

THE
PRACTICE
OF

CSS Nite LP Disk 27 「スマートフォン対応サイト制作 (3)」

Responsive Web Design

レスポンシブWebデザイン 実践編

2013.05.25 こもりまさあき

自己紹介

こもりまさあき

1972年生まれのフリーランス。90年代前半から都内のDTP系デザイン会社にてアルバイトをはじめ、大学卒業後そのまま正社員に。入出力業務、デザイン業務、ネットワーク関連業務に並行して従事後、2001年会社を退職しフリーランスの道へ。業務内容や立ち位置が異なるので、職域的な肩書きはなし

近著に『基礎から覚える、深く理解できる。 Webデザインの新しい教科書』 『レスポンシブ・ウェブデザイン標準ガイド』 など

Twitter: @cipher / @proteanbm

Instagram: @cipher



今日お話しすること

- レスポンシブWebデザインあるある
- いまどきのレスポンシブ、その実装方法



レスポンスがあるある

The Problems of Responsive Web Design

レスポンス

The Problems

- スマートデバイスの種類が多くて困っている
- 表示・非表示を変えたいコンテンツがある
- PCとスマートフォンでコンテンツの表示順を変えたい
- 複数サイズの画像を切り替える方法がわからない
- ラクをしたい

レスポンシブWebデザインの悩みを解決しましょう

その前に。ある海外のサイトで実際に使用されている技術

Requirejs

PhantomJS

Node.js

Bower

Jasmine

LESS

Web Fonts

JShint

Responsive Images

Curljs

Style Guide

Grunt

localStorage

レスポンシブな実装って、Media Queriesだけじゃない

技術の組み合わせがポイント



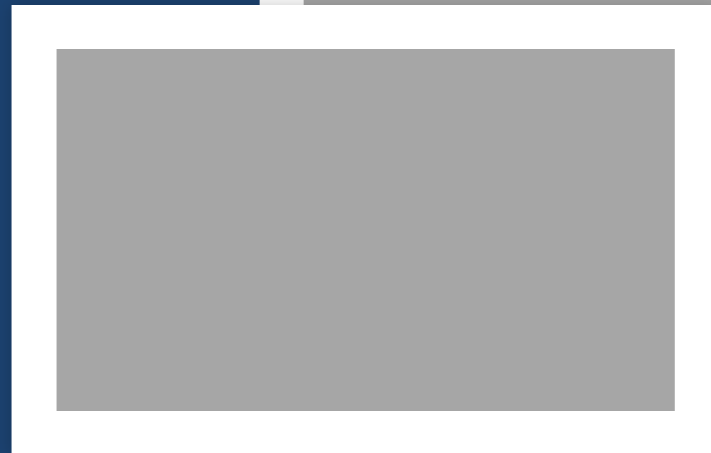
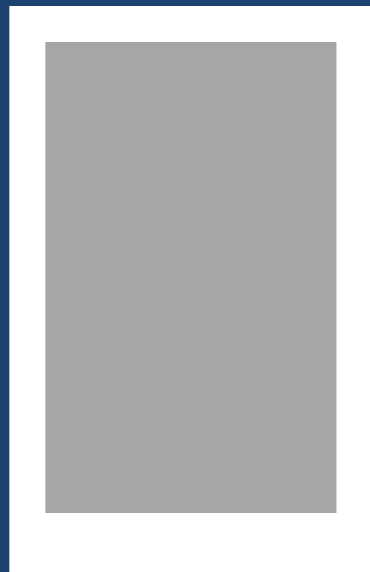
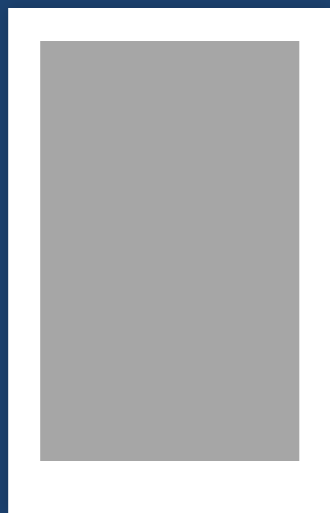
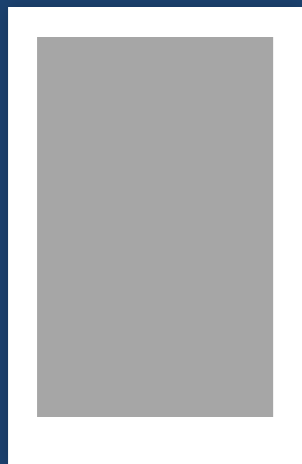
いまどきのレスポンス、その実装方法

The Practice of Responsive Web Design

レス

スマートデバイスの種類が多くて困っている

ブレイクポイント、増やせば増やすほど複雑化



ブレイクポイントを減らせるデザインを考える

ちなみに、いまどきは「px」ではなく「em」で切り替え

320px = 20em

480px = 30em

768px = 48em

960px = 60em

表示・非表示を変えたいコンテンツがある

demo

“
サイトにアクセスするユーザーのことを考えるとき、
端末のことだけでなく、ユーザーが何を期待しているかを
考慮することが大切です。

タブレット端末ユーザーにはフルサイズのウェブを表示しましょう

<http://googlewebmastercentral-ja.blogspot.jp/2012/11/giving-tablet-users-full-sized-web.html>

環境を想定して、柔軟にコンテンツをロードする

WordPressなら「wp_is_mobile()」で

```
<?php if ( !wp_is_mobile() ) :?>  
  <div class="sidebar-ad">  
    </div>  
<?php endif; ?>
```

※デスクトップブラウザには、バナーコンテンツを表示する

Ajaxを使って、特定条件のみでコンテンツをロードする

Ajax-include pattern

- Copyright 2012, Scott Jehl, Filament Group, Inc. Original idea from Scott Gonzalez :)

build passing

Getting Started

Download the [production version](#) or the [development version](#).

How-to

To use, add attributes to elements in your page where non-essential fragments of content can be included from an external URL, using jQuery-api-like qualifiers like `data-after`, `data-before`, `data-append`, and `data-replace`:

Replace:

```
<a href="..." data-replace="articles/latest/fragment">Latest Articles</a>
```

```
<a href="..." data-before="articles/latest/fragment">Latest Articles</a>
```

コンテンツのロード時間も大事な要素

PCとスマートフォンで
コンテンツの表示順を変えたい

Content Choreography

Choreography: バレエやダンスの振り付け

設計時にコンテンツのブロックの振る舞いを決める

demo

Title

1

Navigation

2

3

Main Contents 1

4

Main Contents 2

Paging Navigation

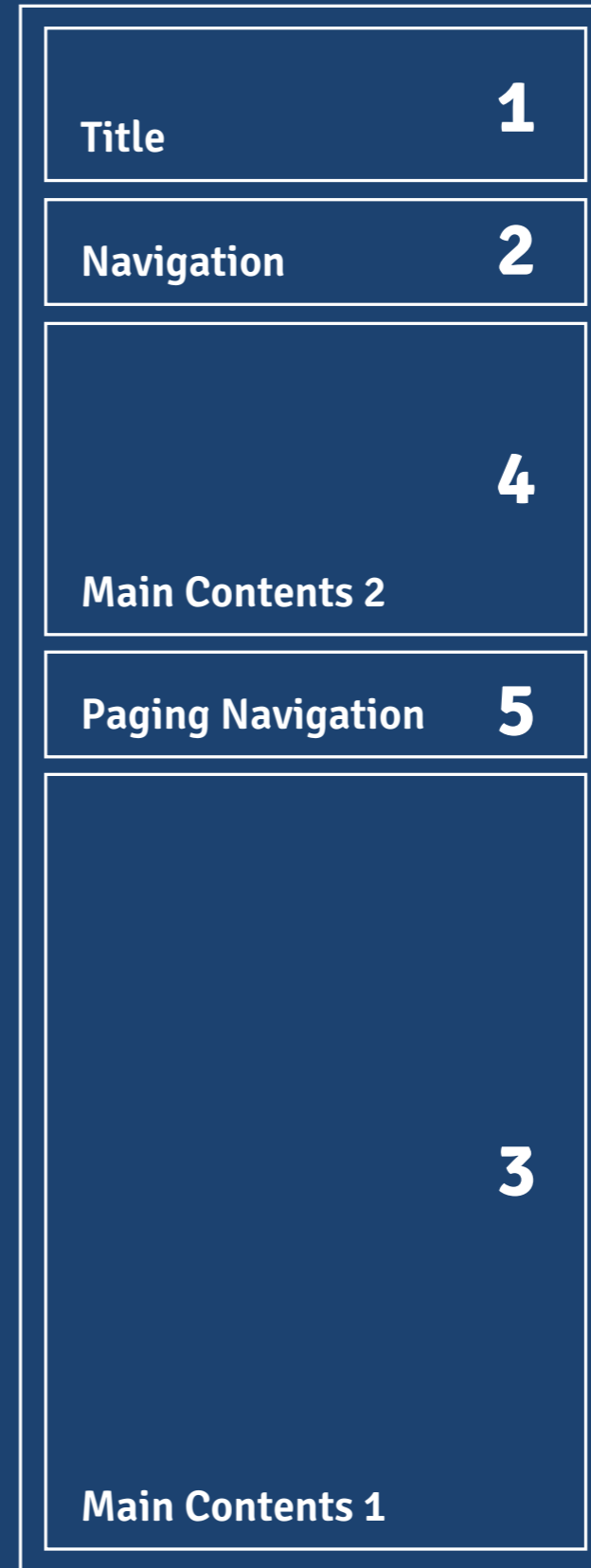
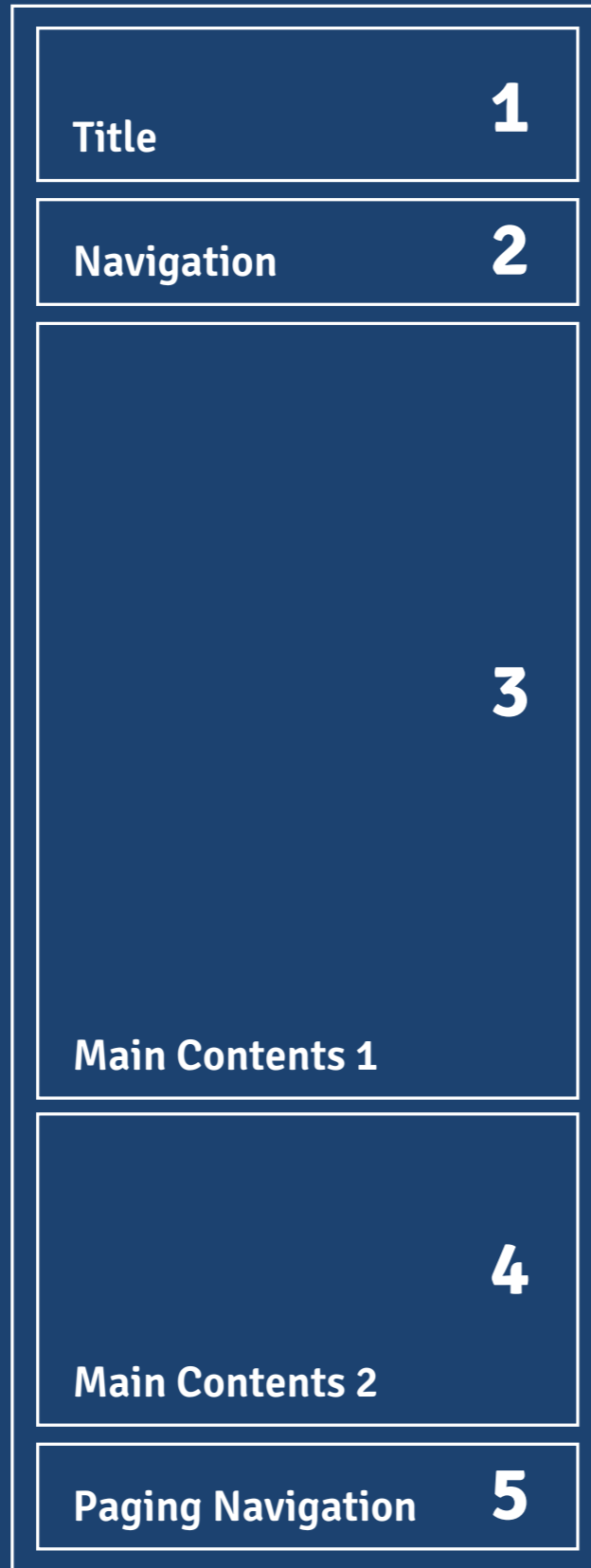
5

6

Aside Contents

Footer

7



情報ブロックの表示順をコントロールするなら

CSS3の「Flexible Box Layout Module」で


```
@media screen and (max-width: 48em) {  
  #container {  
    display:box;  
    display:-moz-box;  
    display:-webkit-box;  
    box-orient:vertical;  
    -moz-box-orient:vertical;  
    -webkit-box-orient:vertical;  
  }  
  #container .main, #container header,  
  #container aside, #container footer,  
  #container nav,  
  #container .example_ad {  
    box-ordinal-group: 1;  
    -moz-box-ordinal-group: 1;  
    -webkit-box-ordinal-group: 1;  
  }  
}
```

```
#container .example_ad {  
  box-ordinal-group: 4;  
  -moz-box-ordinal-group: 4;  
  -webkit-box-ordinal-group: 4;  
}  
#container nav {  
  box-ordinal-group: 2;  
  -moz-box-ordinal-group: 2;  
  -webkit-box-ordinal-group: 2;  
}  
#container footer {  
  box-ordinal-group: 3;  
  -moz-box-ordinal-group: 3;  
  -webkit-box-ordinal-group: 3;  
}  
}
```

Content Choreography Mixins In LESS

<http://www.alwaystwisted.com/post.php?s=2012-05-17-content-choreography-mixins-in-less>

Content Choreography Mixin

<http://blog.woop.ie/post/23227066135/content-choreography-mixin>

複数サイズの画像を切り替える方法がわからない

demo

W3Cでも、画像配信のことには議論が進んでいる

picture要素、srcset属性



The picture element

An HTML extension for adaptive images

W3C Working Draft 26 February 2013

This Version:

<http://www.w3.org/TR/2013/WD-html-picture-element-20130226/>

Latest version:

<http://www.w3.org/TR/html-picture-element/>

Previous version:

None.

Latest Editor's draft:

<http://picture.responsiveimages.org>

Participate:

[Join the Responsive Images Community Group](#)

[Public mailing list](#)

[IRC: #resping on W3C's IRC server](#)

[Twitter](#)

[Github](#)

Version history:

[Github commits \(RSS\)](#)

[Github commits on Twitter](#)

Authors:

[Participants](#) of the Responsive Images Community Group

Editors:

[Marcos Cáceres, Data.Driven](#)

[Mat Marquis](#)

[Arjan Bruijn, Microsoft Corporation](#)

RICG Final Specification Licensing Commitments:

<http://www.w3.org/community/resping/spec/26/commitments>

The picture element

<http://www.w3.org/TR/html-picture-element/>



The srcset attribute

An HTML extension for adaptive images

Editor's Draft 25 May 2013

Latest Published Version:

<http://www.w3.org/TR/html-srcset/>

Latest Editor's Draft:

<http://dev.w3.org/html5/srcset/>

Editor:

[Edward O'Connor](#), Apple Inc.

Derived from the HTML Living Standard edited by:

[Ian Hickson](#), Google, Inc.

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Abstract

When authors adapt their sites for high-resolution displays, they often need to be able to use different assets representing the same image. We address this need by extending HTML to allow authors to use multiple, resolution-appropriate, bitmapped content images by adding a **srcset** attribute to the **img** element.

The srcset attribute

<http://www.w3.org/html/wg/drafts/srcset/w3c-srcset/>

This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current

似たようなカタチで先行実装するPicturefillを試してみる

Picturefill

A Responsive Images approach that you can use today, that mimics the [proposed picture element](#) using `div`s, for safety sake.

- Author: Scott Jehl (c) 2012
- License: MIT/GPLv2

Demo URL: <http://scottjehl.github.com/picturefill/>

Note: Picturefill works best in browsers that support CSS3 media queries. It includes (externally) the [matchMedia polyfill](#) which makes matchMedia work in `media-query`-supporting browsers that don't have `matchMedia`, or at least allows media types to be tested in most any browser. `matchMedia` and the `matchMedia` polyfill are not required for `picturefill` to work, but they are required to support the `media` attributes on `picture` `source` elements.

Size and delivery

Currently, `picturefill.js` compresses to around 498bytes (~0.5kb), after minify and gzip. To minify, you might try these online tools: [Uglify]:(<http://marijnhaverbeke.nl/uglifyjs>), [Yahoo Compressor]:(<http://refresh-sf.com/yui/>), or [Closure Compiler](#). Serve with gzip compression.

scottjehl/picturefill

<https://github.com/scottjehl/picturefill>

Markup pattern and explanation

```
<div data-picture data-alt="Alt Text">
  <div data-src="small.jpg"></div>
  <div data-src="medium.jpg" data-media="(min-width: 400px)"></div>
  <div data-src="large.jpg" data-media="(min-width: 800px)"></div>
  <div data-src="extralarge.jpg" data-media="(min-width: 1000px)"></div>

  <!-- Fallback content for non-JS browsers. -->
  <noscript>
    
  </noscript>
</div>
```

ラクをしたい

demo

Frameworks や Static Site Generators を有効活用



Follow @jayalai

.FITGRD IS THE LIGHTWEIGHT & SEXY LOOKING RESPONSIVE GRID FOR YOUR NEXT AWESOME WEBSITE.

What it is.

.Fitgrd is not a framework. It's a solid foundation to build up your own responsive website. It is designed for rapid prototyping, but also runs well in production environments. This grid system is perfect for advanced web designers who don't want to have their pages look like "bootstrapped". The grid is up to you and gives you the ability to save a lot of dispensable code. Give it a try and you'll love it.

What you will get.

.Fitgrd is divided into twelve columns with percentage widths. Each column has two percent of margin on both sides. **A documentation will be provided very soon. Please take a look in the source code for now. You will definitely get a very quick understanding of how it works.** I'm not a friend of heavy usage of media queries. So i included just one for the size of 30em (480px) and the media queries for iPad. Write smart code and you will not need

fitgrid

<http://www.fitgrd.com/>

m...



Responsive grids for **Compass**.

[Getting Started](#) [Reference](#) [Demos](#) [Sites](#) [Source](#) [Support](#) [Twitter](#)

Your markup. Your design. Our math.

The web is a responsive place, from your lithe & lively development process to your end-user's supertablet-multi-magic-lap-phone. You need grids that are powerful yet custom, reliable yet responsive.

GEM INSTALL SUSY

Recent News:

v1.0.6: **Added bleed and isolation mixins.**

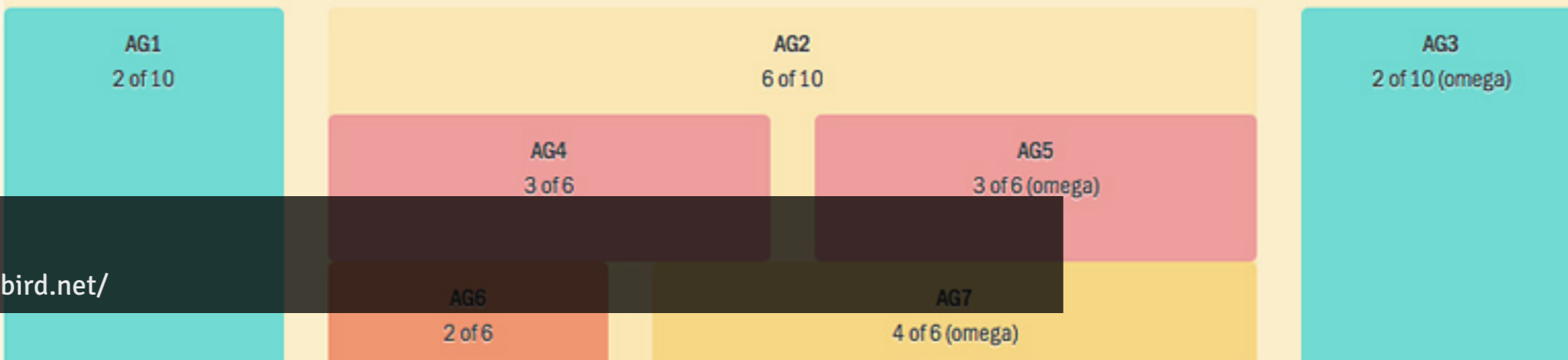
Happy Cog Article: **"It's Alive: Prototyping in the Browser"**

Tutorial: **"Off-Canvas Layout with Susy"**

v1.0.5: **Added support for rem units.**

Nettuts+ Tutorial: **"Responsive Grids With Susy"**

10-column complex nested grid AG test



Susy


<http://susy.oddbird.net/>

Bootstrap

Sleek, intuitive, and powerful front-end framework for faster and easier web development.

Download Bootstrap

[GitHub project](#) [Examples](#) [Extend](#) [Version 2.3.1](#)

 Star 49,692  Fork 15,316  Follow @twbootstrap 61.3K followers  Tweet 18.3K

Bootstrap

<http://twitter.github.io/bootstrap/>

Introducing Bootstrap.

Foundation

The most advanced responsive front-end framework in the world.

[Download Foundation 4](#)

★ 11.2k stargazers  @foundationzurb



[OVERVIEW](#)[DOCUMENTATION](#)[VIEW ON GITHUB](#)

Transform your plain text into static websites and blogs.

Simple

No more databases, comment moderation, or pesky updates to install—just *your content*.

[How Jekyll works →](#)

Static

Markdown (or **Textile**), **Liquid**, HTML & CSS go in. Static sites come out ready for deployment.

[Jekyll template guide →](#)

Blog-aware

Permalinks, categories, pages, posts, and custom layouts are all first-class citizens here.

[Migrate your blog →](#)

Jekyll Get up and running *in seconds*.

<http://jekyllrb.com/>

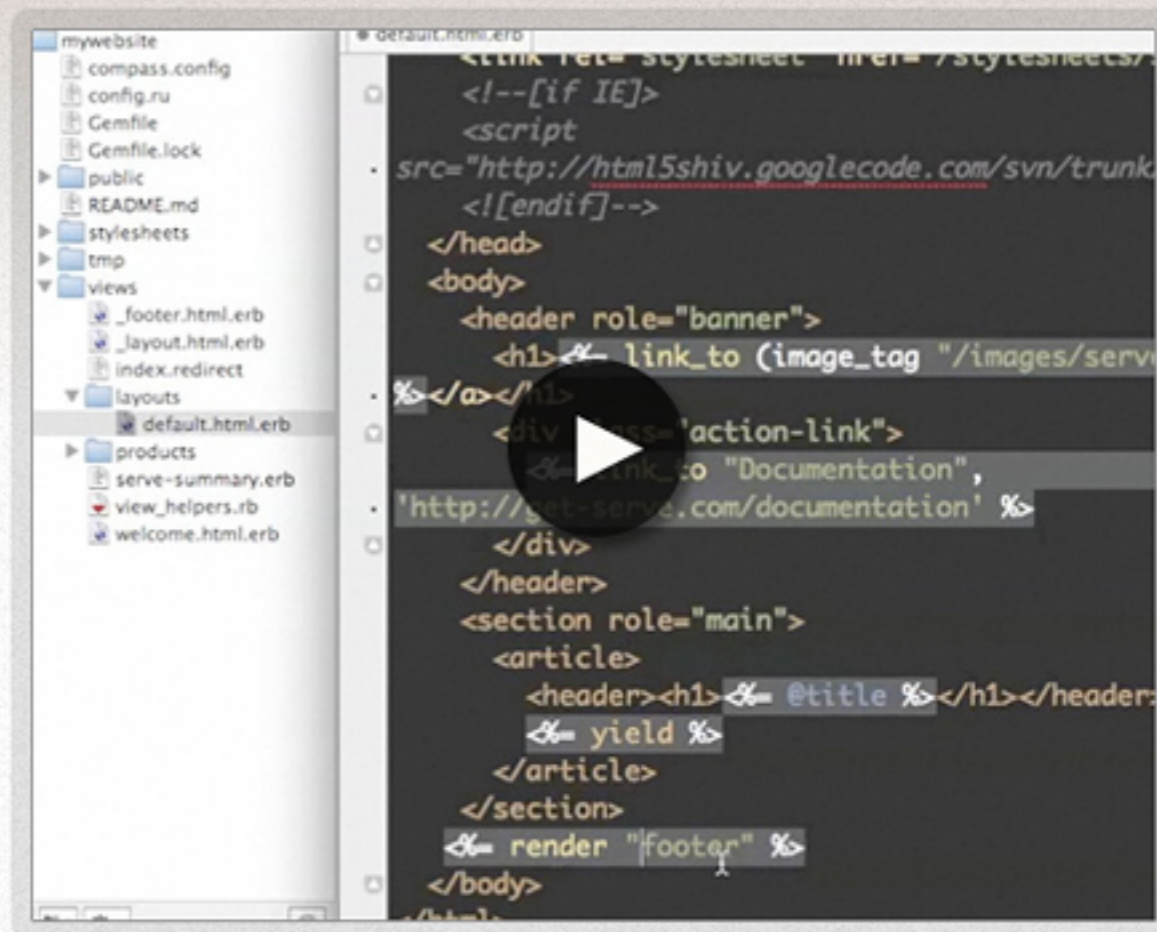
Quick-start Instructions

```
~ $ gem install jekyll
~ $ jekyll new my-awesome-site
~ $ cd my-awesome-site
~/my-awesome-site $ jekyll serve
# ... Now browse to http://localhost:4000
```


Build fantastic websites with your favorite template languages.

- » ERB, Haml, Markdown, Textile, and more!
- » Views, partials & layouts
- » Perfect for Websites or HTML mockups

Get Started »



Views, Partials & Layouts

Serve provides the equivalent of the Views part of the Rails MVC. Partials and layouts make it possible to extract common parts of your website into reusable chunks and templates. Use helper methods to simplify complex logic.

Sass & Compass, built in!

Manage the chaos of your stylesheets with Sass and Compass! Sass adds features like mixins and variables to CSS. Compass provides a "standard library" of sorts or all manner of CSS wizardry.

Static or dynamic—Your choice

Edit and tweak your websites on-the-fly with the Serve server. And when you are ready to deploy, you have two options. Either export to a pure HTML static site or deploy the source on any Ruby-friendly web host.

roots

where it all begins

[overview](#) [installation](#) [commands](#) [client-side js](#) [plugins](#) [help](#) [css library](#)

roots is a toolbox for building simple, beautiful, and efficient products for the web.



powerful compiled languages



simple project structure



css library & live reload

overview

roots Roots is a toolkit built on best practices for advanced front-end web development. It has a very large number of features, which I'll attempt to list below. <http://roots.cx/> comes in the form of a static site build tool by default, but also includes templates and plugins for express.js and rails. Plugins for RailwayJS and Sinatra are also in the works.

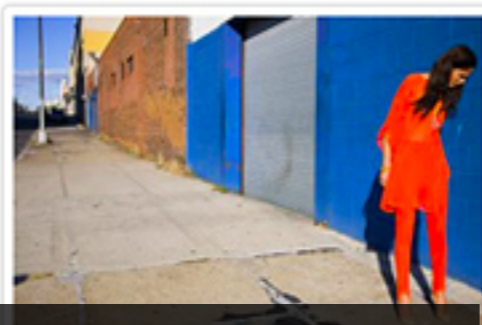
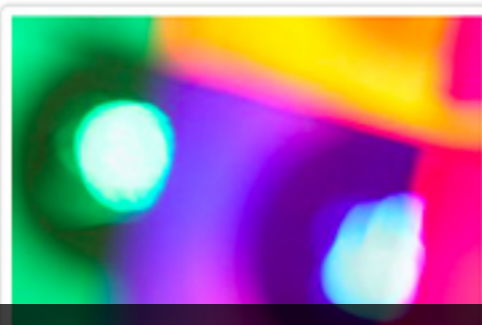
BPSG!

index.json: This is just a placeholder.

✓ kkmsz ver.

Bootstrapunch w/ Style Guide

Section: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.



Bootstrapunch w/ Style Guide

<https://github.com/gaspanik>

Fluid layout

Starter

Featuring a hero unit for a

Uses our new responsive, fluid

A barebones with all the

Heading 2

Aside: Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Section 1

Section 2

1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

Facebook

Twitter

Deciding in The Browser

やってみないとわからない。だから、動くものを先に

デザインキャンプは、むしろ作りながらでも

CasperJS

is a navigation scripting & testing utility for [PhantomJS](#), written in Javascript

CasperJS is an open source **navigation scripting & testing utility** written in Javascript and based on [PhantomJS](#) — the scriptable headless [WebKit](#) engine. It eases the process of **defining a full navigation scenario** and provides useful **high-level functions, methods & syntactic sugar** for doing common tasks such as:

- defining & ordering browsing [navigation steps](#)
- filling & submitting [forms](#)
- [clicking](#) & following links
- capturing [screenshots](#) of a page (or part of it)
- [testing](#) remote DOM
- [logging](#) events
- [downloading](#) resources, including binary ones
- [writing functional test suites](#), saving results as JUnit XML
- [scraping](#) Web contents



Download

CasperJS latest released version is [1.0.0](#),
see the [CHANGELOG](#)

Download as [.zip archive](#)

Download as [.tar.gz archive](#)

Or download CasperJS at [jshosting.com](#)

[Donate](#)

(ghosts have bills, you know)

In case you haven't seen CasperJS yet, go and take a look, it's an extremely useful companion to PhantomJS

[Ariya Hidayat](#), creator of PhantomJS

Get started

CasperJS

[Install CasperJS](#) and get started. Browse the [sample examples](#)

[repository](#). [Get support](#). Checkout the [code](#) at [Github](#). Don't

hesitate to fork and send a pull request for any cool example of

```
casperjs — bash — 70x8
niko@NikoBook:casperjs (0.6*$) $ bin/casperjs samples/googlete
PASS google homepage title is the one expected
PASS main form is found
PASS google title is ok
```

casperjs screenshot.js http://localhost/

Windows環境の方に朗報

The screenshot shows the Prepros application interface. On the left is a dark sidebar with navigation options: 'App Landing', 'File Types', and 'Prepros App'. At the bottom of the sidebar are icons for adding, refreshing, settings, globe, and trash. The main area displays a list of file types, each with a colored icon, a name, and a mapping: 'Coffee' (green) maps 'coffee.coffee' to 'coffee.js'; 'Haml' (blue) maps 'haml.haml' to 'haml.html'; 'Jade' (orange) maps 'jade.jade' to 'jade.html'; 'Less' (cyan) maps 'less.less' to 'less.css'; and 'MD' (yellow) maps 'markdown.md' to 'markdown.html'. The 'Haml' entry is highlighted in light orange. On the right, a configuration panel for 'Haml' is open, showing 'haml.haml' as the selected file. It includes checkboxes for 'Auto Compile' (checked) and 'Double quotes' (unchecked). Below are dropdown menus for 'Output Format' (set to 'Html5') and 'Output Style' (set to 'Indented'). A 'Compile' button is at the bottom of the panel.

プロジェクトに合わせたワークフローを作るべし

demo

本日のまとめ

- できないのではなく、実装方法はいくらでもある
- 使える技術を知って、組み合わせながらどんどん使う
- プロジェクトにあったワークフローを作るとカンタン

本日はありがとうございました