



**KALAMUNA**  
Let's Play.

# Prototyping

Design + Content-first  
approaches to prototyping



**KALAMUNA**  
Let's Play.

## About Us

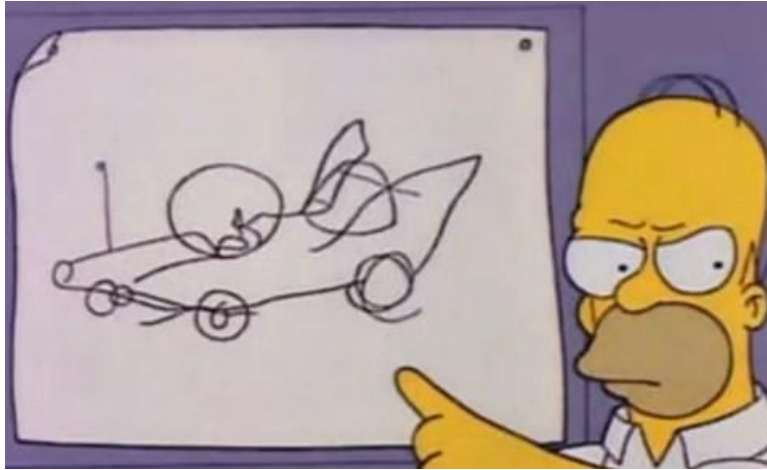
Kalamuna makes the Internet for for mission-driven organizations driven to tinker, critique, and change the way things are. We specialize in design, strategy, user experience, and development.

# Trial vs Error

to build sites that **MATTER**

# Prototyping = Solutions

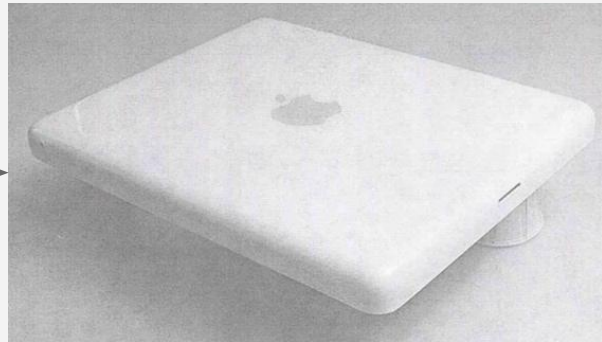
# Can you imagine a world without prototyping?



nature is weird



# iPad Prototypes





# Why Prototyping

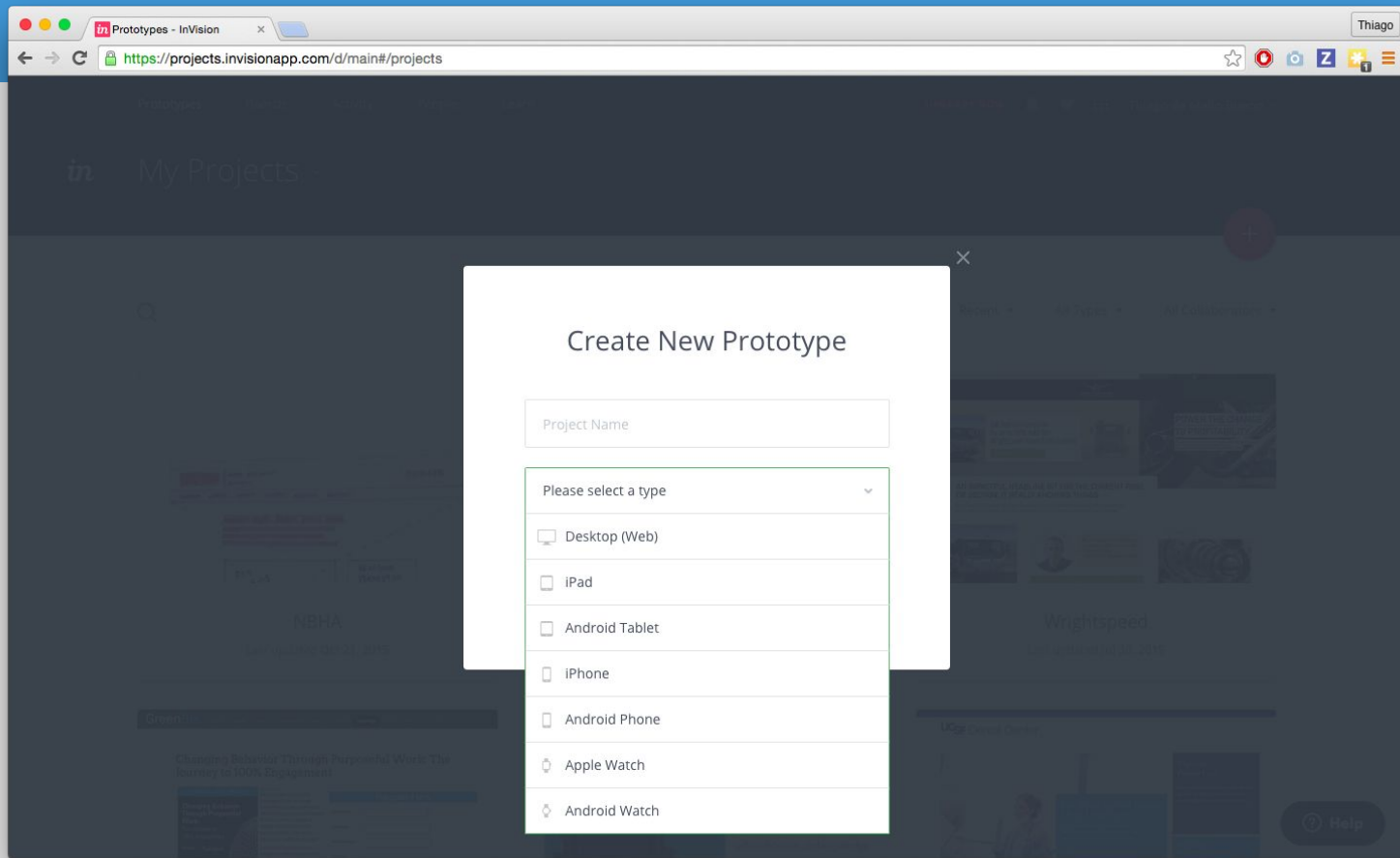
- ACTUALLY test early
- Get stakeholder feedback early
- Removed waterfall-effect from passing designs back and forth
- Avoid solving hard problems in Drupal if features aren't awesome

# Prototyping for the Web

# Paper prototypes



# Some prototypes are only responsive-ish



# Let's use the native medium

<http://alistapart.com/blog/post/15-years-of-dao>

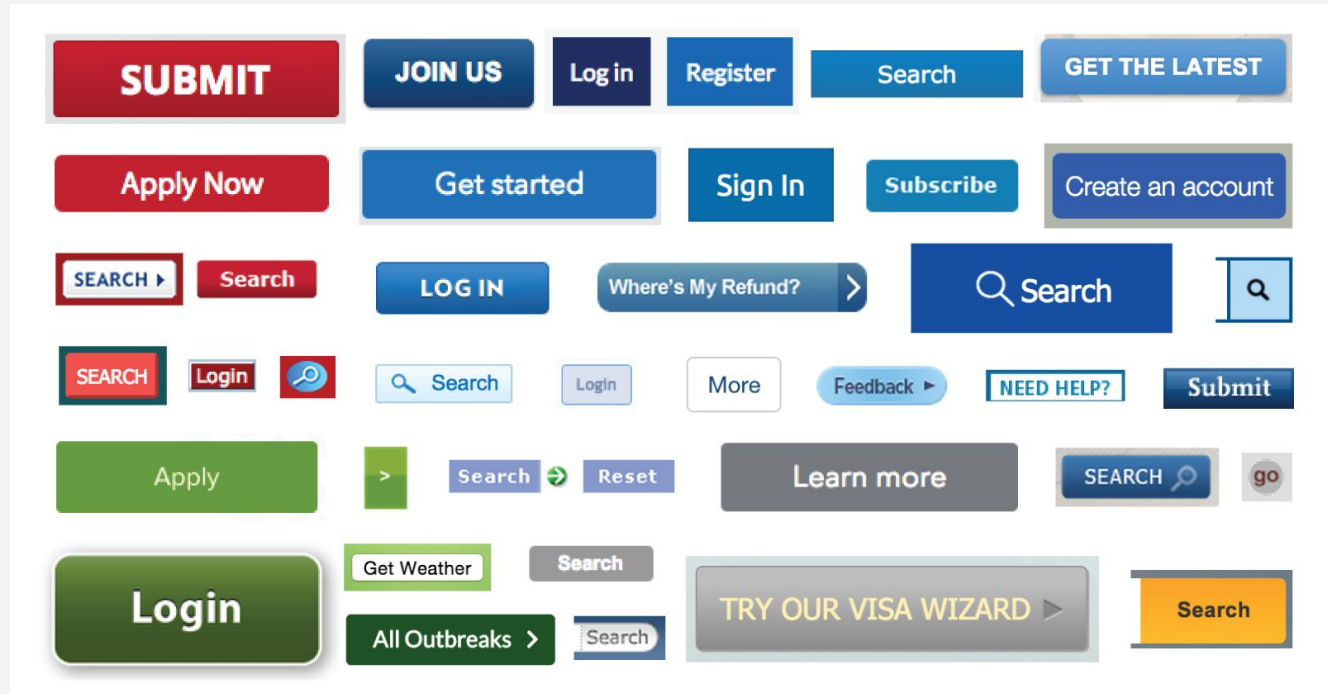


```
1  <!doctype html>
2  <html>
3  <head>
4      <base href="/" />
5      <meta charset="utf-8">
6      <meta http-equiv="X-UA-Compatible" content="IE=edge">
7      <meta name="viewport" content="width=device-width, initial-scale=1">
8      <link rel="shortcut icon" href="images/favicon.ico" type="image/vnd.
9      <link rel="apple-touch-icon" href="images/touch-icon.png">
10     <link rel="icon" href="images/favicon.png">
11     <[if IE]><link rel="shortcut icon" href="images/favicon.ico"><![e
12     or, set /favicon.ico for IE10 win -->
13     <meta name="msapplication-TileColor" content="#f00">
14     <meta name="msapplication-TileImage" content="/images/tileicon.png">
15
16
17     <title>
18         Kalastatic
19     </title>
```

# Characteristics of a Solid Web Prototyping Solution

# A Style Guide!

# No guide = no style





# the new US standard (in alpha)

[View on GitHub](#)

## U.S. Web Design Standards

Open source UI components and visual style guide to create consistency and beautiful user experiences across U.S. federal government websites

[View the standards](#)[Download the components](#)

Download a zip file with code and assets

# the US standard

🇺🇸 An official website of the United States Government

This site is currently in alpha. [Learn more.](#)

## U.S. Web Design Standards

[Download code](#)[View on GitHub](#)

### Getting started

### Visual style

[Typography](#)[Typefaces](#)[Pairings and styles](#)[Typesetting](#)[Links](#)[Lists](#)[Colors](#)[Palette](#)[Text accessibility](#)[Grid](#)[Buttons](#)[Labels](#)[Tables](#)[Alerts](#)[Accordions](#)[Form controls](#)[Form templates](#)**#323a45**

gray-dark

**#aeb0b5**

gray-light

**#ffffff**

white

### Secondary colors

These are accent colors to provide additional lightness and style to pages looking for a more modern flair. These colors should be used to highlight important features on a page, such as buttons, or for visual style elements, such as illustrations. They should be used sparingly and never draw the eye to more than one piece of information at a time.

**#02bfe7**

primary-alt

**#046b99**

primary-alt-darkest

**#00a6d2**

primary-alt-dark

**#9bdaf1**

primary-alt-light

**#e1f3f8**

primary-alt-lightest

**#e31c3d**

secondary

**#981b1e**

secondary-darkest

**#cd2026**

secondary-dark

**#e59393**

secondary-light

**#f9dede**

secondary-lightest

### Background colors

These colors are used largely for background blocks and large content areas. When alternating between tones, be sure to use enough contrast between adjacent colors.



# Styleguides can also be about words



## NATIONAL GEOGRAPHIC Style Manual

### ▼ NGS Style Manual

- # -
- A -
- B -
- C -
- D -
- E -
- F -
- G -
- H -

[NGS Style Manual](#) > [- F -](#) >

## F-word

NGS preferred capitalization and hyphenation.

# Component Architectures

# Atoms

Brad Frost's "Atomic Design"

Submit



Sign Up Today



`<input>`

`<a>`

`<h3>`

`<h1 class="logo">`

# Molecule

**Sign Up Today**

# Organism



Navitem

Navitem

Navitem

Sign Up Today

Submit 

# Some Drupal-y Components

## 2.0 - Components

Functional patterns that are repeated throughout out the site.

### 2.1 - Cards

Great for grids and masonry, extends the thumbnail. Usually used with masonry.

#### Default styling



#### Why water needs Collective Action 2.0

September 22, 2014

by Will Sami

Getting the answer to this complicated problem starts with asking the right questions. Here's why the H2O issue needs a radical rethink.

Collective action is one of the key drivers in a water stewardship strategy, and in my opinion one of the two key components in aligning water strategy to fuel business growth. While many collective action frameworks and initiatives have been successful and resulted in tangible "boots on the ground" success the question was raised, what's next?



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#### .card-inverse

inverse variation



#### Why water needs Collective Action 2.0

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by Will Sami

Getting the answer to this



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Getting the answer to this

## 2.3 - Content teaser

Great for larger displays of content throughout the site. Extends the bootstrap media pattern.

#### Default styling

### 3 tips from Caltech on how to keep project drift at bay

November 27, 2013

By Candice D McLeod

With the right approach, building owners can match actual energy savings with the theoretical.

Operations & Maintenance

Buildings

Energy Efficiency

## 2.2 - Content List

Small listing of content on the site

#### Default styling



#### Content List Heading

Small byline text is available here.



#### Content List Heading

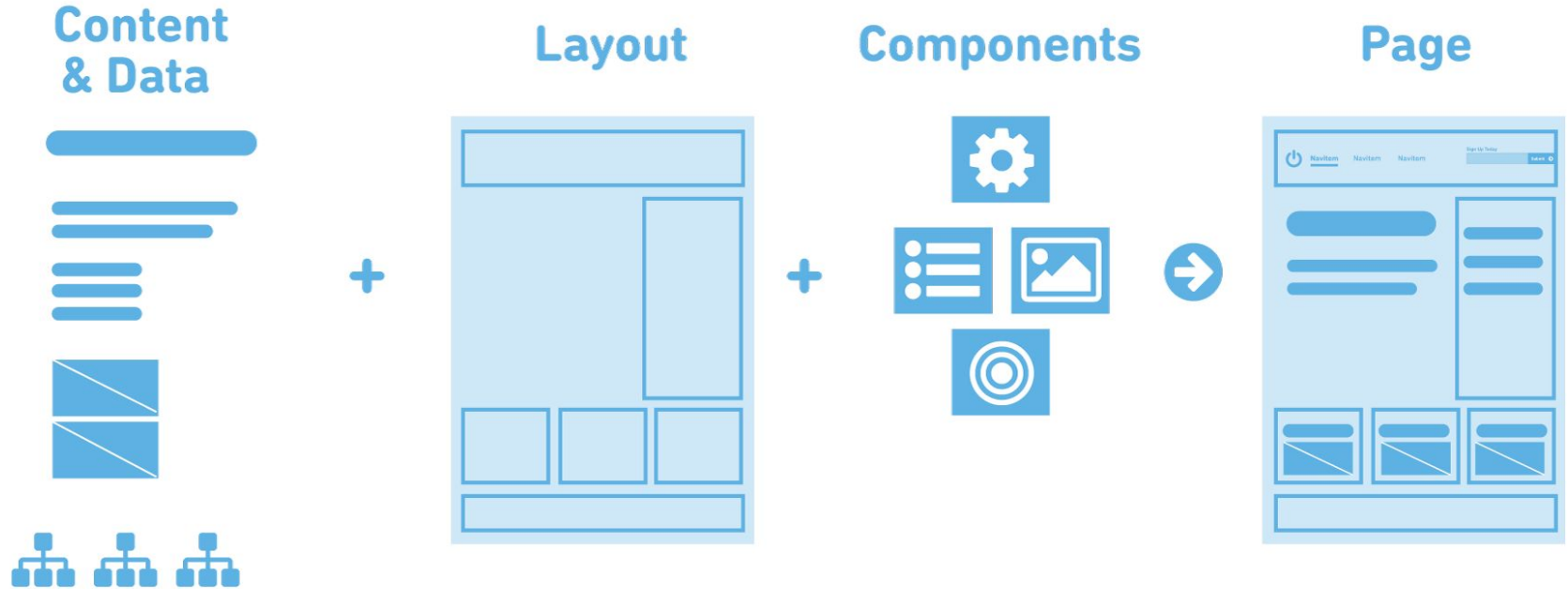
Small byline text is available here.



# Why it Matters?

- Reusability, and consistency
- Markup needs assessed as planning and not afterthought
- Serve as a guide for future work
- Identify styling regressions as a project evolves
- Results in smaller style assets (DRY)

# Layouts & Pages



- Organisms + Molecules: like blocks in a Layout.
- Add content to a layout and it is a Page

# Content Workflows

# Content

- Lorem ipsum dolar sit amet
- It's not an afterthought!
- The site adapts to it (not vice versa)
- It has mass and takes up space (it matters)
- Updating content/images should be easy
- The Dean will love the design with his face in it

# Testing

# Tests

- Continuous Integration
- Automated Build Tests
- Linting (JS,HTML and CSS/SCSS)
- Accessibility Reports

# Welcome to Kalastatic

a static framework for prototyping  
responsive sites, styleguides,  
and designing in-browser.

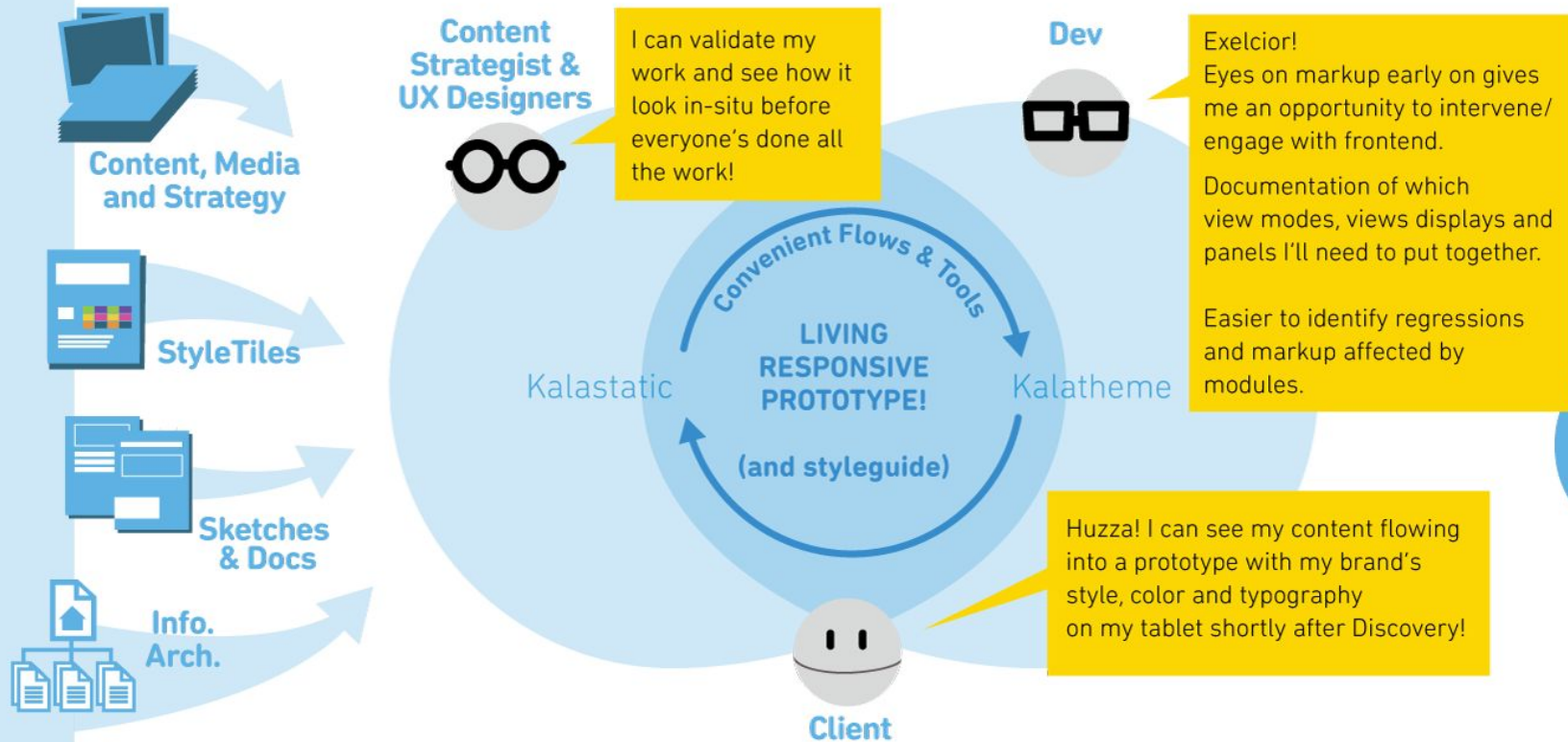
# Why?

With Kalastatic we close the gap early between **visual design**, **content strategy** and **frontend development**.



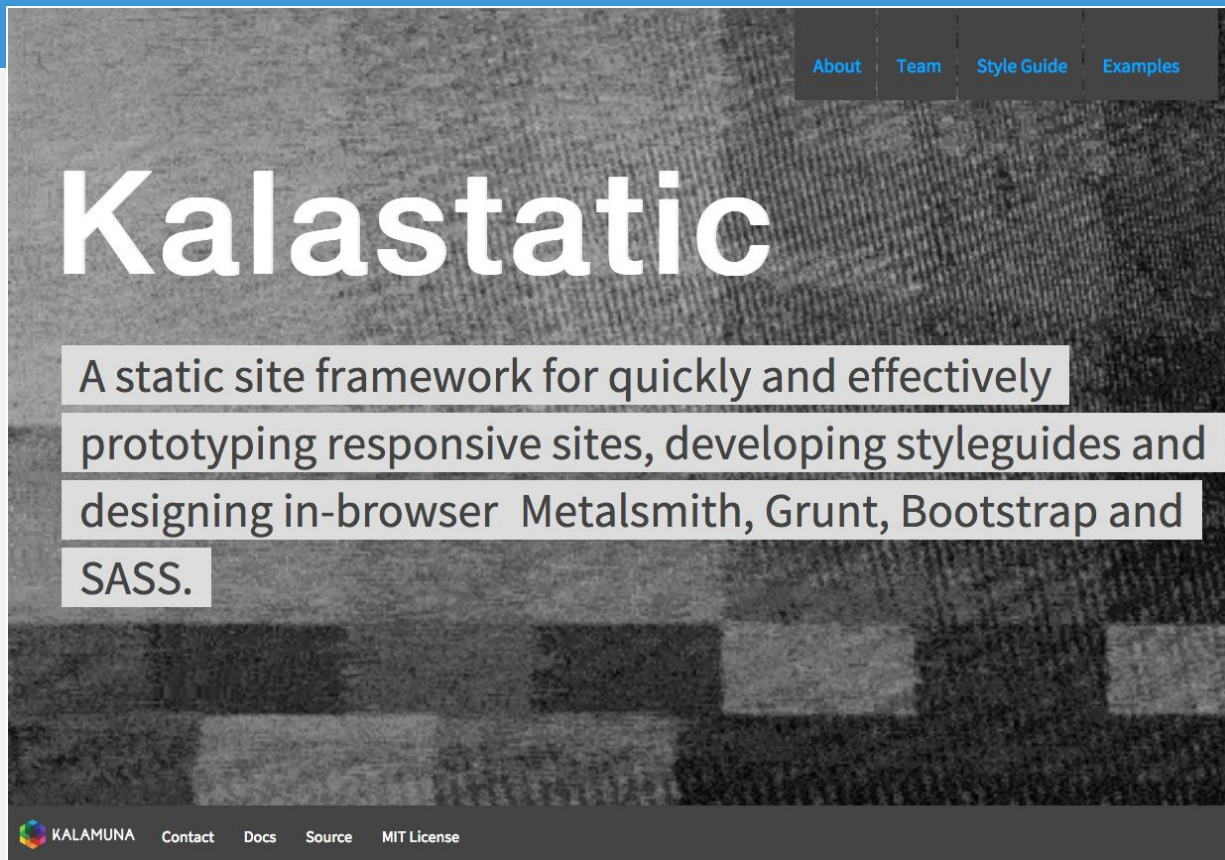
# Strategy, Design and Code – Together!

## Discovery Process



# Prototyping Examples

<http://test-kalastatic.at.kalamuna.com>



# kalastatic + kalatheme in love

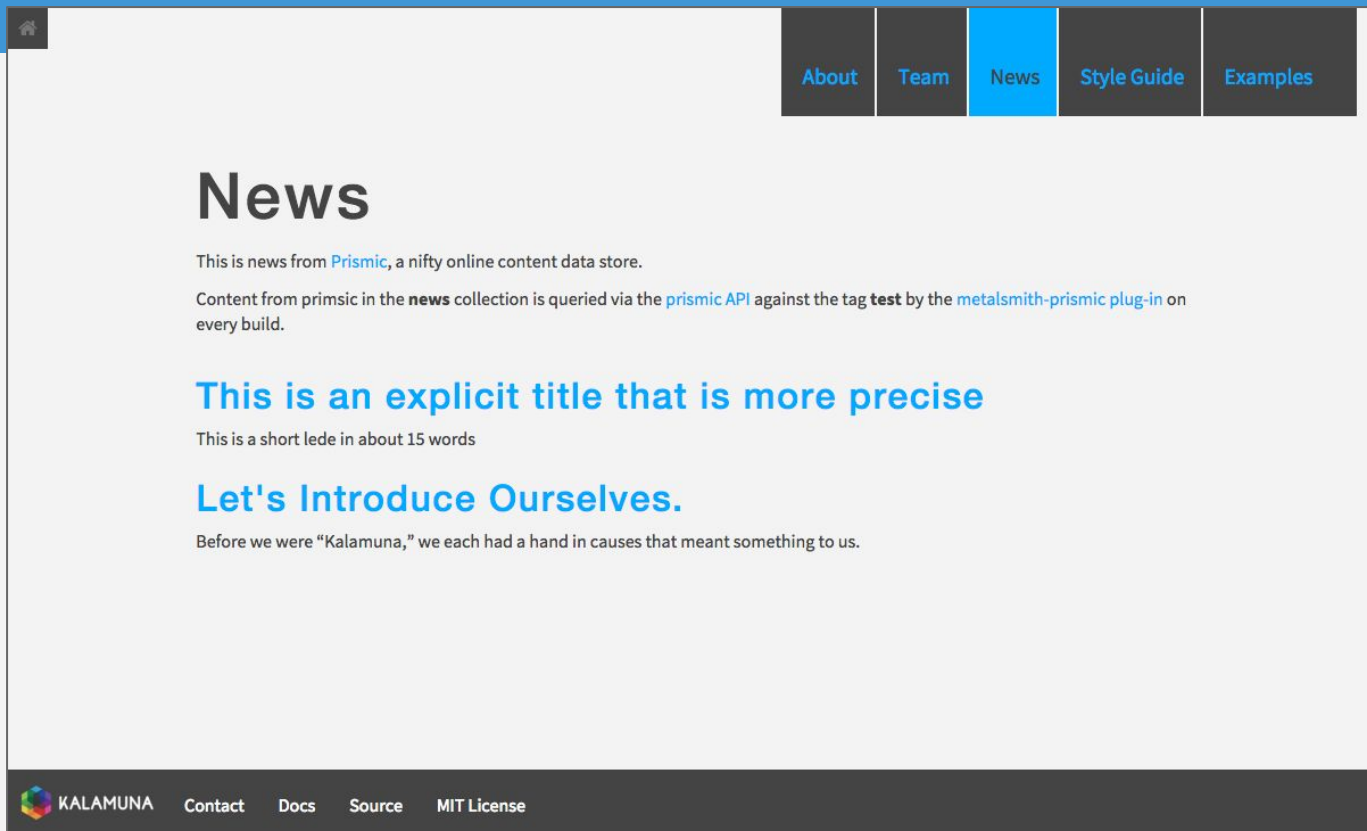
kalastatic [imported into kalatheme](#) [vs [vanilla kalatheme](#)]

> prototype [in Drupal](#)

> kalastatic.module [configuration](#)

# Application Integrations

# Prismic: pulling json into the prototype




# Drupal 7/8 integration: more decoupling!

- hal+json
- RSS

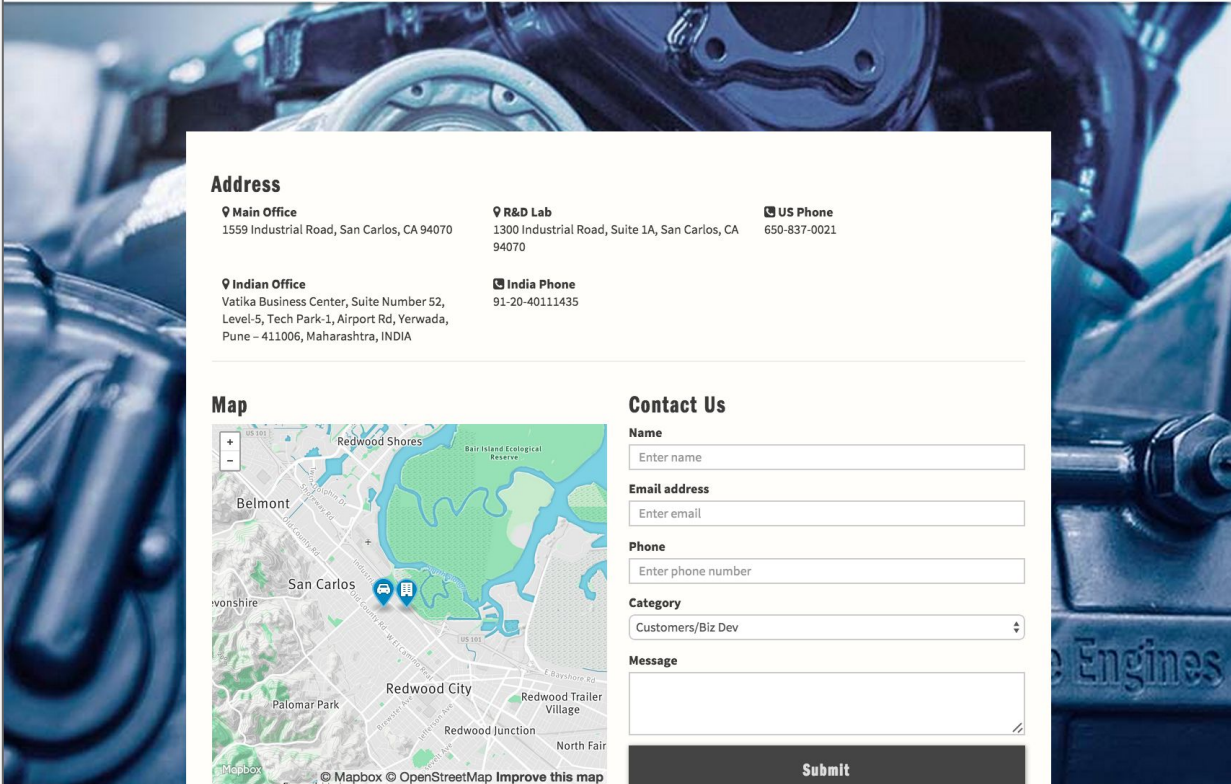


# Pinnacle Engines: static site resources shared to Wordpress



Pinnacle Engines

[ABOUT](#) [TECH](#) [MARKET OPPORTUNITY](#) [NEWS & EVENTS](#) [CAREERS](#) [CONTACT](#)



### Address

**📍 Main Office**  
1559 Industrial Road, San Carlos, CA 94070

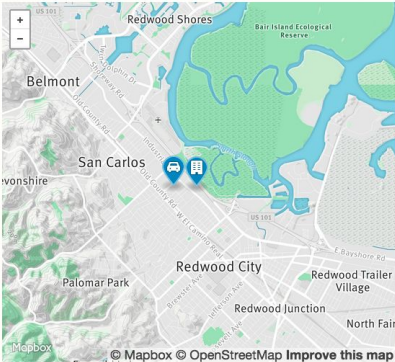
**📍 R&D Lab**  
1300 Industrial Road, Suite 1A, San Carlos, CA 94070

**📞 US Phone**  
650-837-0021

**📍 Indian Office**  
Vatika Business Center, Suite Number 52,  
Level-5, Tech Park-1, Airport Rd, Yerwada,  
Pune – 411006, Maharashtra, INDIA

**📞 India Phone**  
91-20-40111435

### Map



© Mapbox © OpenStreetMap Improve this map

### Contact Us

**Name**

**Email address**

**Phone**

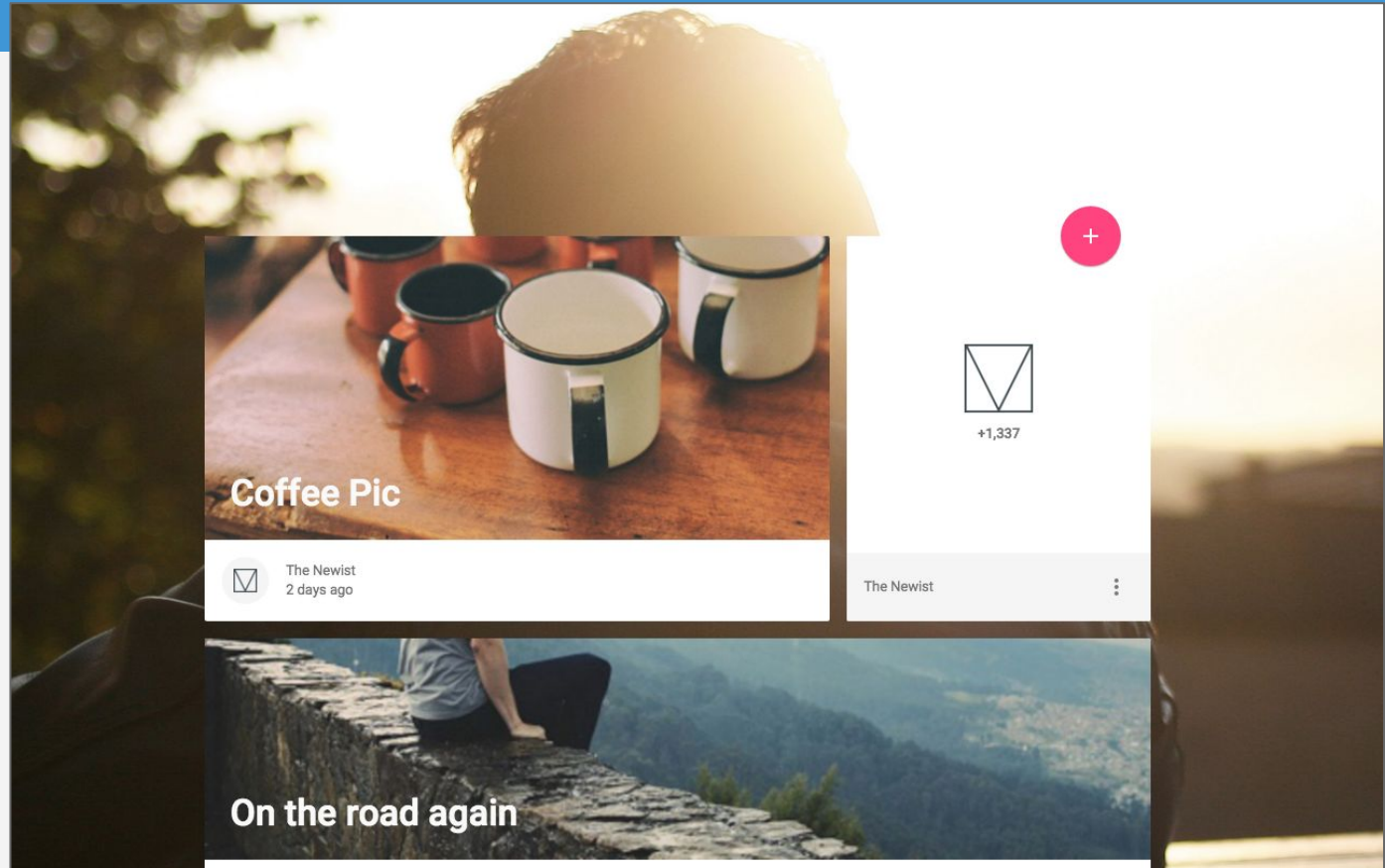
**Category**

**Message**

**Submit**

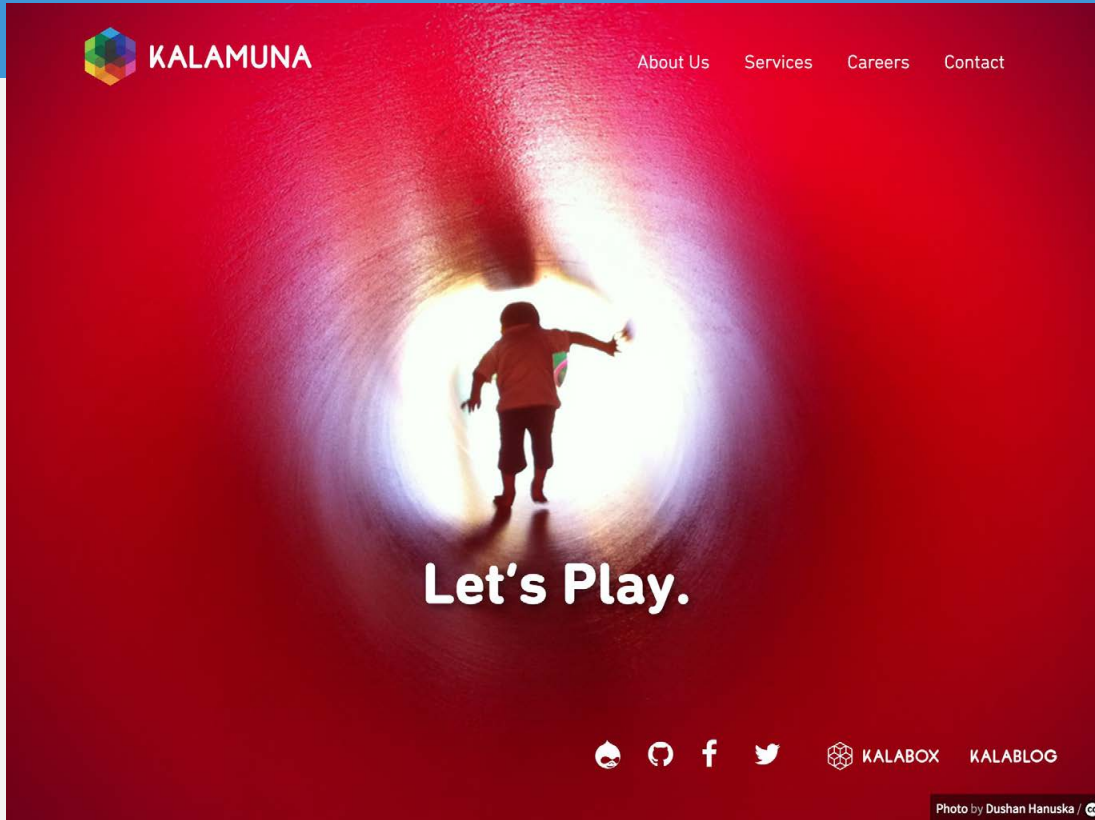


# material design lite

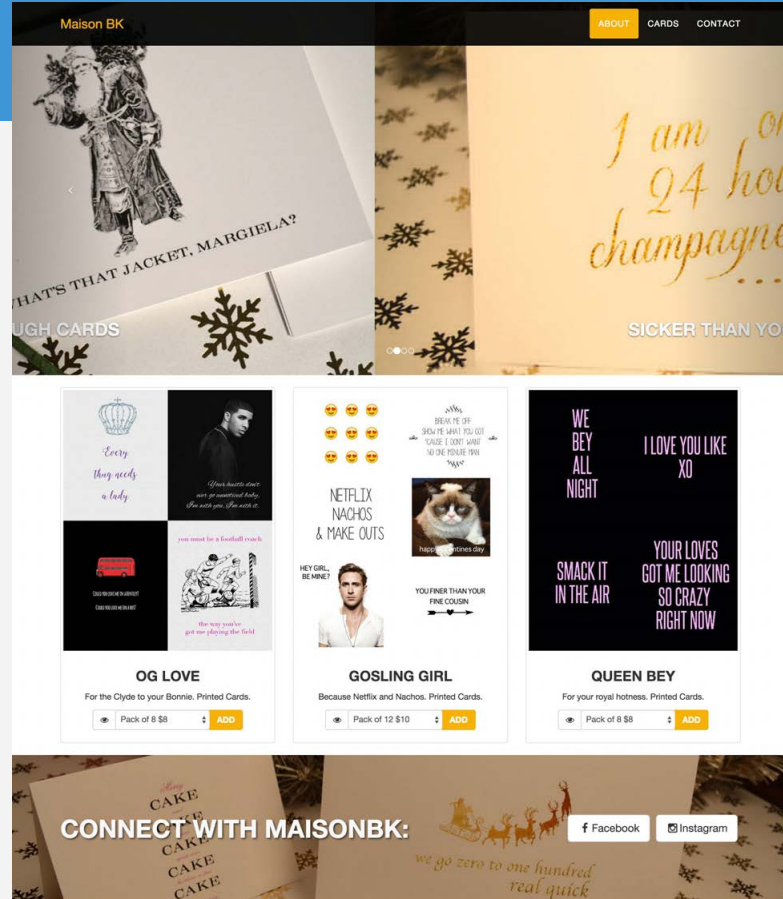


# Examples in the wild


<http://www.kalamuna.com>



# Maison BK: bootstrap prototype + e-commerce





# Metropolitan Transportation Commission





METROPOLITAN  
TRANSPORTATION  
COMMISSION


OUR SERVICES

 511.Org

 FasTrak

 Clipper

 Xpress Lanes

 Bike Share


What do you want to learn about today?

English

Planning, financing and coordinating transportation for the nine-county San Francisco Bay Area

GETTING AROUND | NEWSROOM | MAPS & DATA | MEETINGS | GETTING INVOLVED | JOBS & CONTRACTS | ABOUT MTC

## San Jose, VivaFest to Host Free Electric Vehicle Test-Drive




San Jose, VivaFest to Host Free Electric Vehicle Test-Drive

The Transbay Transit Center Begins Its Historic Rise

From the Train to the Plane – BART OAK Connector Opens

Deadline Nears to Help Plan the Future of Clipper

Zippling Along – First Golden Gate Commute with New Median Barriers




PLAN + BUILD

INVEST + PROTECT

INNOVATE + COORDINATE

ADVOCATE + LEAD

TOP VIDEO AND PHOTO GALLERIES



METROPOLITAN  
TRANSPORTATION  
COMMISSION


What do you want to learn about today?

English

Planning, financing and coordinating transportation for the nine-county San Francisco Bay Area

Menu

## San Jose, VivaFest to Host Free Electric Vehicle Test-Drive



San Jose, VivaFest to Host Free Electric Vehicle Test-Drive

The Transbay Transit Center Begins Its Historic Rise

PLAN + BUILD

# THE FUTURE:

from blueprint to framework

# Application Framework

github.com/kalamuna/**kalastatic-cli**

- Drush-like updating
- Support multiple templating engines
- multiple frameworks, like Google Material Design:  
<http://mdl-blog-kalastatic.at.kalamuna.com>

```
index.html.jade  
styles.css.scss  
scripts.js.jsmin.browserify
```









# Thank You!

[www.kalamuna.com](http://www.kalamuna.com)

[mallis@kalamuna.com](mailto:mallis@kalamuna.com)

[rob@kalamuna.com](mailto:rob@kalamuna.com)

# Q & A

This section contains supplemental slides that speak more to the technologies that power kalastatic

# Features

# HOW is this different than patternlab?

- more advanced, modern (attractive) tools
  - no compass = node-sass
  - easy to ingest libraries
- no PHP dependencies
- Content strategy
- Flexible beyond styleguides
  - can ingest json
  - metalsmith can do anything!
  - can be used to make a real website!

# Features

- Easy, single command installation
- Managed dependencies
- Built in webserver
- Livereload: Saving files reloads the browser
- Remote device access: Load your local on a mobile device!
- You can make a real site with this thing
- JSON ingestion from remote sources if you want it! (drupal 8?)

# Features

## CONVENIENCE UTILITIES

- Cache busting
- Deep linking (URL fragments)
- Character limit filters
- IE backward-compatibility

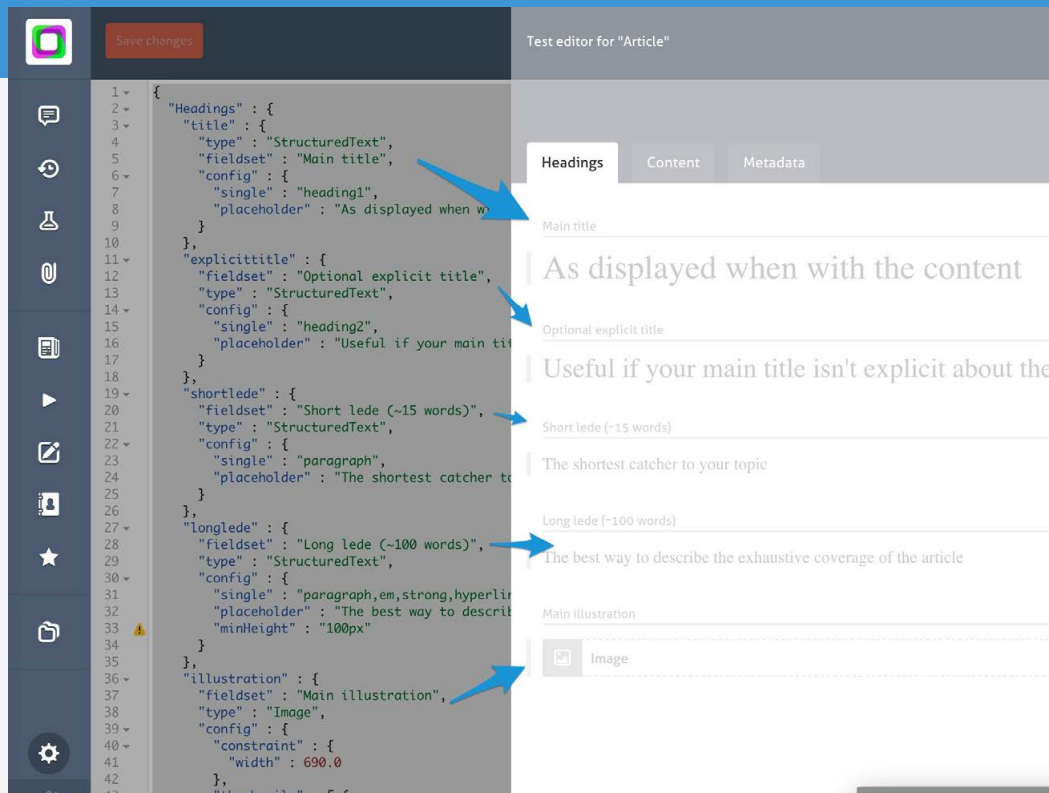
# PRISMIC



# Prismic – a head wearing masks

masks are like content types,  
but defined in json!

- [edit article](#)
- [view content](#)



# “view” of stories of type **news** tagged **test**

`/src/news.md`

```
---  
template: news.html  
title: News  
pageSlug: news  
prismic:  
  news:  
    query: '[:d = at(document.tags, ["test"])]'  
---
```

`This is news from [Prismic] (https://kalastatic.prismic.io)!`

# article “teaser”

```
/templates/partials/news-teaser.html
```

```
<article class="teaser">
  <div class="wrapper">
    <a href="/article/{{id}}/{{slug}}">{{data.explicittitle.html|safe}}</a>
    {{data.shortlede.html|safe}}
  </div>
</article>
```

# article “node”

```
/templates/news-article.html
```

```
{% extends 'html.html' %}

{% block contents %}

    {% for article in prismic.news.results %}
        <main role="main">
            <article>
                {{article.data.title.html|safe}}
                <figure class="article-img">
                    {{article.data.illustration.html|safe}}
                </figure>
            </div>
            {{article.data.content.html|safe}}
        </article>
    </main>
    {% endfor %}

{% endblock %}
```

# TECHNOLOGIES



## Dependency Management

We use npm for running tasks whenever it saves us from adding additional grunt dependencies.



## Development Tools

Using Grunt allows us to run a local development environment with live reloading, as well as deployment.

# Technologies



## Front-End Dependencies

Bower downloads all of our frontend libraries:

- Bootstrap
- jQuery
- Holder.js
- and anything else we might need...

# Technologies



## Front-End Framework

- Most popular CSS/JS/HTML framework
- Responsive
- Large library of components
- 4.0 right around the corner!
  - SASS Native
  - Flexbox
  - Cards
  - etc



# Technologies



## CSS Pre-Processor

We use node-sass which is a wrapper for LibSass.

LibSass is written in C/C++ and as a result is much faster than RubySass.

This speeds up our workflows and removes any Ruby dependencies from our stack.

# Technologies



## JavaScript Pre-Processor

Compiling JavaScript for the browser is hard, so we use Browserify.

Browserify lets us `require( 'modules' )` in the browser, and bundles up all the dependencies.

This speeds up our workflows and even speeds up browser JavaScript performance.

# Technologies

## METALSMITH

### Templating

Extremely simple, pluggable, static site generator.

Takes source files, manipulates them via chainable plugins, and outputs results.

# Metalsmith

# Metalsmith

```
{  
  "plugins": {  
    "metalsmith-collections-convention": {},  
    "metalsmith-metadata": {  
      "config": "config.yaml",  
      "navigation": "navigation.yaml"  
    },  
    "metalsmith-markdown": {},  
    "metalsmith-include": {},  
    "metalsmith-permalinks": {  
      "pattern": ":url",  
      "relative": false  
    },  
    "metalsmith-swig-helpers": {
```

# Metalsmith – collections

A key Metalsmith plugin is metalsmith-collections

**Collections** are bundles of content that can be iterated through, they can be passed off to partials for rendering and allow for design patterns such as indexes, slideshows, and can allow individual bits of content to be used in multiple contexts. Not unlike of like custom queries, and views.

# Metalsmith

```
---  
pattern: collections/news/*.md  
sortBy: order  
---
```

All news articles.

# Custom template filters

**Swig** has straightforward html-yness.

We chose it due to it's relative similarities to **twig**, aligning us towards a D8 future.

It also supports **partials**, and **template inheritance** out of the box.

We rolled up some custom swig filters to get a bit of extra functionality like **email obfuscation**, **excerpts**, and **slug matching**.

We're probably switching to Mozilla's Nunjucks!



# templating example

```
<section class="page-content">
  <h1>{{title}}</h1>
  <div class="contents">
    {{contents|safe}}
  </div>
</section>
```

```
<section id="news" class="news teasers">
  {% for news in collections.news %}
    {% include "../partials/news-teaser.html" with news only %}
  {% endfor %}
</section>
```

KSS

# KSS

- Knyle Style Sheets is a CSS documentation specification that enables automated generation of ‘living’ style guides.
- It is **not** a preprocessor, CSS framework, naming convention, or specificity guideline.
- It works with any flavour of CSS—CSS, SCSS, LESS.
- We use kss-node, by Drupal’s own [johnalbin](#).

KSS allows us to document our components style and markup, and easily identify/avoid front-end regressions.

# KSS Styleguide

Styleguide

Home CSS Components JavaScript Base styles Site Components Fontawesome

## Tables

1.2

For basic styling-light padding and only horizontal dividers-add the base class .table to any <table>. It may seem super redundant, but given the widespread use of tables for other plugins like calendars and date pickers, we have opted to isolate our custom table styles.

#	First Name	Last Name	Username
1	Mark	Otto	@mdo
2	Jacob	Thornton	@fat
3	Larry	the Bird	@twitter

```
<table class="table ">
  <thead>
    <tr>
      <th>#</th>
      <th>First Name</th>
```

Typography

Tables

Forms

Code

Buttons

Images

Helpers

# KSS

```
1  /*
2  CTA
3
4  Call to action
5
6  Markup:
7  <section class="cta {$modifiers}">
8    <h2>CTA Title Here</h2>
9    <p class="blurb">
10      Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
11      tempor incididunt ut labore et dolore magna aliqua.
12    </p>
13    <button type="button" class="btn btn-default"><a href="#">Here's a button</a></button>
14  </section>
15
16  Styleguide 5.1
17  */
18
19  .cta-wrapper {
20    @extend .clearfix;
21    clear: both;
22    background: #dedede;
23    .cta {
24      text-align: center;
25    }
26  }
27
```

