Mobile Web Apps

Harnessing the Power of Infusion

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Fluid

Topics We'll Cover

- About Fluid and Infusion
- Benefits of Mobile Web Apps
- Mobile Web App Pain Points
- How Infusion Can Help

Fluid

What is Fluid

http://fluidproject.org

- Is an Open Source community of

    - Designers

    - Developers

    - Accessibility Experts

- Helps other open communities

- Consists of universities, museums, and individuals
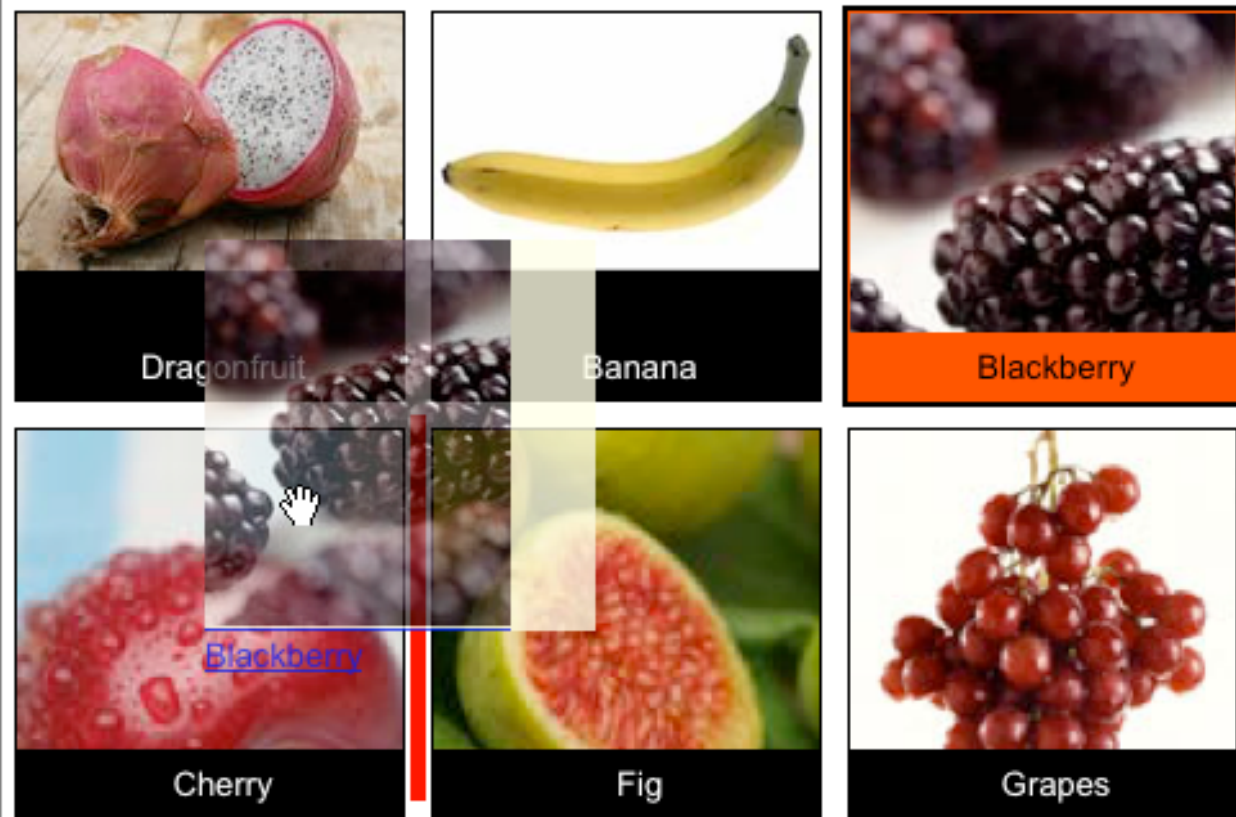
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What is Fluid Infusion

- Application Framework built on top of jQuery

- Lightweight CSS Framework (FSS)

- UI Components you can reuse and adapt

- Open architecture: everything is configurable

- Designed for Usability and Accessibility

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Infusion Components

http://build.fluidproject.org/infusion/demos/

Why Mobile Web Apps?
Simplify development

Objective-C

Java

C++

Cocoa Touch

Android SDK

Carbide

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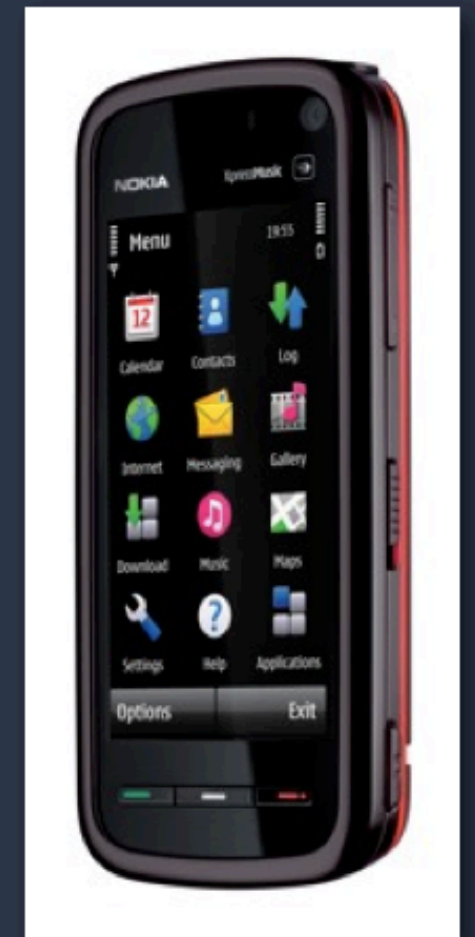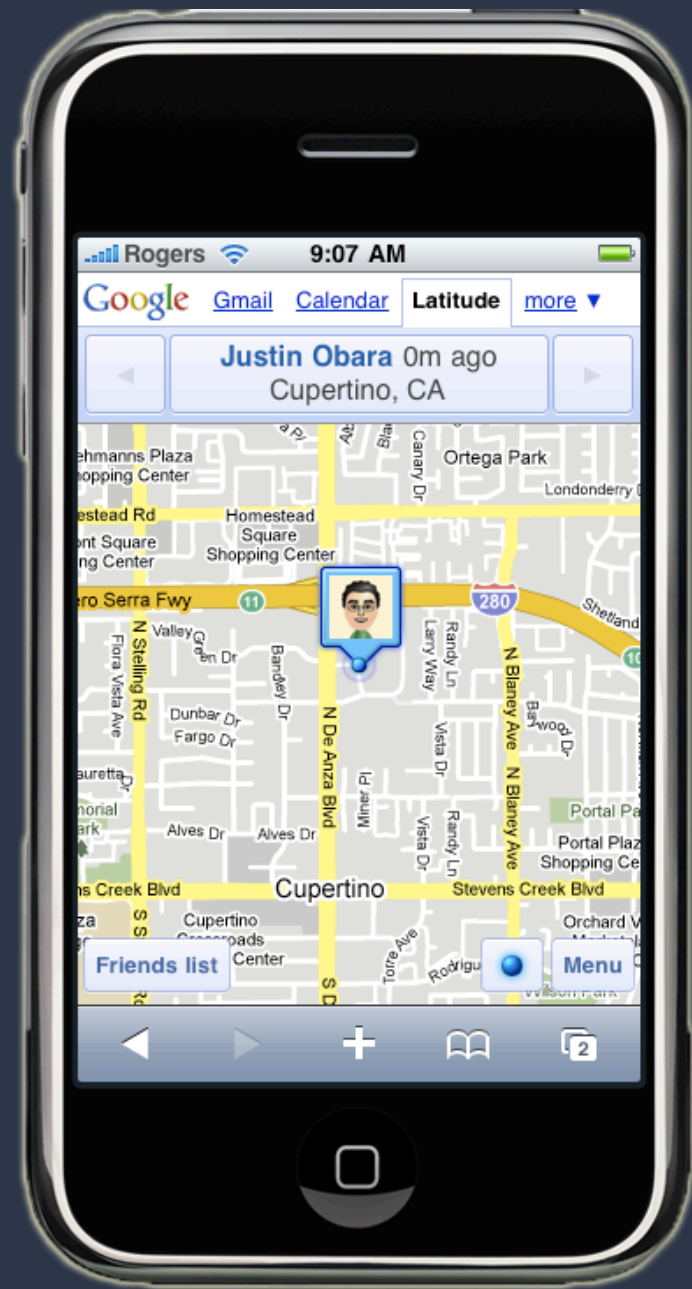
Why Mobile Web Apps?
Simplify development
HTML, CSS, JS

Browser

Benefits of Mobile Web Apps

- Modern phones have great browsers

- Web is ubiquitous and familiar

  - HTML, CSS, and JavaScript

Google Latitude

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Mobile Web Pain Points

- Sparse documentation

- Few successful Open Source examples

- Existing frameworks have limitations

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Mobile Web Pain Points
Sparse Documentation

- Lots of uncharted territory....

Availability
Available in Safari 3.0 and later.
Available in iPhone OS 1.0 and later.

Support Level
Under development.

-webkit-background-origin

Determines where the background-position property is anchored.

Syntax

```
-webkit-background-origin: origin
```

Parameters
origin
The origin of the background position.

Discussion
The background position can be anchored at the upper-left corner of the border, t
of the content inside the padding area.

Availability
Available in Safari 3.0 and later.
Available in iPhone OS 1.0 and later.

Support Level
Experimental CSS 3.

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Mobile Web Pain Points
Existing Frameworks

Frameworks:
jQTouch   iUI   WebApp.Net   Magic Framework

- Workflow

- JavaScript Footprint

- Flexibility of themes

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How Infusion Can Help
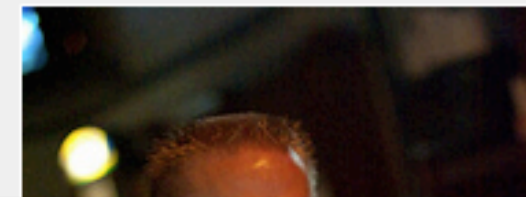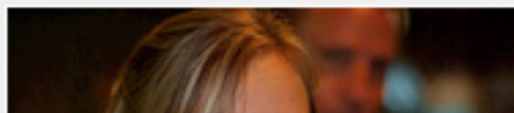## The Fliquor App

http://tinyurl.com/fliquor
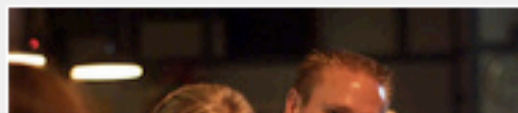
- Demonstration of Using Fluid Infusion
  - Search public images on Flickr

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Fliquor

How Infusion Can Help

- Loose coupling (DOM Agnosticism)

- Template driven

- Fast and flexible styling (FSS)

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DOM Agnosticism

Component code is maximally unaware of the details of the markup layout that it operates on.

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DOM Binder

- Relaxes the coupling between the code and the markup

DOM Binder

- Uses named selectors
    - Explicit selectors never appear in code
    - Code is free of baked dependences on markup
- Attached to a component with call to fluid.initView

DOM Binder

Options

```
fluid.defaults("fliquor.imageViewer", {
  selectors: {
    searchButton: ".flc-fliquor-searchButton",
    searchBox: ".flc-fliquor-search",
    template: ".flc-fliquor-template",
    images: ".flc-fliquor-images",

    ...
  },
  ...
});
```

locate

```
that.locate("searchBox").fluid("activatable",
  that.search);


that.locate("searchButton").click(function (evt) {
  that.search();
  return false;
});
```

HTML Template

- Components render based on Template

- Code has no dependence on markup structure

- Markup is not in code

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HTML Template

```html
<body class="flc-fliquor fl-theme-coal">
  <div class="fl-centered fl-navbar fl-table search-bar">
    ...
    <div class="fl-centered results">
      <ol class="flc-fliquor-images fl-list-menu fl-list-thumbnails fl-thumbnails-expanded">
        <li class="flc-fliquor-template">
          <a href="#">
            <span class="wrapper">
              <span class="flc-fliquor-item-title fl-fliquor-item-title">Title</span>
              <img title="Title" alt="Alt" src="#" class="fl-icon" />
            </span>
          </a>
        </li>
      </ol>
    </div>
    ...
</body>
```

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HTML Template

- Fully customizable

- As semantic as possible

- ARIA added via JavaScript

- Presentation class names separated from Javascript selector names
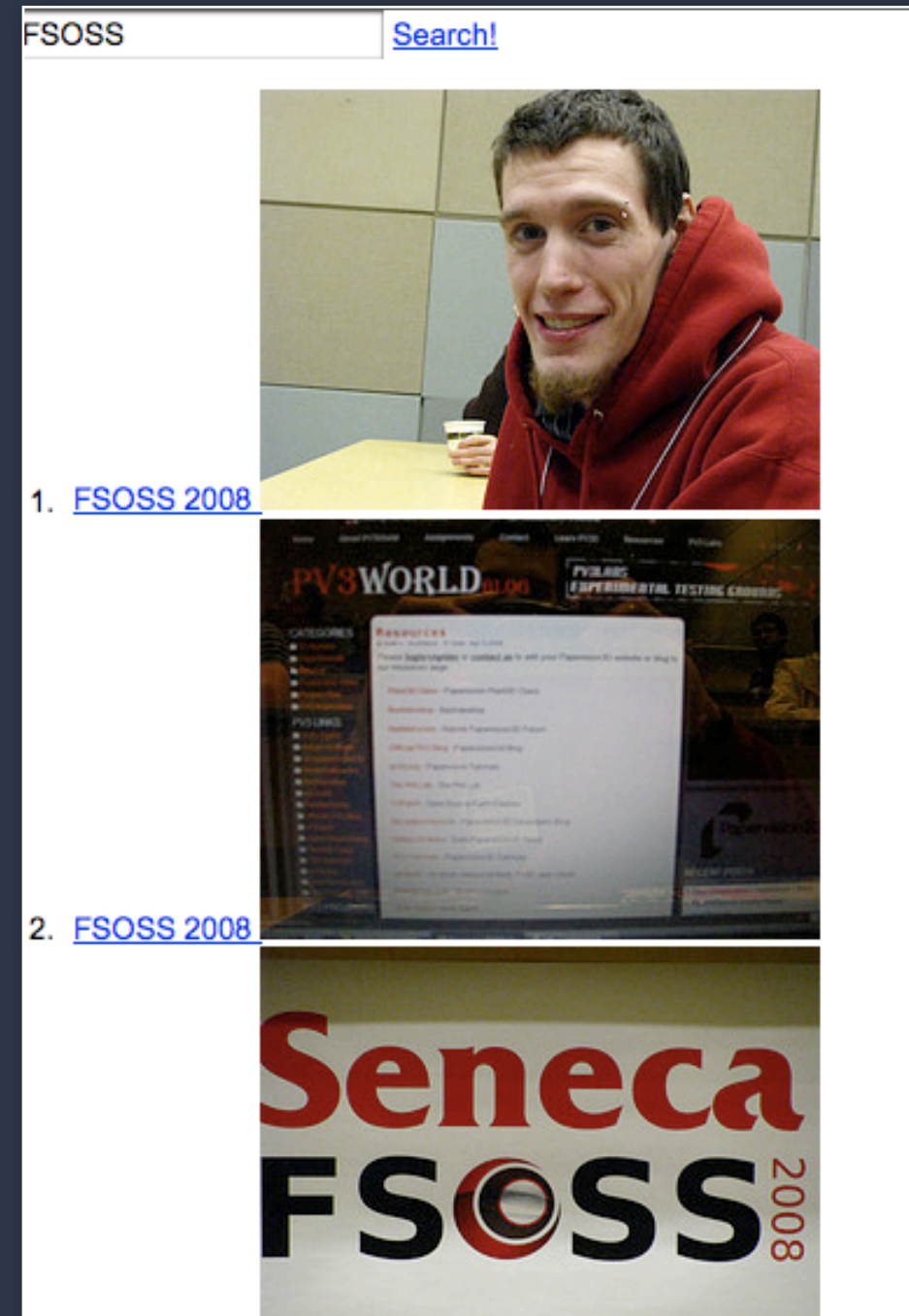
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Rapid CSS using FSS

- Modular, extensible class-name CSS system

- Easy to read class names

- Plays nice with other CSS systems (jQuery themes, other frameworks, etc)

- Modularity means it's meant for you to hack

- Lots of support, fully cross browser

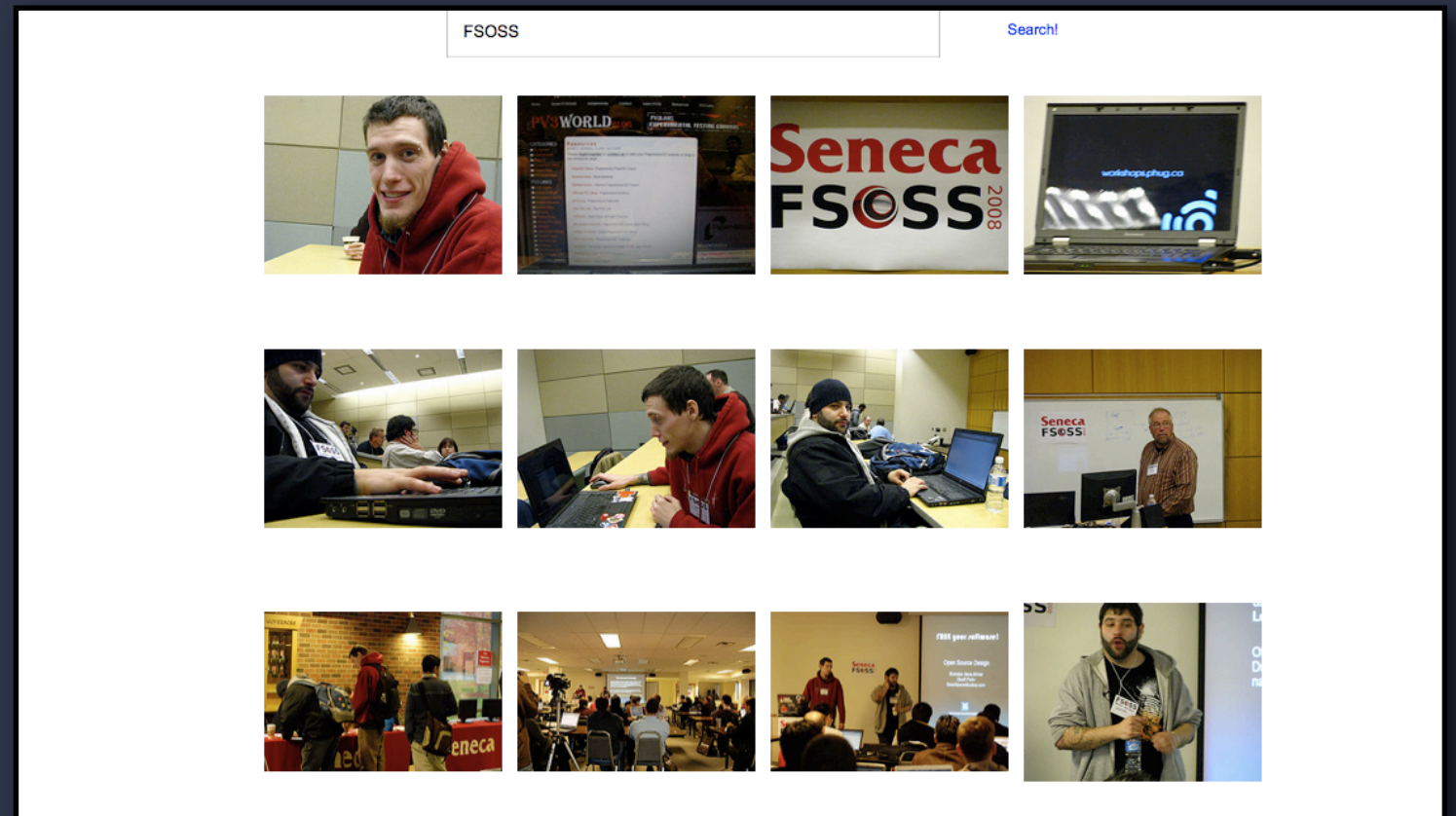Fluid

FSS Applied

Reset:

normalize the little things for a consistent starting point
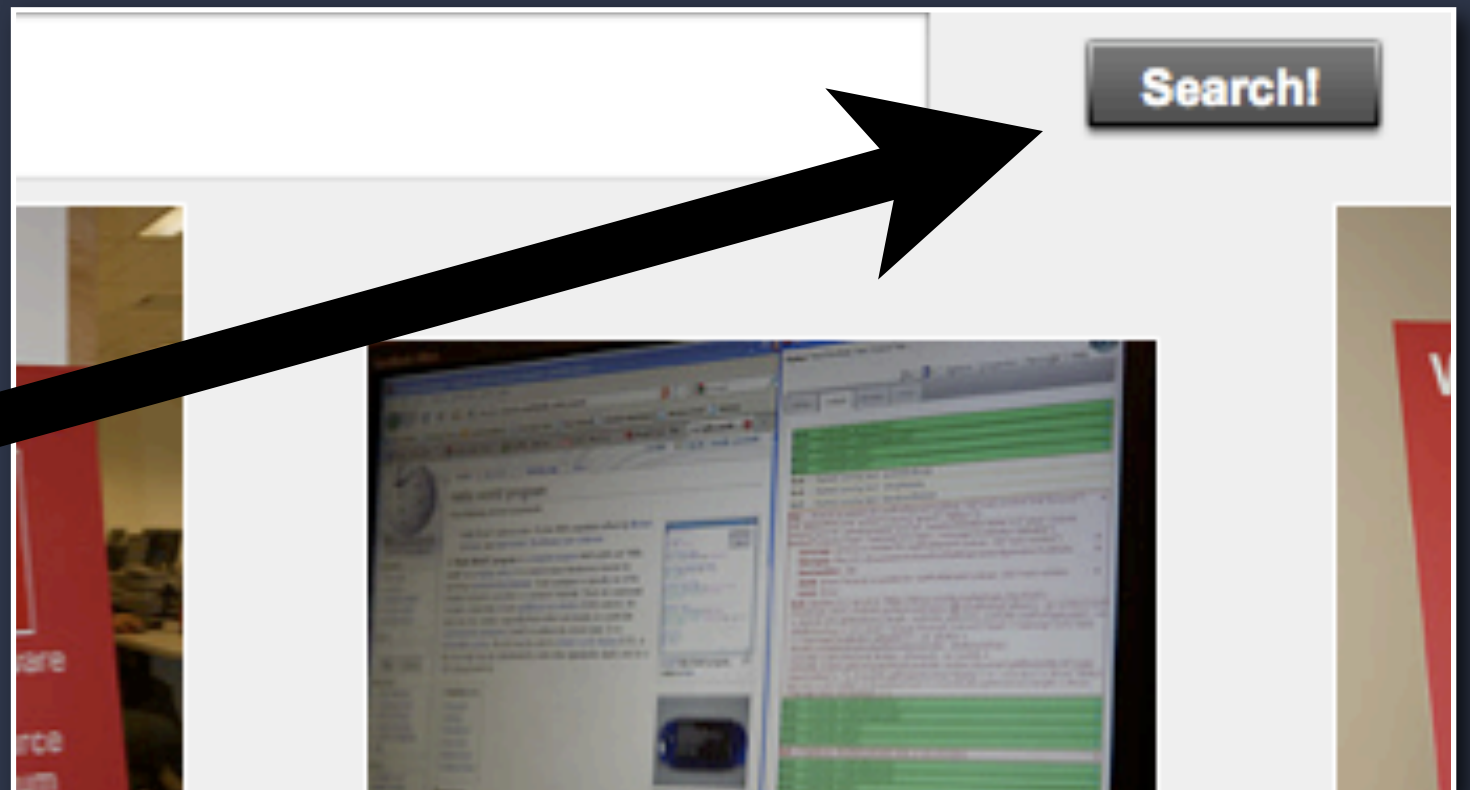
FSS Applied

Layout:

placement & containers

FSS Applied
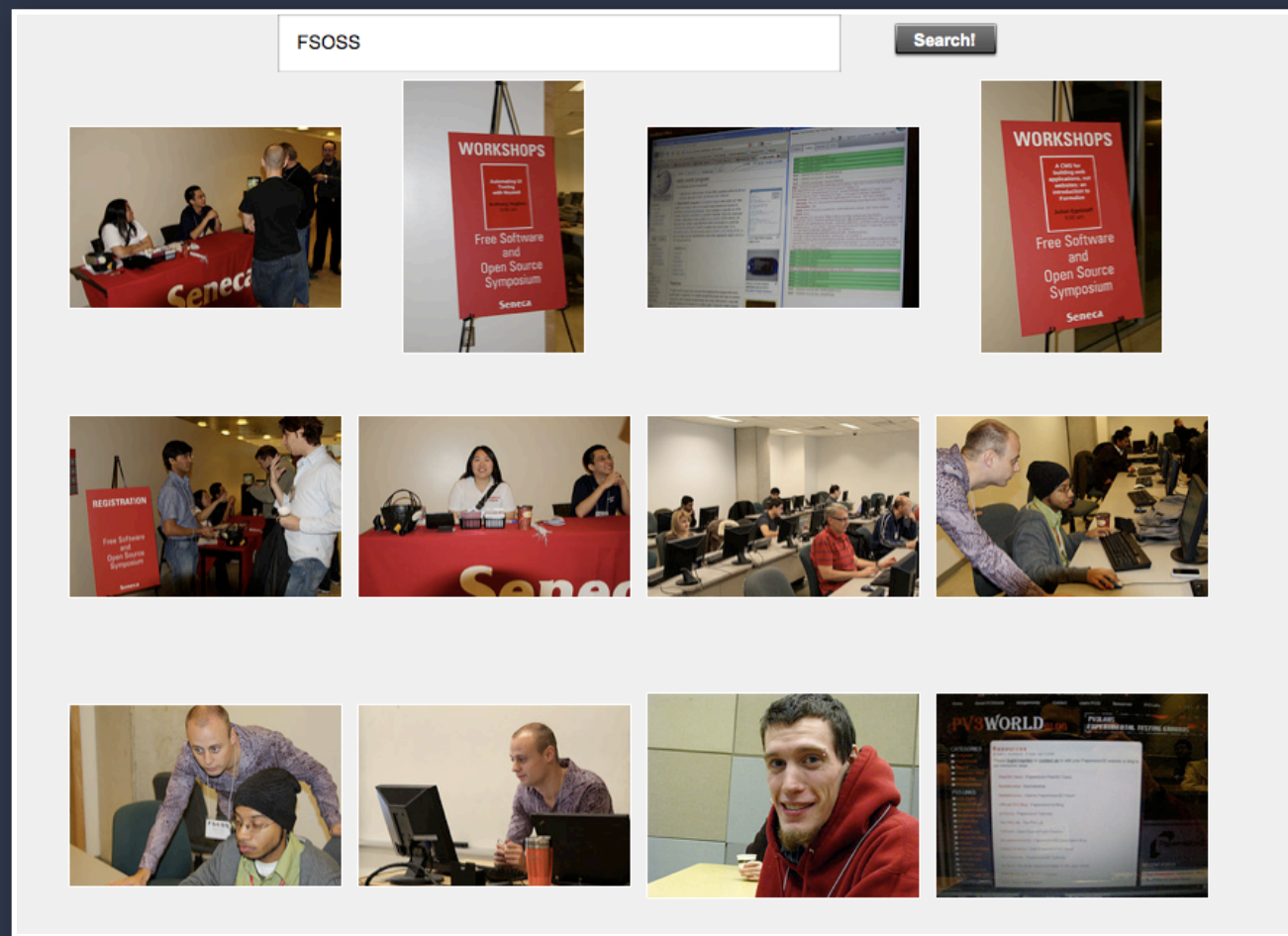
Themes:

style, colors and
graphics

Mobile FSS

- Highly focused on target platforms

- Follows basic touchscreen UI guidelines from Apple and Android dev centres

- Repurposes FSS class names, enabling multiplatform content

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Mobile FSS Applied

.fl-theme-coal

.fl-theme-iphone

Make it your own

.fl-theme-myTheme

Presentation Summary

- Loose coupling (DOM Agnosticism)

  - No baked dependence on markup

- Template Driven

  - You own the markup

- Rapid CSS

  - Get up and running fast, easily customized

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Fluid Engage

Thank You

Fluid Project

    http://www.fluidproject.org/

Demos

    http://build.fluidproject.org/

Join the community

    http://fluidproject.org/getinvolved/

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