

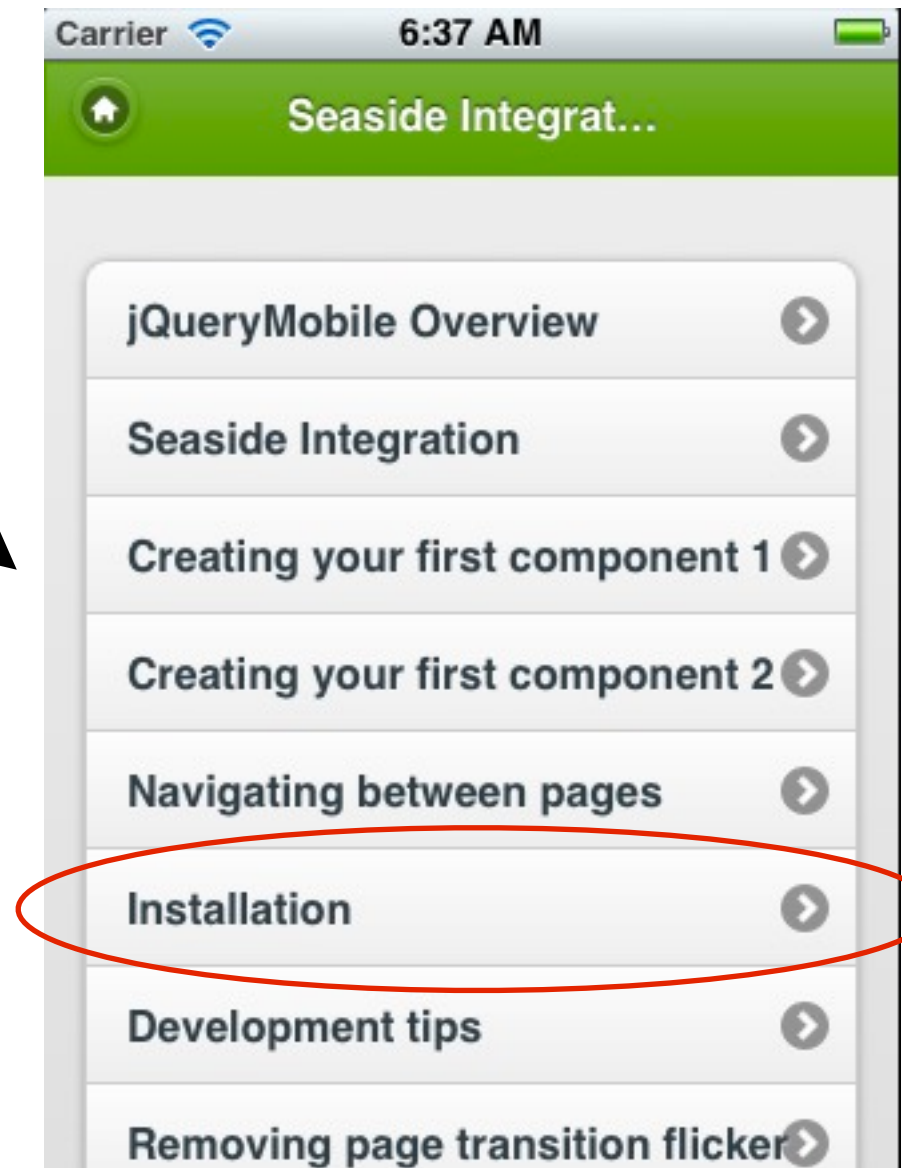
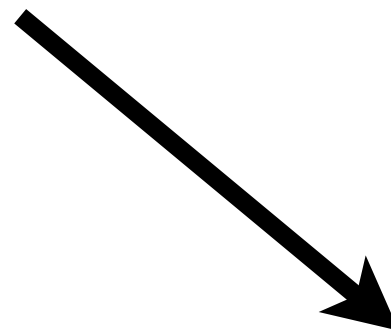
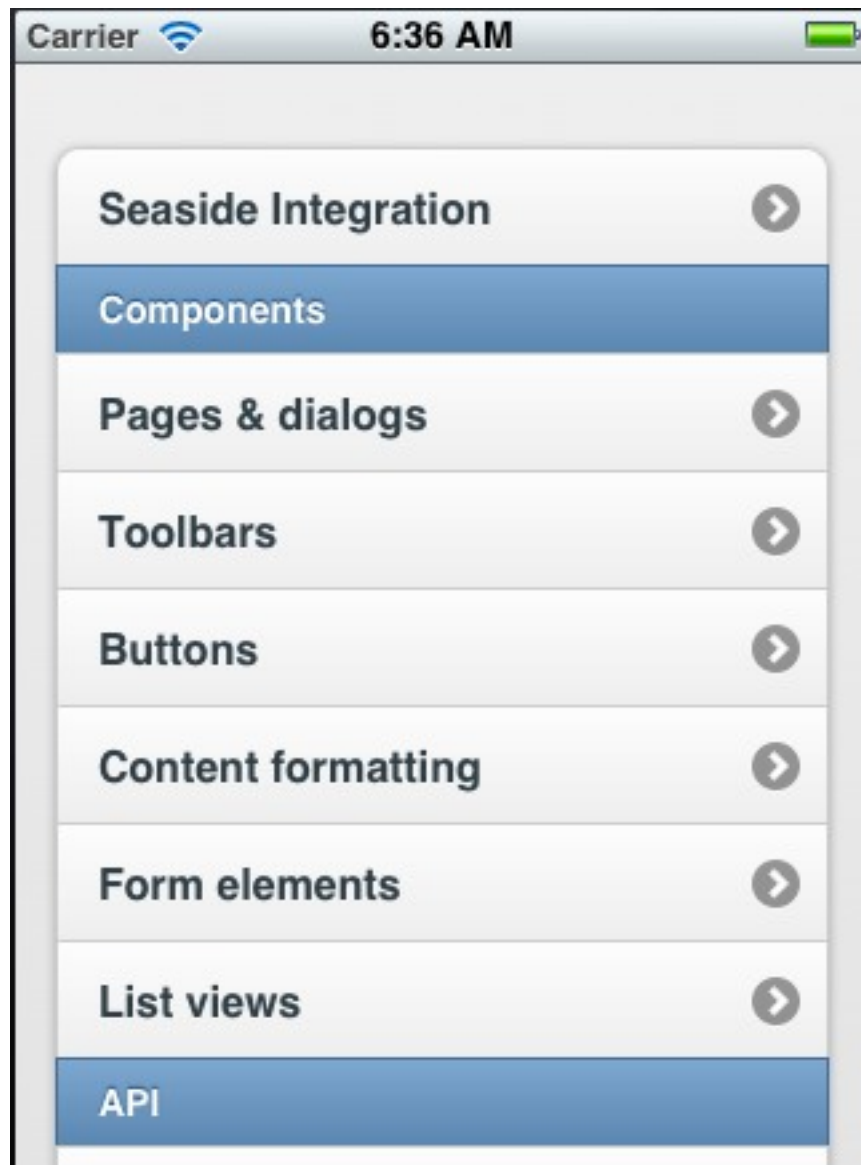


Nick Ager
@nickager

Plan

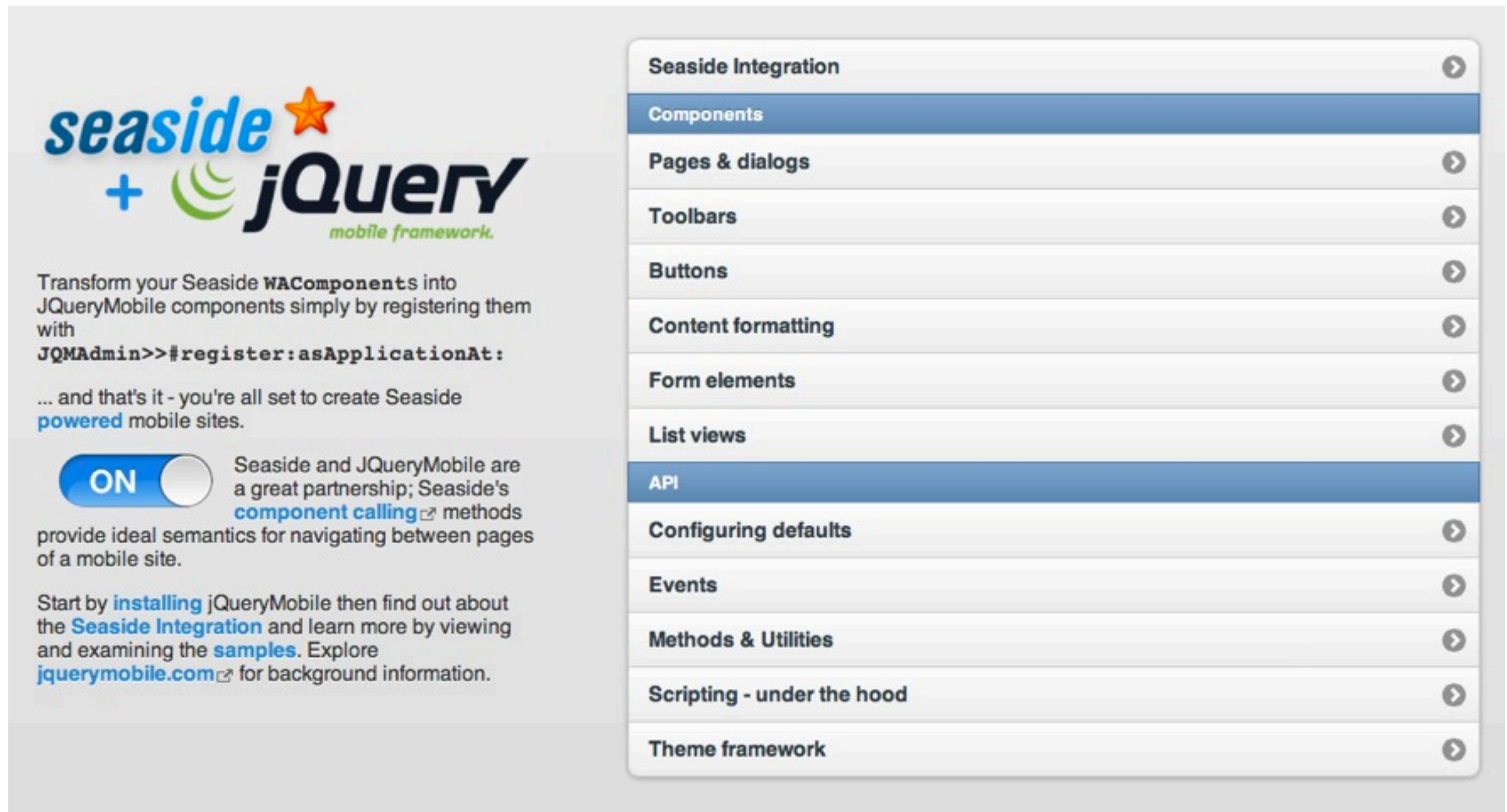
- Overview of jQueryMobile
- Seaside integration with jQueryMobile
- Building an app with Pharo, Seaside
jQueryMobile
- Questions



Installation



<http://jquerymobile.seasidehosting.st>

Follow along



seaside  **jQuery**
+  **mobile framework.**

Transform your Seaside **WComponents** into JQueryMobile components simply by registering them with **JQAdmin**>>**#register:asApplicationAt:**

... and that's it - you're all set to create Seaside **powered** mobile sites.

ON Seaside and JQueryMobile are a great partnership; Seaside's **component calling** [methods](#) provide ideal semantics for navigating between pages of a mobile site.

Start by **installing** JQueryMobile then find out about the **Seaside Integration** and learn more by viewing and examining the **samples**. Explore jquerymobile.com [for background information](#).

- Seaside Integration
- Components**
- Pages & dialogs
- Toolbars
- Buttons
- Content formatting
- Form elements
- List views
- API**
- Configuring defaults
- Events
- Methods & Utilities
- Scripting - under the hood
- Theme framework

<http://jquerymobile.seasidehosting.st>

#1 jQuery

The screenshot shows the jQuery website homepage. At the top, there is a navigation menu with links for jQuery, UI, Mobile, Plugins, Meetups, Forum, Blog, About, and Donate. Below this is the jQuery logo with the tagline "write less, do more." and a secondary navigation bar with links for Download, Documentation, Tutorials, Bug Tracker, and Discussion. The main content area features a large heading "jQuery is a new kind of JavaScript Library." followed by a paragraph describing the library's capabilities. To the right, there is a section titled "GRAB THE LATEST VERSION!" with a "CHOOSE YOUR COMPRESSION LEVEL:" section containing two radio button options: "PRODUCTION (32KB, Minified and Gzipped)" and "DEVELOPMENT (252KB, Uncompressed Code)". Below these options is a large "Download (jQuery);" button with a downward arrow icon. Underneath the button, it says "Current Release: v1.8.0". Below the main content, there is a section titled "WHO'S USING JQUERY?" with logos for various companies like Google, Dell, and others. At the bottom, there are two columns: "LEARN JQUERY NOW!" with a link to "What does jQuery code look like?" and "JQUERY RESOURCES" with links for "Getting Started With jQuery" and "Developer Resources".

jQuery UI Mobile Plugins Meetups Forum Blog About Donate

jQuery
write less, do more.

Download Documentation Tutorials Bug Tracker Discussion

jQuery is a new kind of JavaScript Library.

jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. jQuery is designed to change the way that you write JavaScript.

✓ [Lightweight Footprint](#) ✓ [CSS3 Compliant](#) ✓ [Cross-browser](#)

GRAB THE LATEST VERSION!

CHOOSE YOUR COMPRESSION LEVEL:

PRODUCTION (32KB, Minified and Gzipped)
 DEVELOPMENT (252KB, Uncompressed Code)

Download (jQuery);

Current Release: **v1.8.0**

WHO'S USING JQUERY? Google DELL IBM .NET NBC CBS NETFLIX Technorati mozilla.org

LEARN JQUERY NOW!

What does jQuery code look like? Here's the quick and dirty:

JQUERY RESOURCES

Getting Started With jQuery

- ◆ [How jQuery Works](#)

Developer Resources

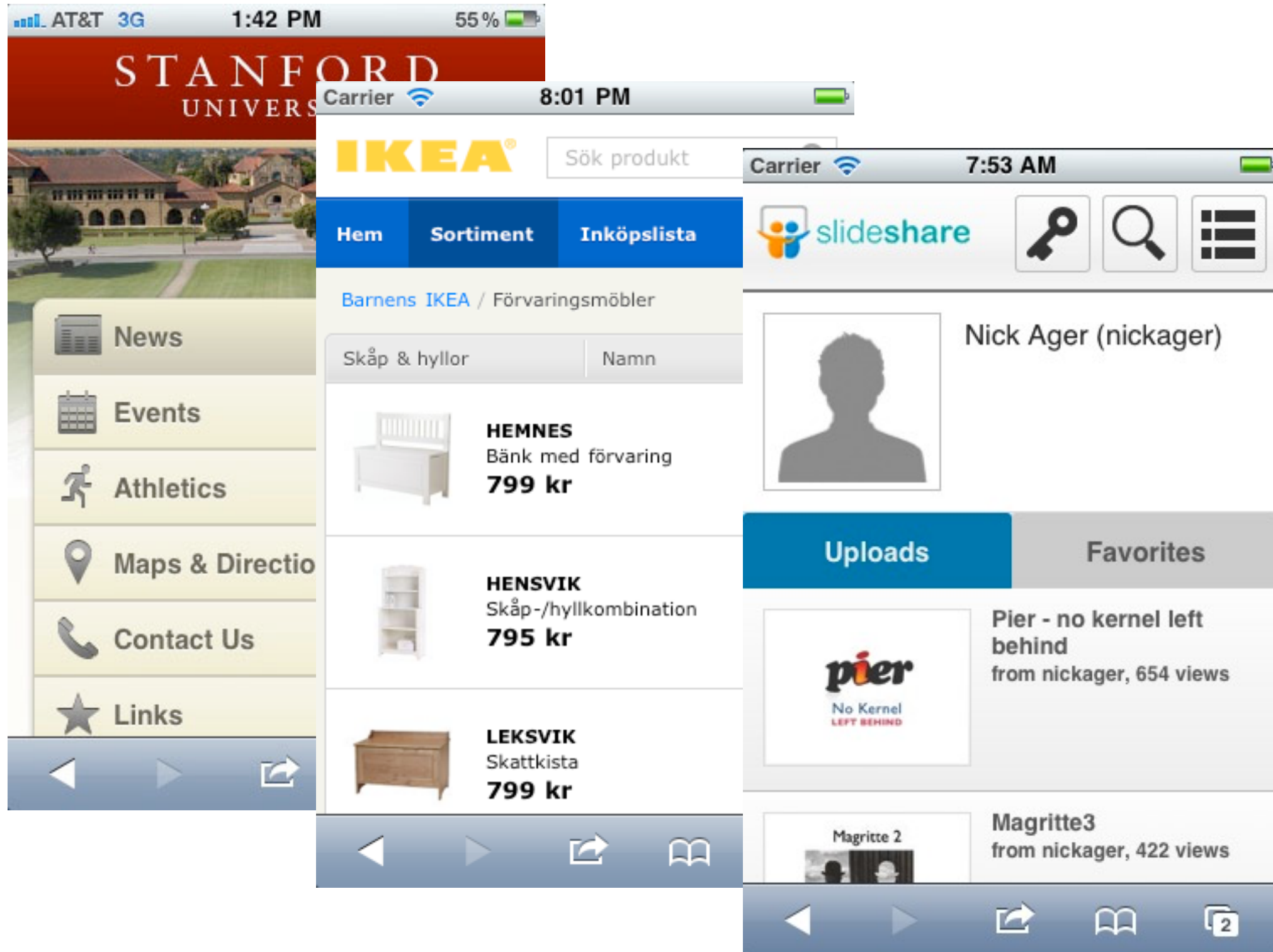
- ◆ [Mailing List](#)

#2 jQuery Mobile



Progressive enhancement

Widely used



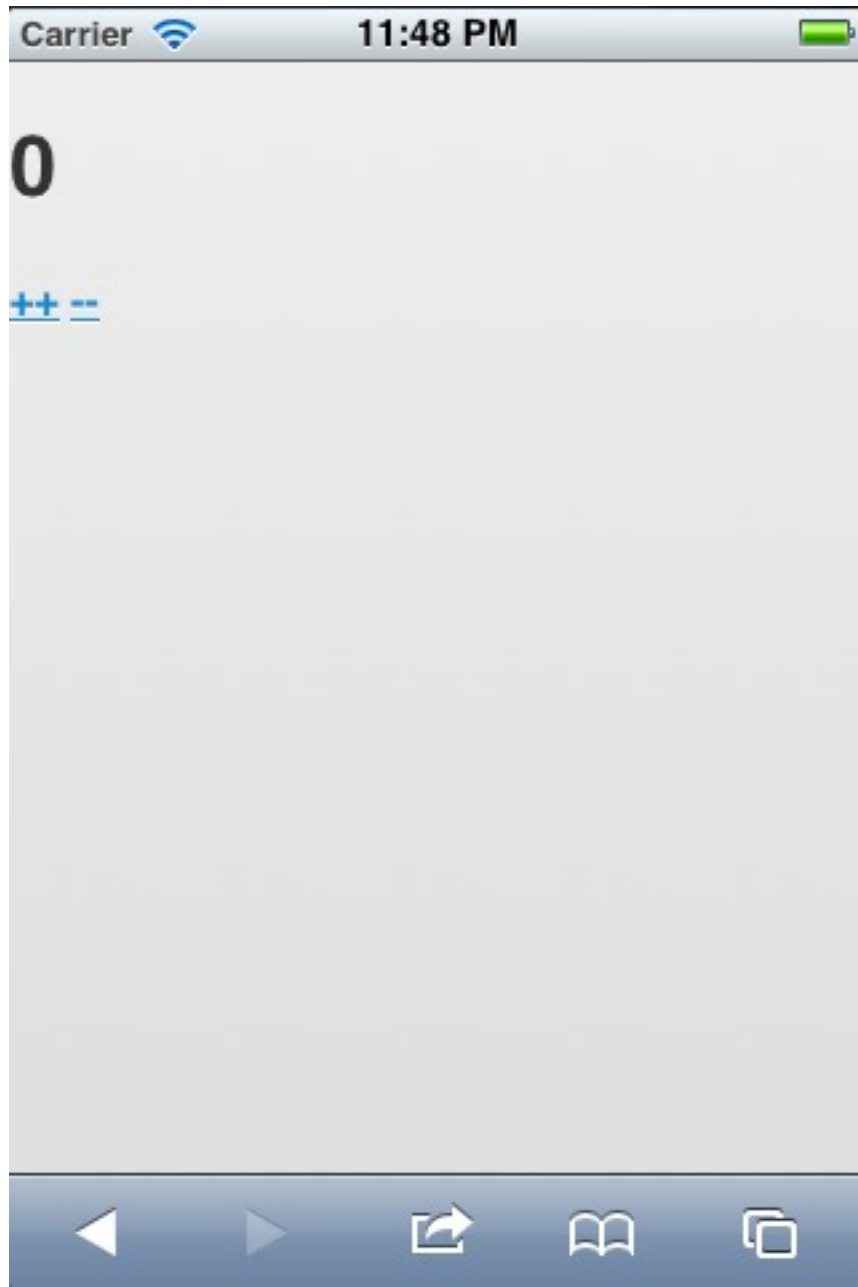
Demo

JQMAdmin register: WACounter asApplicationAt: 'example1'.



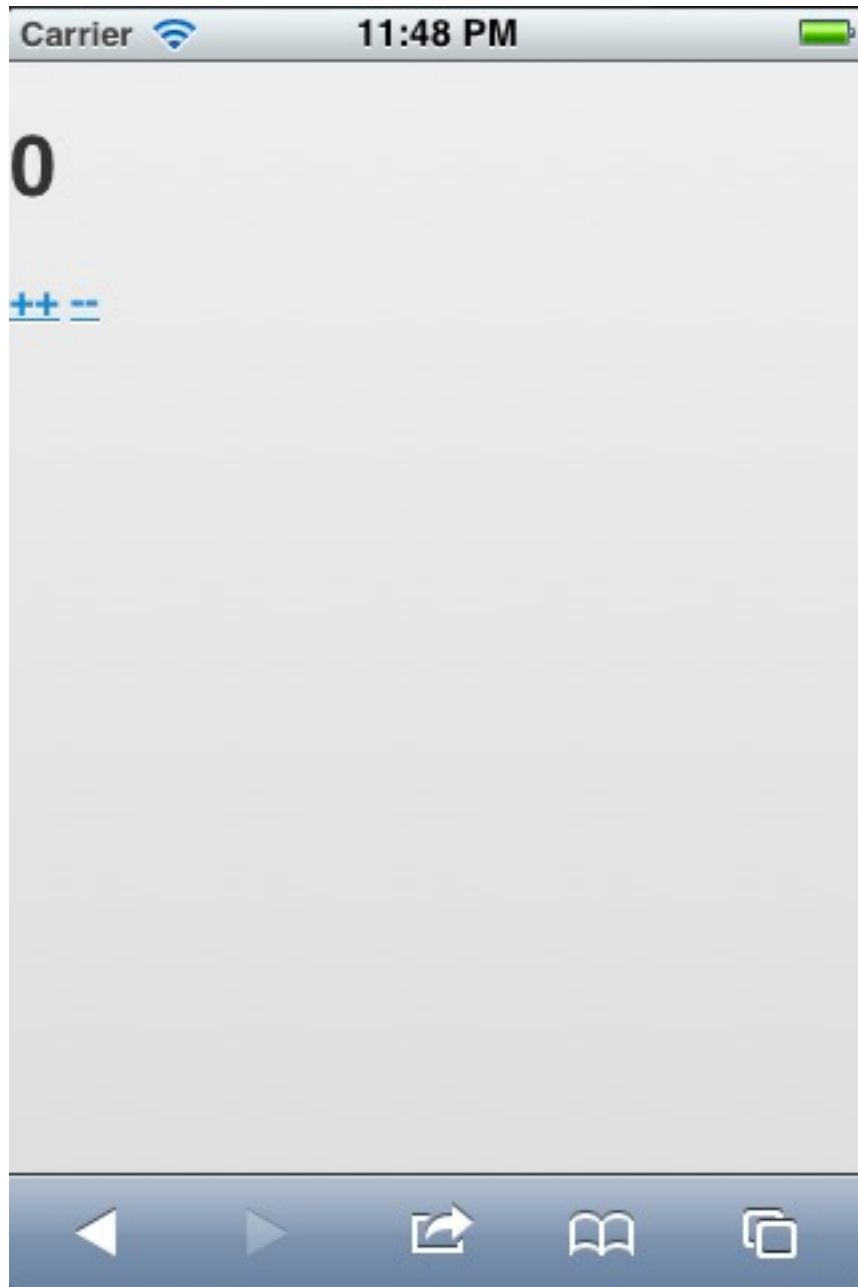


Hijax



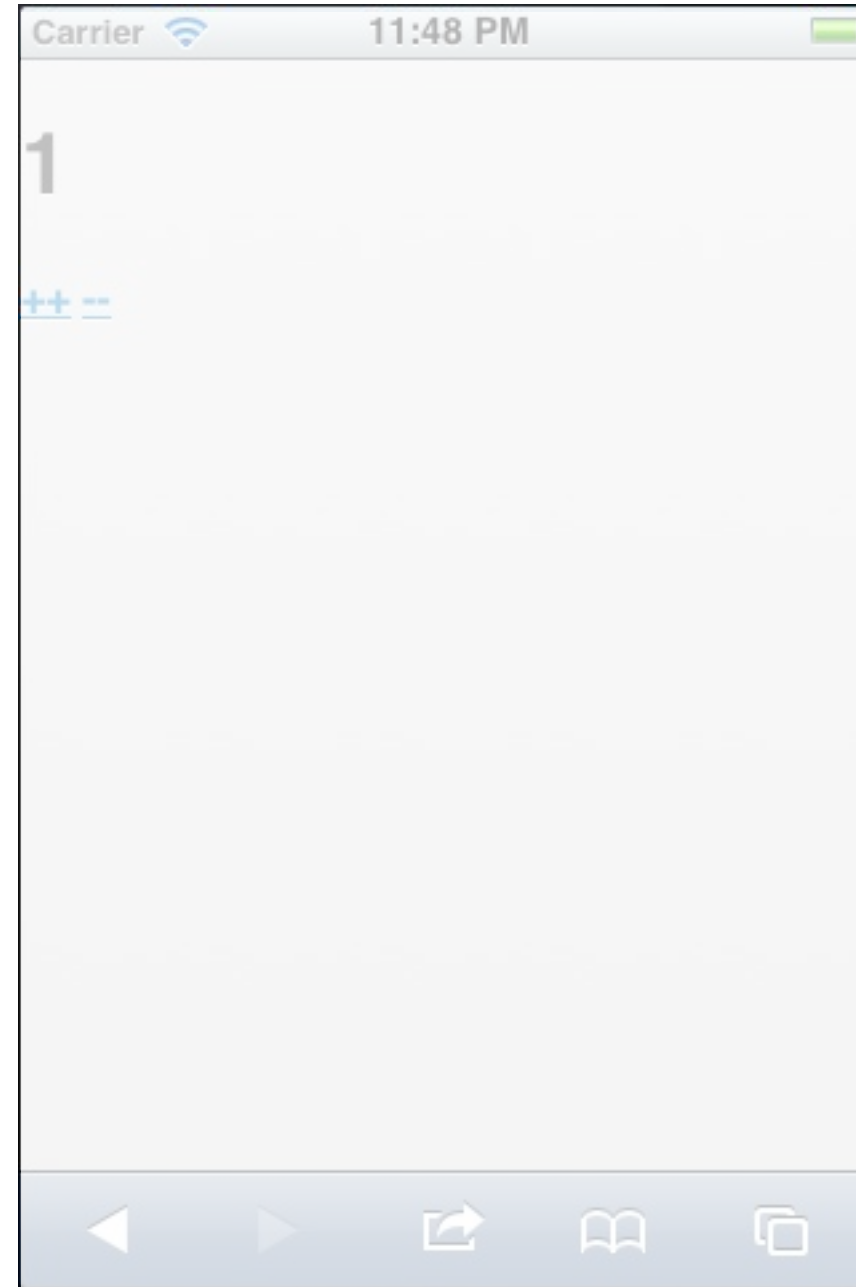
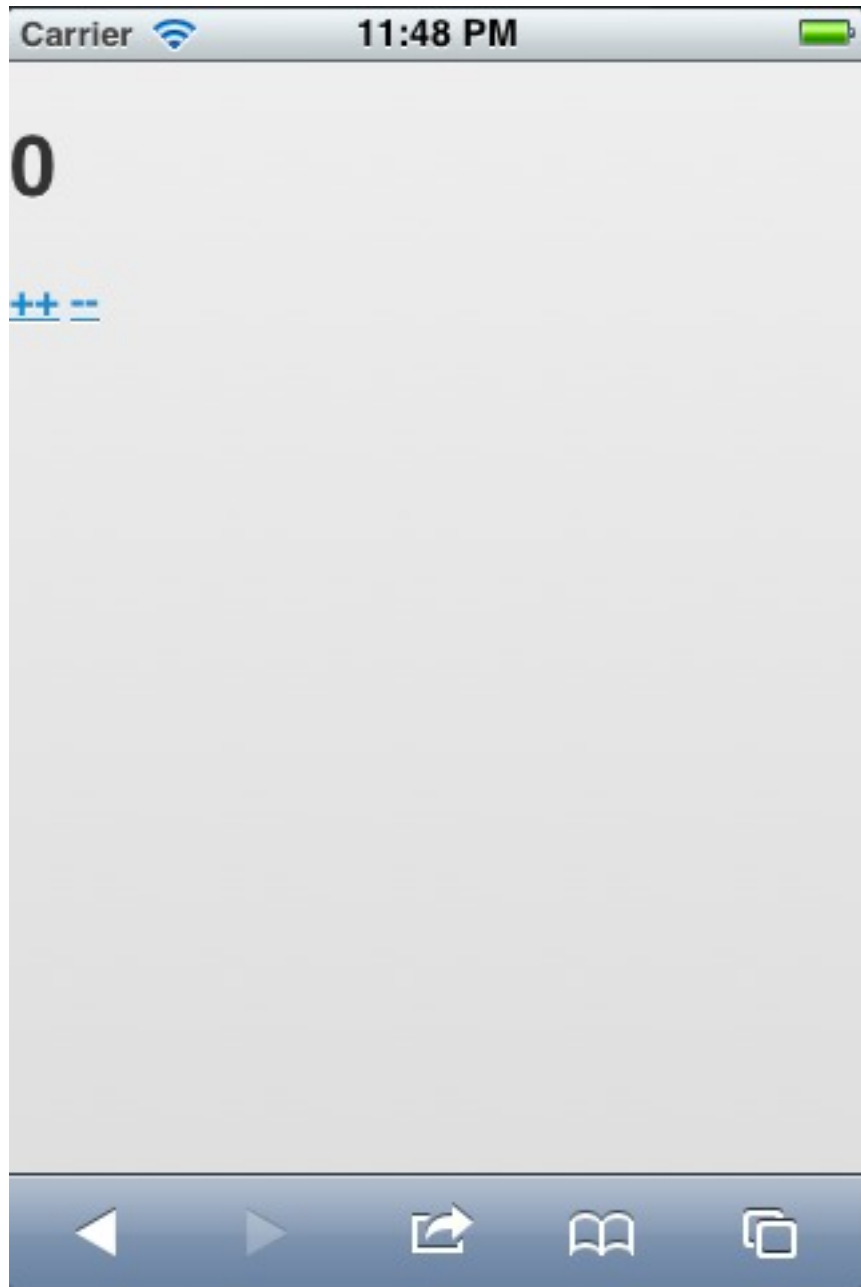


Hijax





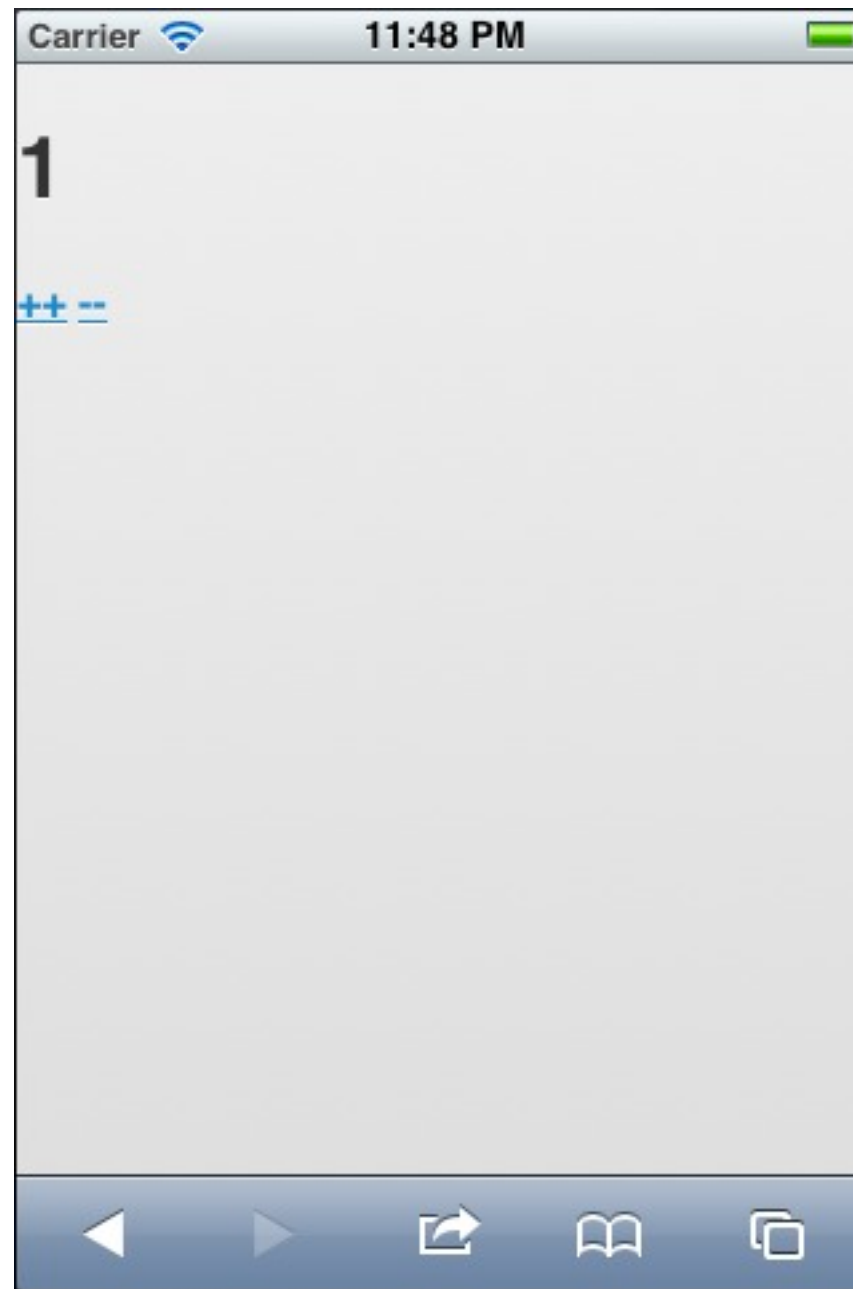
Hijax



Next page downloads in background



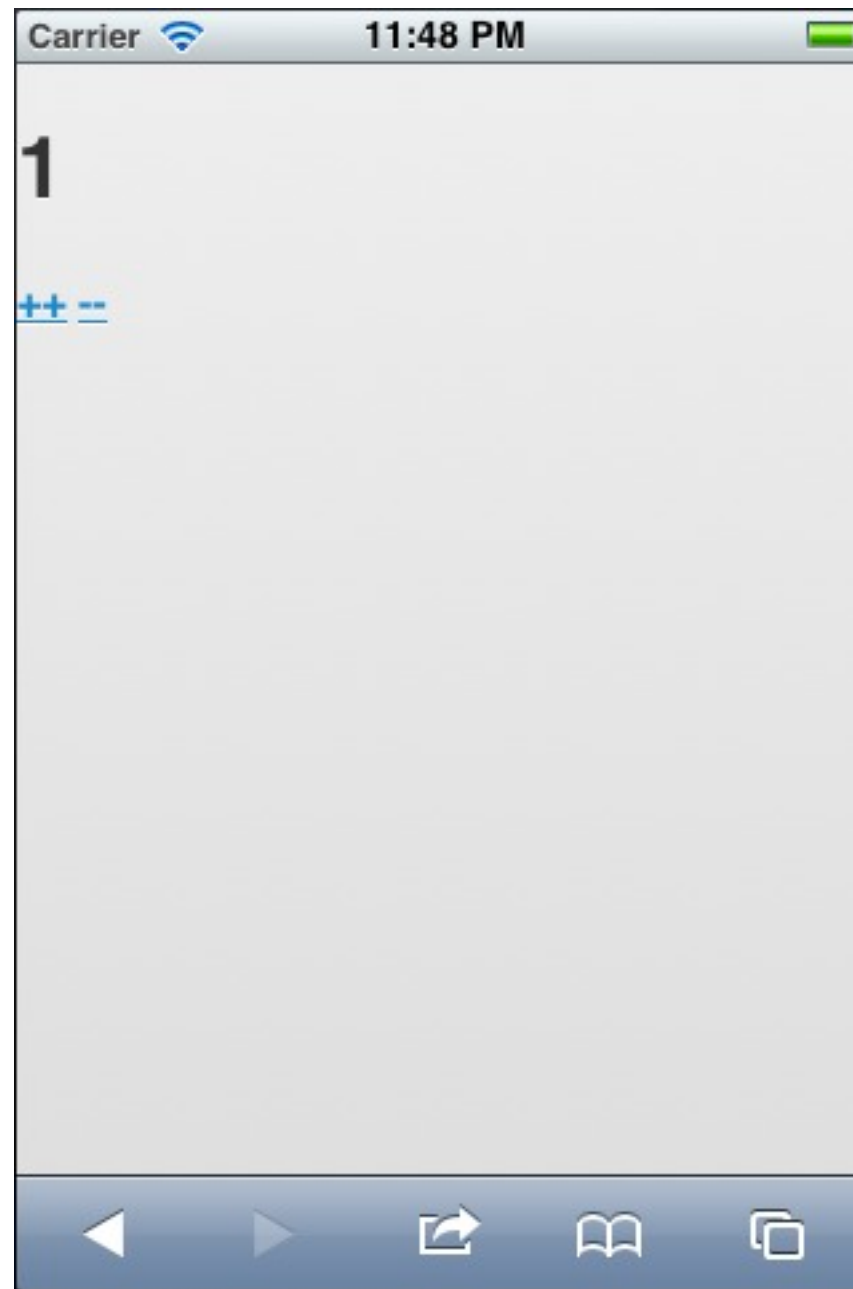
Hijax



JQueryMobile orchestrates the transition between the two pages



Hijax



JQueryMobile orchestrates the transition between the two pages

Seaside adds surrounding page div

```
WACounter>>renderContentOn: html
html heading: count.
html anchor
  jqmTransitionFlip;
  callback: [ self increase ];
  with: '++'.
html space.
html anchor
  jqmTransitionFade;
  callback: [ self decrease ];
  with: '--'
```

```
<div data-role="page" id="pageId1">
  <h1>0</h1>
  <a data-transition="flip"
    href="/example1?_s=pd7WE5NXDZgQ645v&_k=_cTKIFL5PeEz1RRS&1">++</a>
  &nbsp;
  <a data-transition="fade"
    href="/example1?_s=pd7WE5NXDZgQ645v&_k=_cTKIFL5PeEz1RRS&2">--</a>
</div>
```

Seaside changes the binding document>>addLoadScript:

```
JQMEvents>>renderOrientationChangeEventOn: html
  html heading
    level4;
    id: html nextId;
    with: 'Text changes on new orientation'.

  html document addLoadScript:
    (html jQuery page onOrientationChange:
      ('$("#', html lastId, ').text("Orientation: " + event.orientation)'
      asFunction: #(event)))
```

```
<div data-role="page" id="pageId5">
  <h4 id="id1">Text changes on new orientation</h4>
  <script type="text/javascript">/**/$("#pageId5").bind("pageinit",
function(){$("#pageId5").bind("orientationchange",function(event){$
("#id1").text("Orientation: " + event.orientation)}});});/*]]&gt;*/&lt;/script&gt;
&lt;/div&gt;</pre></div><div data-bbox="210 872 747 925" data-label="Text"><p><u><a href="#">/javascript/jquery-mobile/Events</a></u></p></div><div data-bbox="2 971 160 993" data-label="Page-Footer"><p>lunes 3 de septiembre de 12</p></div>
```

JQMAAdmin

```
JQMAAdmin register: WCounter asApplicationAt: 'example1'.
```

```
JQMAAdmin class>>register: aComponentClass asApplicationAt: aString  
| application |  
application := super register: aComponentClass asApplicationAt: aString.  
application preferenceAt: #scriptGeneratorClass put: JQMScriptGenerator.  
application preferenceAt: #rootDecorationClasses put: #().  
application preferenceAt: #renderPhaseContinuationClass put:  
JQMRenderPhaseContinuation.
```

```
^ application
```

ids: session unique VS page unique

```
JQMRRenderPhaseContinuation>>createRenderContext
| renderContext |
"create a custom render context - which in turn creates a custom
callback registry which provides callback ids (html nextId) which are
session unique, rather than page unique"

renderContext := JQMRRenderContext new.

renderContext visitor: (WARenderingGuide client: renderContext visitor).

^ renderContext
```

```
JQMEvents>>renderOrientationChangeEventOn: html
html heading
  level4;
  id: html nextId;
  with: 'Text changes on new orientation'.

html document addLoadScript:
(html jQuery page onOrientationChange:
  ('$("#', html lastId, '").text("Orientation: " + event.orientation)')
  asFunction: #(event))
```

Demo

```
JQMAdmin register: WACounter2 asApplicationAt: 'example2'.
```

Removing address bar dipping

```
JQMTestPageBase>>rendererClass  
^ JQMHtmlCanvas
```

```
JQMHtmlCanvas>>anchor  
| anchorBrushClass |  
anchorBrushClass := self requestContext request jqmUserAgent isIOS  
  ifTrue: [ JQMIOSAnchorTag ]  
  ifFalse: [ WAAncorTag ].  
  
^ self brush: anchorBrushClass new
```


Seaside's **modular** architecture
made it possible to **plug-in**
components to modify page
rendering add **rewire** the page
script initialisation

Precaching

```
JQMAdmin register: WACounter3 asApplicationAt: 'example3'.
```

```
WACounter3>>renderContentOn: html
html heading: count.
html anchor
  jqmPrefetch;
  callback: [
    (Delay forSeconds: 5) wait.
    self increase ];
  with: '++'.
html space.
html anchor
  jqmPrefetch;
  callback: [
    (Delay forSeconds: 5) wait.
    self decrease ];
  with: '--'
```

simulating a slow network



Seaside call: & answer:

```
JQMAAdmin register: JQMSampleFlickrHome asApplicationAt:  
  'jqm-samples/flickr'.
```

Repository: <http://ss3.gemstone.com/ss/jqueryMobileSamples>

DEMO

<http://vimeo.com/31600152>

JQMSampleFlickrHome

```
JQMSampleFlickrHome>>renderContentOn: html
html div
  jqmContent;
  with: [
    html paragraph: 'Enter a tag to retrieve Flickr photos:'.
    self renderFormOn: html ]
```

```
JQMSampleFlickrHome>>renderFormOn: html
html form: [
  html textInput
    on: #flickrTag of: self.

  html submitButton
    callback: [
      self show: (JQMSampleFlickrSlideShow flickrTag: self flickrTag) ];
  with: 'View Slide Show' ]
```

answer:

```
JQMSampleFlickrBase>>initialize  
  super initialize.
```

```
self addDecoration: JQMSampleFlickrToolbar new.  
self addDecoration: JQMIOSHomescreenBookmarkDecorator new.
```

```
JQMSampleFlickrToolbar>>renderContentOn: html  
html div  
  jqmHeader;  
  with: [  
    html anchor  
      jqmIcon: 'home';  
      jqmReverse;  
      jqmIconNoText;  
      callback: [ self decoratedComponent answer ].  
    html heading  
      level1;  
      with: 'Flickr photos' ].  
  
super renderContentOn: html.
```


Widgets

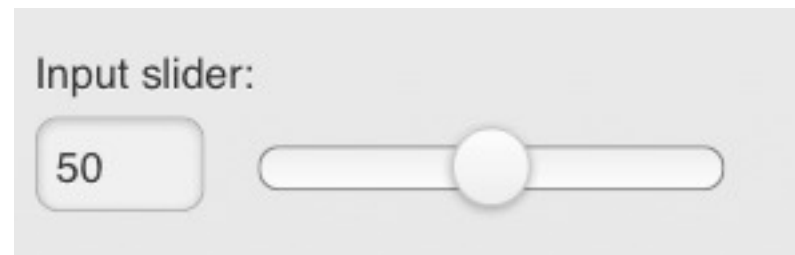
The image displays a collection of mobile UI widgets arranged vertically. From top to bottom, they are: a standard text input field; a larger text area; a search input field with a magnifying glass icon; a flip switch currently in the 'On' position; an input slider set to the value 50; a multi-select list of snack items (Cheetos, Doritos, Fritos, Sun Chips) with checkboxes; font styling buttons for bold (b), italic (i), and underline (u); a radio button selection for 'Choose a pet' with options Cat, Dog, Hamster, and Lizard; a layout view selector with buttons for List, Grid, and Gallery; a shipping method dropdown menu currently showing 'Standard: 7 day'; and a themed search input field with a dark background and a magnifying glass icon.

- Provides consistent widget set closely matching iPhones native widgets
- Degrades gracefully for less capable browsers
- Uses Html & Html 5 widgets

<http://jquerymobile.seasidehosting.st/seaside/javascript/jquery-mobile/Form-element-gallery>

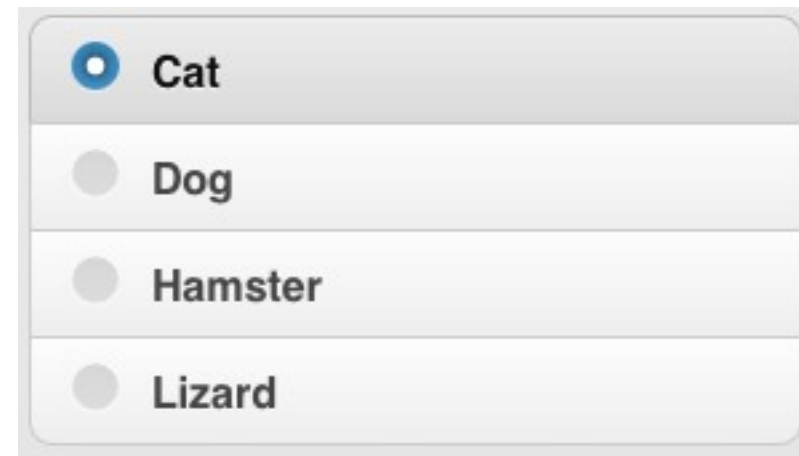
DEMO

Widget styling occurs (mainly) automatically



```
JQMFormBase>>renderSliderOn: html
  "*Slider>http://jquerymobile.com/test/docs/forms/slider/*"
self renderFormElementOn: html element: [
  html label
    for: html nextId;
    with: 'Input slider:'.

  html rangeInput
    id: html lastId;
    value: 50;
    min: 0;
    max: 100 ].
```



Cat
Dog
Hamster
Lizard

```
JQMFormBase>>renderRadioButtonPetsOn: html
"*Slider>http://jquerymobile.com/test/docs/forms/radiobuttons/*"
self renderFormElementOn: html element: [
  html fieldSet
    jqmControlGroup;
  with: [
    | pets |
    pets := #(Cat Dog Hamster Lizard).
    html radioGroup
      selected: pets first;
      with: [ :group |
        html legend: 'Choose a pet:'.
        pets do: [ :each |
          html label
            for: html nextId;
            with: each.
          html radioButton
            group: group;
            value: each;
            id: html lastId ] ] ] ].
```



```
JQMFormBase>>renderFlipSwitchOn: html
  "*Flip Toggle Switch>http://jquerymobile.com/test/docs/forms/switch/"
self renderFormElementOn: html element: [
  html label
    for: html nextId;
    with: 'Flip switch:'.

  html select
    list: #(On Off);
    jqmSlider;
    id: html lastId ]
```



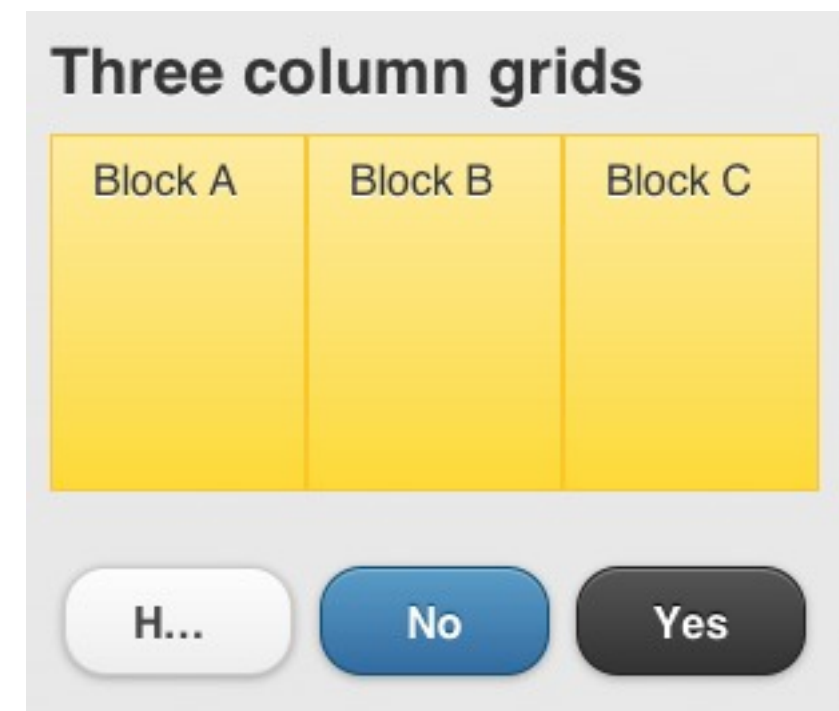
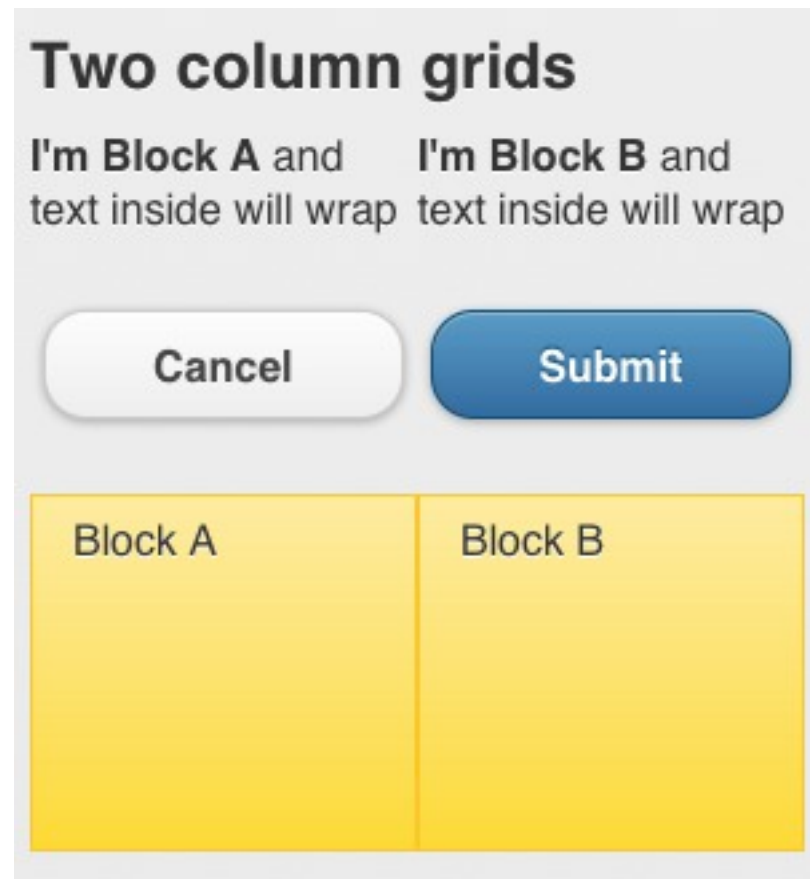

```
JQMFormBase>>renderCheckButtonFontStylingOn: html
self renderFormElementOn: html element: [
  html fieldSet
    jqmControlGroup;
    jqmHorizontal;
    with: [
      html legend: 'Font styling:'.
      html label
        for: html nextId;
        with: 'b'.
      html checkbox
        id: html lastId.

      html label
        for: html nextId;
        with: [
          html emphasis: 'i' ].
      html checkbox
        id: html lastId.

      html label
        for: html nextId;
        with: 'u'.
      html checkbox
        id: html lastId ] ].
```

jQuery Mobile specific

- layout grids
- collapsible content blocks
- accordions
- theming



The background of the slide is a dense, top-down view of numerous US dollar bills falling through the air. The bills are in various orientations and stages of descent, creating a sense of motion and abundance. The colors are muted, with a dark, almost black background that makes the green and white of the bills stand out. The text is overlaid on this scene.

Mobile apps

DEMO

Step #1

```
[self.webView loadRequest:  
    [NSURLRequest requestWithURL:  
        [NSURL URLWithString:  
            @"http://jquerymobile.seasidehosting.st"]]]];
```

Step #2

```
CGRect bounds = self.window.bounds;
self.webView = [[[UIWebView alloc] initWithFrame: bounds] autorelease];

[self.webView setAutoresizingMask:
    UIViewAutoresizingFlexibleBottomMargin
    | UIViewAutoresizingFlexibleHeight
    | UIViewAutoresizingFlexibleLeftMargin
    | UIViewAutoresizingFlexibleRightMargin
    | UIViewAutoresizingFlexibleTopMargin
    | UIViewAutoresizingFlexibleWidth ];

[self.window addSubview:self.webView];
```

Outstanding

- Making a builder
- Android & Windows 8 ports
- Remote development to an 'i'device

Acknowledgements

- Louis Andriese
- Esteban
- John Macintosh
- Seaside team

Questions?