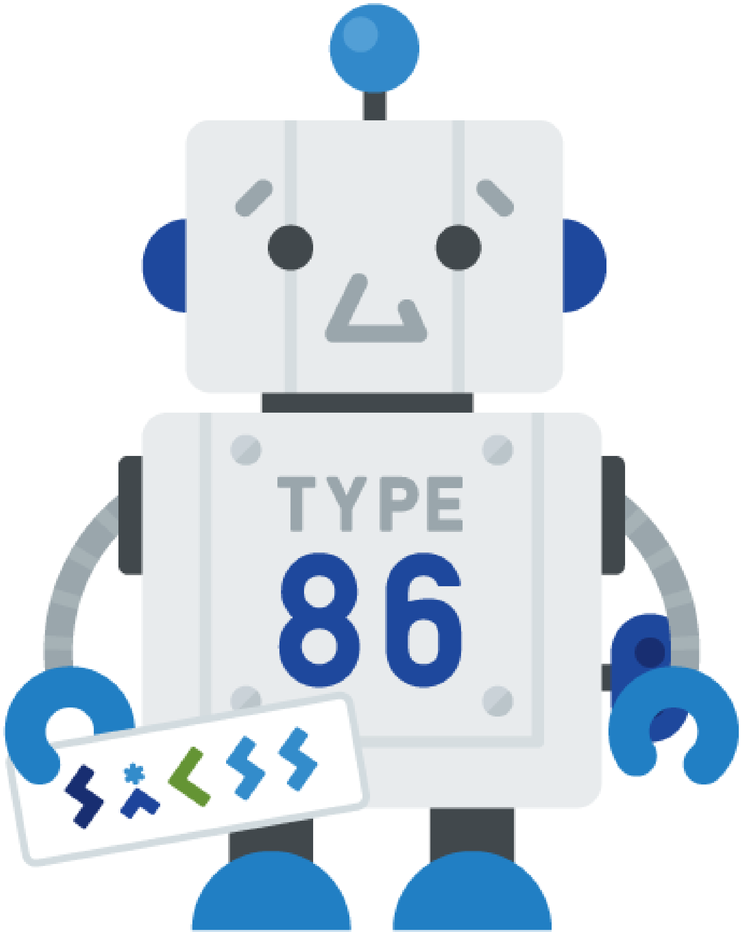
長谷川 広武 (ハム)
@h2ham

HAMWORKS

新潟出身 北海道札幌市在住
フリーランス → 法人化：代表取締役

フロントエンドエンジニア 兼 テクニカルディレクター

愛用エディタ：Sublime Text 3
最近の趣味： ハム家菜園水やり (農園ではない、インスタグラムにアップ中)


TYPE
86


Sapporo.css


ハートの完成！
わーい
合体

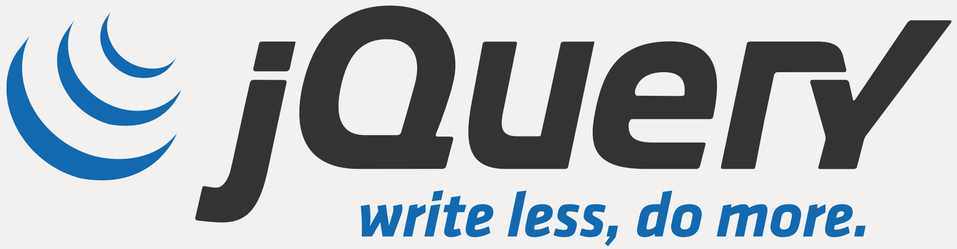
本日の結論

本日話す内容の結論

- jQuery含めライブラリやフレームワークは
  適材適所で活用
- 実装内容・規模・学習コストを考えて選択
  小規模のWebサイトであれば jQuery で問題なし
- 使いたくなければ使う必要はない

本日話す内容の注意

- 特定のフレームワークを
  ディスる内容ではありません


jQuery
write less, do more.

Categories

- Events
- Foundation
- jQuery
- jQuery UI
- Projects
- Weekly News

Recent Posts

- jQuery 3.1.1 Released!
- The jQuery Foundation and Standards
- jQuery 3.1.0 Released - No More

jQuery 3.0 Final Released!

Posted on June 9, 2016 by Timmy Willison

jQuery 3.0 is now released! This version has been in the works since October 2014. We set out to create a slimmer, faster version of jQuery (with backwards compatibility in mind). We've removed all of the old IE workarounds and taken advantage of some of the more modern web APIs where it made sense. It is a continuation of the 2.x branch, but with a few breaking changes that we felt were long overdue. While the 1.12 and 2.2 branches will continue to receive critical support patches for a time, they will not get any new features or major revisions. jQuery 3.0 is the future of jQuery. If you need IE6-8 support, you can continue to use the latest 1.12 release.

Despite the 3.0 version number, we anticipate that these releases shouldn't be too much trouble when it comes to upgrading existing code. Yes, there are a few "breaking changes" that justified the major version bump, but we're hopeful the breakage doesn't actually affect that many people.

To assist with upgrading, we have a brand new 3.0 Upgrade Guide. And the jQuery Migrate 3.0 plugin will help you to identify compatibility issues in your code. Your feedback on the changes will help us greatly, so please try it out on your existing code and plugins!

from the jQuery CDN, or link to them directly:

jQuery 3 系

通常版

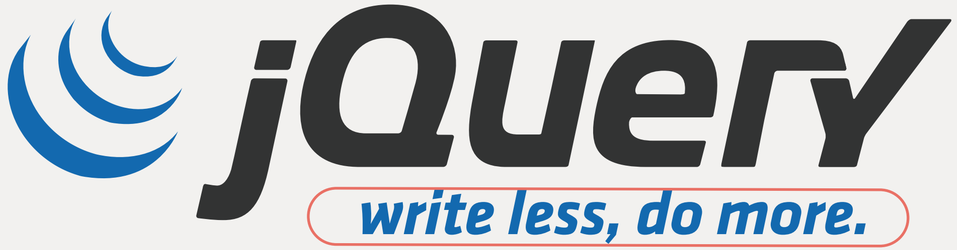
Slim build

jQuery

```
<button class="js-show">SHOW</button>
<button class="js-hide">HIDE</button>
<img src="img.png" class="js-toggle-body">

<script src="jquery.js"></script><!-- jQueryの読み込み -->
<script>
  $('.js-show').on('click', function() {
    $('.js-toggle-body').show();
  });
  $('.js-hide').on('click', function() {
    $('.js-toggle-body').hide();
  });
</script>
```

jQuery とは？



write less, do more.

少ないコードで、より多くのことを実行

```
var elements = document.querySelectorAll("p");
for(var i = 0; i < elements.length; i++) {
  elements[ i ].classlist.add("className");
}
```

```
$("p").addClass("className");
```

```
var elements = document.querySelectorAll("p");
for(var i = 0; i < elements.length; i++) {
  elements[ i ].classlist.add("className");
}
```

少しのコードで動作

```
$("p").addClass("className");
```

jQuery

- CSSを扱うのに近いセレクター
- デザイナーにとって導入しやすい
- プラグインが豊富

Tweet

Lightbox

by Lokesh Dhakar

The original lightbox script.

Eight years later — still going strong!

DOWNLOAD VIEW ON GITHUB

Examples

Two individual images

Four image set

http://lokeshdhakar.com/projects/lightbox2/

jQuery プラグインの利用

```
<link rel="stylesheet" href="path/to/lightbox.css">
<script src="jquery.js"></script>
<script src="lightbox.js"></script>

--

<a data-lightbox="groupname">
  <img src="img.png">
</a>
```

Optional caption.

Four image set


なんて簡単なんだ！

最初はそう思っていた・・・

しかし・・・

jQuery で頑張るのつらい

- ✖ 密結合すぎ
- ✖ DOM操作ゴリゴリつらい
- ✖ どこでイベントつけているの？

自分もよくやっていた Selector

```
$('#main .tab span a').on('click', function() {
  $(this).parent().parent().addClass('active')
    .siblings().removeClass('active');
  $('.tabpanel').hide();
  $($(this).attr('href')).show();
});
```

自分でもよくやっていた Selector

```
$('#main .tab span a').on('click', function() {
  $(this).parent().parent().addClass('active')
    .siblings().removeClass('active');
  $('.tabpanel').hide();
  $($(this).attr('href')).show();
});
```

自分もよくやっていた Selector

```
$('#main .tab span a').on('click', function() {
  $(this).parent().parent().addClass('active')
    .siblings().removeClass('active');
  $('.tabpanel').hide();
  $($(this).attr('href')).show();
});
```

密結合すぎ

```
<main class="main">
 <ul class="tablist">
  <li class="tab"><span><a href="#panel1">~</a></span></li>
  <li class="tab"><span><a href="#panel2">~</a></span></li>
  <li class="tab"><span><a href="#panel3">~</a></span></li>
 </ul>
 <div class="tabpanel__wrap">
   <div id="panel1" class="tabpanel"> ~ </div>
   <div id="panel2" class="tabpanel"> ~ </div>
   <div id="panel3" class="tabpanel"> ~ </div>
 </div>
</main>
```

DOM？

```
$('.sample-selector').on('click.name1', function() {
  $.ajax('xxx.json')
   .done(function(data) {
     $('#list').append('<li>'
       + '<a href="'+ data.link + '">'
       + data.title
       + '</a>'
       + ‘</li>');
    });
});
```

イベントはどこでついている？

```
$('.sample-selector').on('click.name1', function() {
  ~
});
$('.sample-selector').on('click.name2', function() {
  ~
});
$('.sample-selector').on('click.name3', function() {
  ~
});
$('.sample-selector').on('click.name4', function() {
  ~
});
```


photo by Captain Pancakes https://www.flickr.com/photos/70006548@N04/

プログラマー向けな話

jQueryだけで頑張るのはつらい

JavaScript ライブラリ・フレームワーク

BACKBONE.JS

Backbone.js gives structure to web applications by providing **models** with key-value binding and custom events, **collections** with a rich API of enumerable functions, **views** with declarative event handling, and connects it all to your existing API over a RESTful JSON interface.

The project is hosted on GitHub, and the annotated source code is available, as well as an online test suite, an example application, a list of tutorials and a long list of real-world projects that use Backbone. Backbone is available for use under the MIT software license.

You can report bugs and discuss features on the GitHub issues page, on Freenode IRC in the `#documentcloud` channel, post questions to the Google Group, add pages to the wiki or send tweets to @documentcloud.

Backbone is an open-source component of DocumentCloud.

Downloads & Dependencies (Right-click, and use "Save As")

Development Version (1.3.3) *72kb, Full source, tons of comments*

Production Version (1.3.3) *7.6kb, Packed and gzipped*
(Source Map)

https://angularjs.org/

React

A JAVASCRIPT LIBRARY FOR BUILDING USER INTERFACES

Get Started Download React v15.3.2

Declarative

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.

Declarative views make your code more predictable and easier to debug.

Component-Based

Build encapsulated components that manage their own state, then compose them to make complex UIs.

Since component logic is written in JavaScript instead of templates, you can easily pass rich data through your app and keep state out of the DOM.

Learn Once, Write Anywhere

We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.

React can also render on the server using Node and power mobile apps using React Native.

https://facebook.github.io/react/

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Vue.js

Reactive Components for Modern Web Interfaces

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https://vuejs.org/

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RIOT

A React-like user interface micro-library

CUSTOM TAGS • ENJOYABLE SYNTAX • VIRTUAL DOM • TINY SIZE

v2.6.2 — Bug fix children parent inheritance...

Why do we need a new UI library?

The frontend space is indeed crowded, but we honestly feel the solution is still "out there". We believe Riot offers the right balance for solving the great puzzle. While React seems to do it, they have serious weak points that Riot will solve.

So — here's why we need one:

http://riotjs.com/

さすがフレームワーク戦国時代

他にもいろいろな
ライブラリ・フレームワークがある

フレームワークを使うメリット

- 疎結合によるメンテナンス性向上
- HTMLとJavaScriptとの差の吸収
- データバインディング
- コンポーネント化しやすさ

プログラマーは

- ✔ 何かしらフレームワークを使えるようになる方がよさそう

✏️ しかし、いずれも学習コストが高め

私的見解

- どれでもいい
- トレンドが最適解とは言えない
- いずれはトレンドも変わる
- スキルと学習コストを考慮して

デザイナーも使うべきか？

すぐに必須ではないが

- デザイナーはまだ必須ではないが
  メリットなどの知識は必要
- シンプルなのは使えるほうがよい
- テンプレート的な利用の場合は積極的に利用を

ただしHTMLとCSSは

- HTML・CSSのコンポーネント化は
  すでに最低限必要な話

jQueryに話を戻して

jQueryまだまだ活用できるが

- プラグインでできるなら活用を
  ただし、使うときのチェックは導入前に
- 頼りすぎも要注意

jQueryまだまだ活用できるが

- スタイル変更はCSSをあらかじめ用意して

jQuery

```
<button class="js-show">SHOW</button>
<button class="js-hide">HIDE</button>
<img src="img.png" class="js-toggle-body">

<script>
  $('.js-show').on('click', function() {
    $('.js-toggle-body').addClass('is-show');
  });
  $('.js-hide').on('click', function() {
    $('.js-toggle-body').removeClass('is-show');
  });
</script>
```

jQueryまだまだ活用できるが

- DOMの追加はテンプレートの利用を

サンプルデータ

```
var items = [
    { title: 'list title01', link: 'entry01.html' },
    { title: 'list title02', link: 'entry02.html' },
    { title: 'list title03', link: 'entry03.html' },
    { title: 'list title04', link: 'entry04.html' }
  ];
```

JavaScriptテンプレート未使用

```
<button class="sample-selector">リスト表示</button>
<ul id="list"></ul>

<script>
$('.sample-selector').on('click.sample', function() {
  $('#list').empty();
  $.each(items, function() {
    $('#list').append('<li>'
      + '<a href="'+ this.link + '">'
      + this.title
      + '</a>'
      + '</li>');
  });
});
</script>
```

http://codepen.io/h2ham/pen/WGpwwJ

JavaScriptテンプレートを使うなら

- handlebars.js など

handlebars

Handlebars provides the power necessary to let you build **semantic templates** effectively with no frustration.

Handlebars is largely compatible with Mustache templates. In most cases it is possible to swap out Mustache with Handlebars and continue using your current templates. Complete details can be found here.

Installation

Getting Started

Handlebars templates look like regular HTML, with embedded handlebars expressions.

```
<div class="entry">
  <h1>{{title}}</h1>
  <div class="body">
    {{body}}
  </div>
```

handlebars.js 利用

```
<button class="sample-selector">リスト表示</button>

<ul id=“list"></ul>
<script id="linklist" type="text/x-handlebars-template">
  {{#each this}}
  <li><a href="{{ link }}">{{ title }}</a></li>
  {{/each}}
</script>

<script>
$('.sample-selector').on('click.sample', function() {
  var source = $("#linklist").html();
  var template = Handlebars.compile(source);
  var html = template(items);
  $("#list").html(html);
});
</script>
```

http://codepen.io/h2ham/pen/yarORd

JavaScriptテンプレートを使うのであれば
簡易なフレームワークを利用してみよう

簡易なフレームワークを使う場合

- 簡易的に使う場合の個人的なオススメ

簡易なフレームワークを使う場合

- データバインディング便利！
- 本日紹介するサンプルは
  コンパイルなしでも簡易導入可能

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https://vuejs.org/

Vue.js 簡易利用例

```
<div id="button">
  <button v-on:click="listshow">リスト表示</button>
  <ul v-if="itemlist">
    <template v-for="item in items">
      <li><a href="{{ item.link }}">{{ item.title }}</a></li>
    </template>
  </ul>
</div>

var linklist = new Vue({
  el: '#linklist',
  data: { itemlist: '' }, //クリックするまでデータを空に
  methods: {
    listshow: function() {
      this.itemlist = items; //データをいれるだけで表示も変わる
    }
  }
});
```

http://codepen.io/h2ham/pen/QKpEpL

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So — here's why we need one:

http://riotjs.com/

Riot.js 簡易利用例

```
<linklist></linklist>

<script type="riot/tag">
  <linklist>
    <button onclick={listshow}>リスト表示</button>

    <ul>
      <li each={ this.items }><a href="{ link }">{ title }</a></li>
    </ul>
    listshow() {
      this.items = items  //データを入れるだけで表示も変わる
    }
  </linklist>
</script>
<script src="riot%2Bcompiler.min.js"></script>
<script>riot.mount('linklist')</script>
```

http://codepen.io/h2ham/pen/jrBAKb

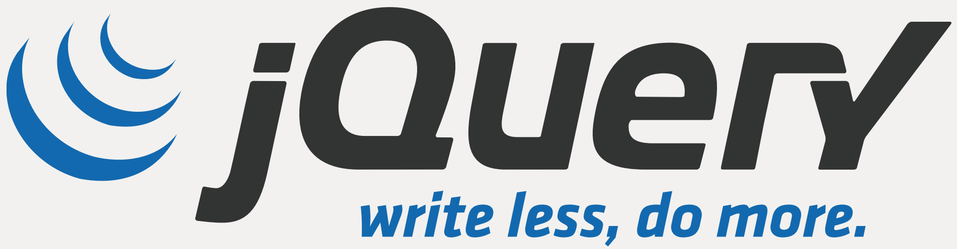
まとめ

まとめ

- jQuery便利！
  小規模サイトはまだまだ利用問題なし
- jQueryプラグイン利用はエコ♻
- コンポーネント化は最低限必須
- JavaScriptテンプレートを使う場合
  データバインディングを使えるように

いろいろな話題を出しましたが、それでもまだまだ…

漢は黙って



参照： http://www.slideshare.net/TakumaHanatani/jquery-56093566

ご清聴ありがとうございました