



Lab 2: jQuery Mobile

Mikael Blomberg



- Specializes in HTML5 application development
- Located in Helsinki (Kamppi) + Jyväskylä (Innova 2)
- Founded in 2006, currently employs 50 people
- Customers include Sanoma, YLE, Veikkaus, F-Secure, SAK

SC5 - World Class HTML5 Know-How



Pioneer

We can develop to platforms not yet released – as long as they have a browser installed!



Unique

Only company (as far as we know) in the world specializing in HTML5 applications

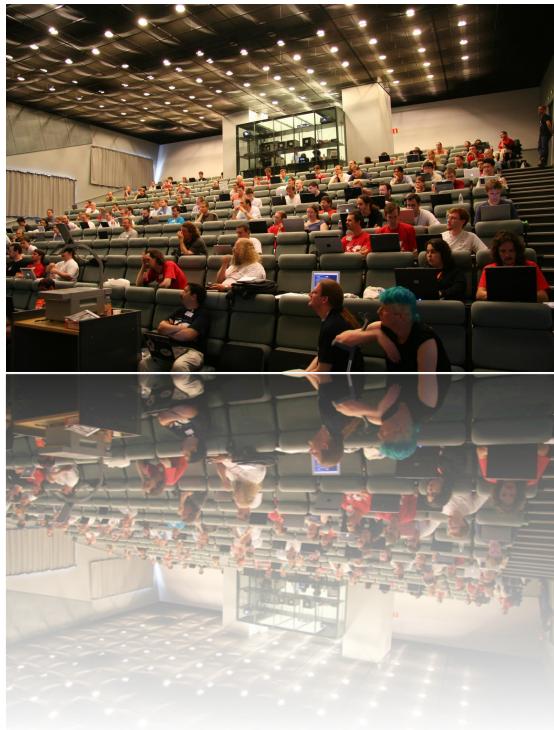


Challenger

We challenge the current ways of thinking: There are no "mobile" devices anymore, everything is mobile (even your laptop has a gyroscope!)

Mikael Blomberg

Audience



- Who is familiar with jQM?
- Who has done Web development?
- Who has done AJAX based Web development?
- Who masters closures?
- Who masters anonymous self-executing functions?
- Who contributes to JS OSS?

Lab structure

- jQuery introduction
- jQuery Mobile
 - Pages
 - List Views
 - Buttons
 - Toolbars
 - Form Elements
 - Content Formatting

jQuery introduction

- jQuery is a cross-browser JavaScript Library
 - Simplifies DOM traversing and modification
 - Event handling
 - Animation
 - Ajax interaction
 - Extendable with plugins

jQuery examples

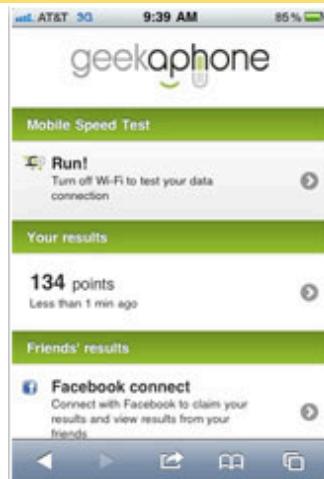
```
1 // Select all paragraphs
2 jQuery('p');
3 // or use the $(dollar) sign to make it shorter
4 $('p');
5
6 // Add class blue to all spans within content id
7 $('#content .span').addClass('blue');
8
9 // Add click-handler for current and future anchors
10 $('#a').on('click', function(event) {
11     console.log('got event', event);
12     event.preventDefault();
13     event.stopPropagation();
14 });
15
16 // Slowly enlarge h1 on mouse enter and restore on mouse leave
17 $('#h1').on('mouseenter mouseleave', function(event) {
18     var fs = parseInt($(this).css("font-size"), 10);
19     if (fs > 30) {
20         $(this).animate({fontSize: "30px"}, "slow");
21     } else {
22         $(this).animate({fontSize: "50px"}, "slow");
23     }
24 });
25
26 // Remove all handlers
27 $('#h1').off();
```



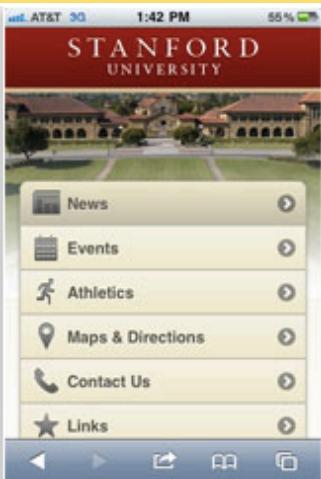
jQuery Mobile

- touch-optimized
- progressive enhancement
- themeable design
- cross-platform & cross-browser
 - supports all major platforms
 - supports all major browsers
- hybrid app friendly

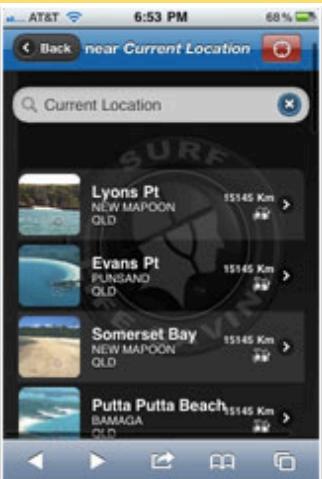
jQuery Mobile examples



Geekaphone



Stanford



Beachsafe Mobile



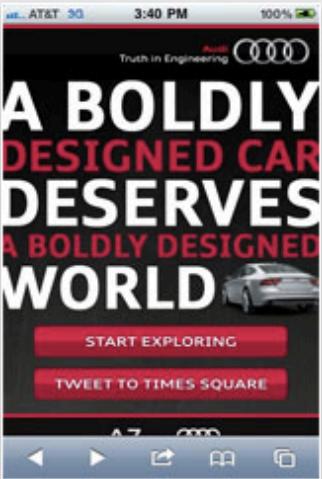
I.O.U. Mate



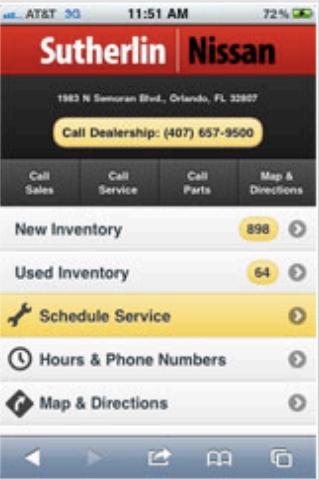
ChoreQuest



ihaveu



Audi A7 Bold Design



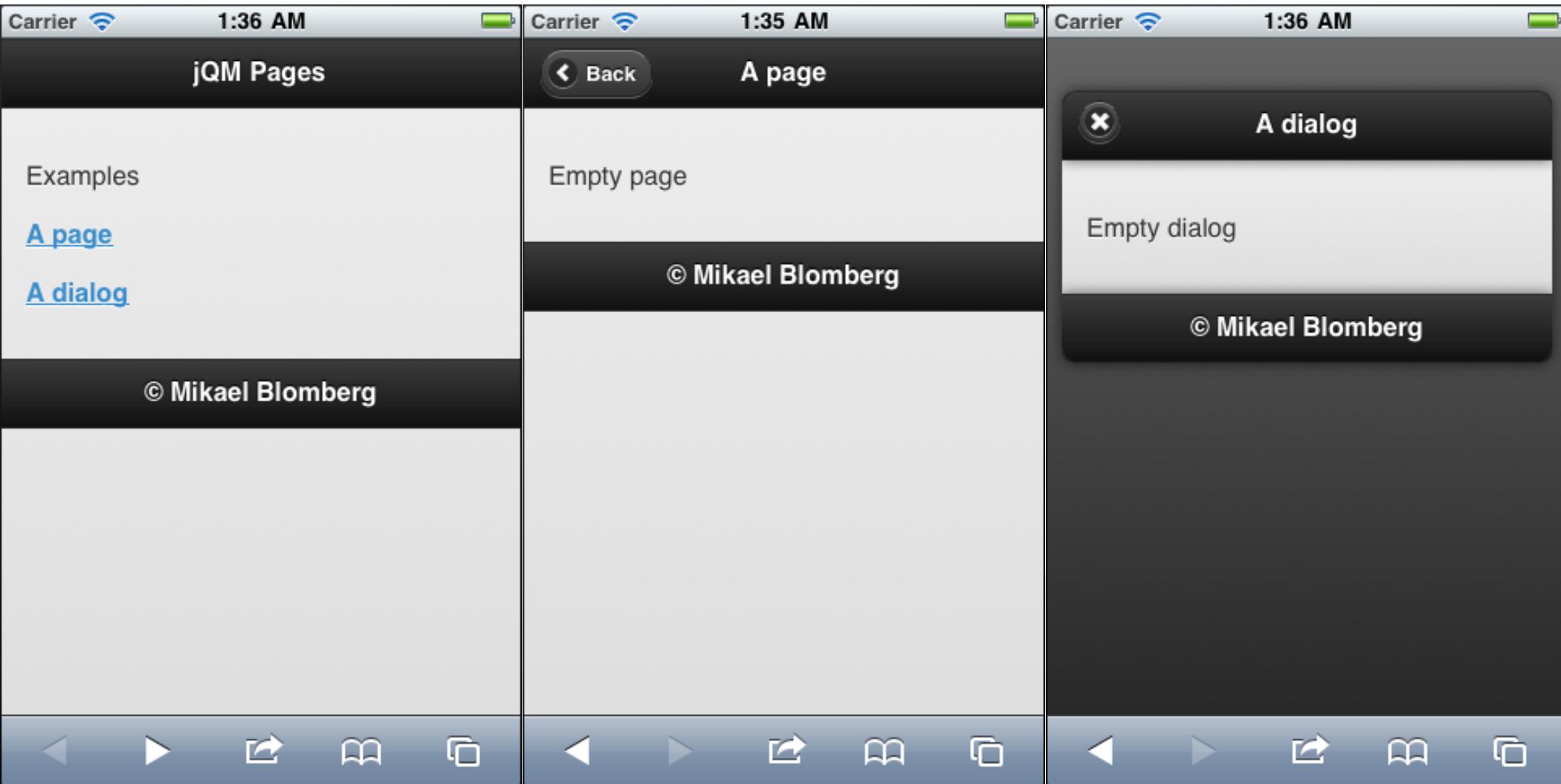
Sutherlin Nissan

jQuery Mobile : Pages html page

```
1 <!DOCTYPE html>
2 <html>
3     <head>
4         <title>jQuery Mobile Examples</title>
5         <meta name="viewport" content="width=device-width, initial-scale=1">
6         <link rel="stylesheet" href="http://code.jquery.com/mobile/1.0.1/jquery.mobile-1.0.1.min.css" />
7         <script src="http://code.jquery.com/jquery-1.7.1.js"></script>
8         <script src="scripts.js"></script>
9         <script src="http://code.jquery.com/mobile/1.0.1/jquery.mobile-1.0.1.min.js"></script>
10    </head>
11    <body>
12        <div id="main">
13            <header>
14                <h1>Examples</h1>
15            </header>
16            <div class="content">
17                <p class="none">
18                    No examples
19                </p>
20            </div>
21            <footer>
22                <h6>&copy; Mikael Bloomberg</h6>
23            </footer>
24        </div>
25    </body>
26 </html>
```



jQuery Mobile : Pages goal



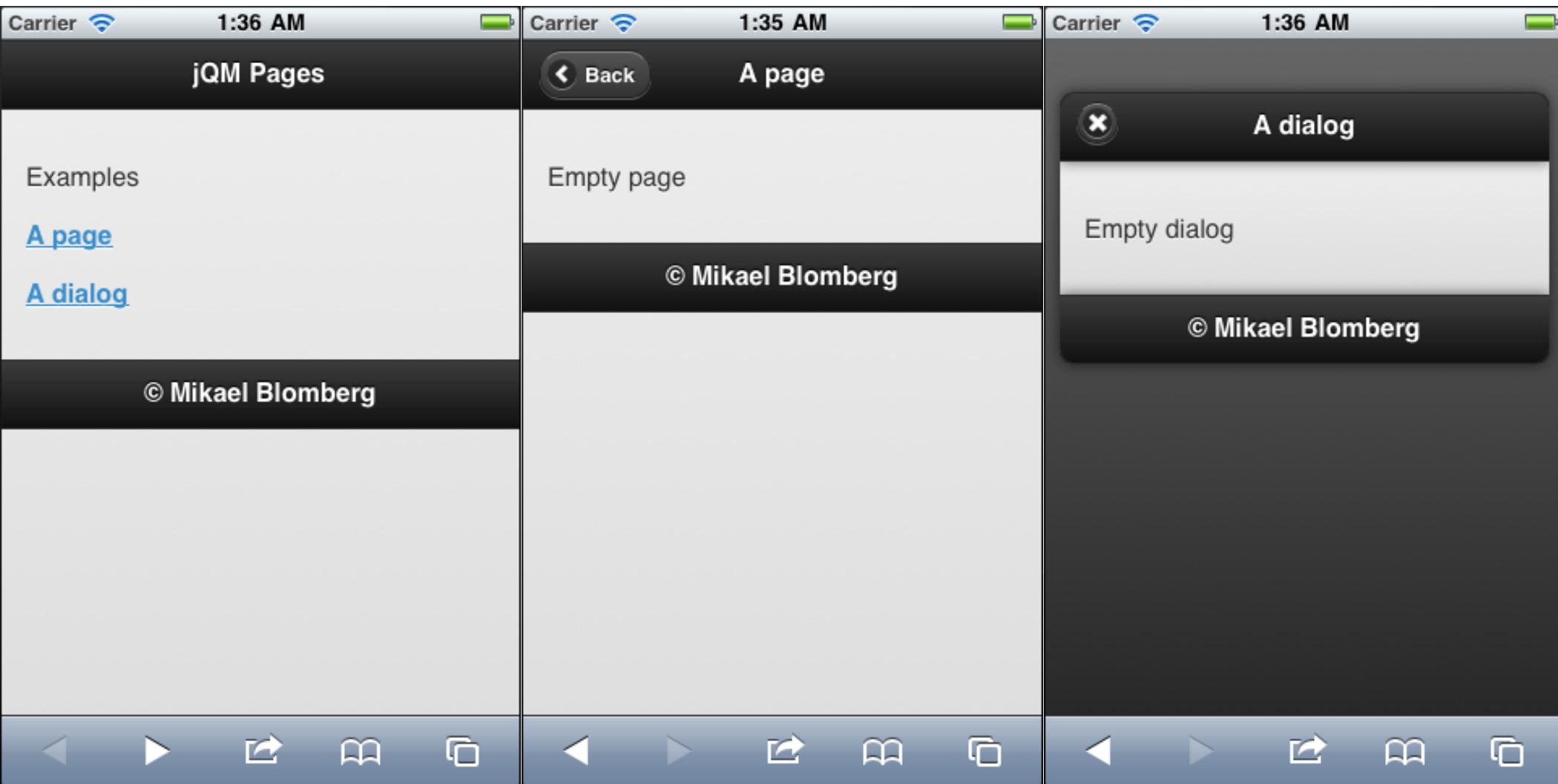
jQuery Mobile : Pages

- A view is called “Page”
- jQuery Mobile uses data attributes
- Each page can have 3 data-roles
 - Header
 - Content
 - Footer
- A multi-page app is linked using #pageId

jQuery Mobile : Pages continued

- Automatic page transitions
 - `data-transition="fade"` by default
 - fade, pop, flip, turn, flow, slide, etc.
- Linked pages are automatically hijaxed
 - `data-rel="external"` or `data-ajax="false"`
- Back-button support
 - `data-rel="back"` or `data-add-back-btn="true"`
- A page can be presented as a Dialog
 - `data-rel="dialog"`

jQuery Mobile : Pages demo



jQuery Mobile : List Views goal

The image displays three screenshots of a mobile application interface, likely demonstrating jQuery Mobile's list view features. The screenshots are arranged horizontally, each showing a different list view with various items and interactive elements.

- Screenshot 1: jQM List View**
 - Unordered list:** Item A, Item B (with a right-pointing arrow icon).
 - Ordered list:** 1. Item A, 2. Item B (with a right-pointing arrow icon).
 - Nested list:** Item A (with a right-pointing arrow icon).
 - © Mikael Bloomberg
- Screenshot 2: Item A**
 - Split button A (with a right-pointing arrow icon).
 - Divider.
 - Split button B (with a right-pointing arrow icon and a small circular badge containing the number 7).
- Screenshot 3: Split button A**
 - Filter items... (with a magnifying glass icon).
 - Item A.
 - Item B1.
 - Item B2.
 - Item B3.
 - Item B3C.

jQuery Mobile : List Views

- There are 3 types of List Views
 - Unordered, ordered and nested lists
- List items with anchors are automatically enhanced
 - A single anchor becomes a right arrow icon
 - Two anchors becomes a split button
- Nested lists are lists inside list item
 - LabsLab 1...

jQuery Mobile : List Views continued

- List items can be separated using a divider
 - `data-role="divider"`
- Search filters can be added using
 - `data-filter="true"`
- List views can be added to forms using
 - `data-inset="true"`
- Count bubbles can be added using
 - `class="ul-li-count"`

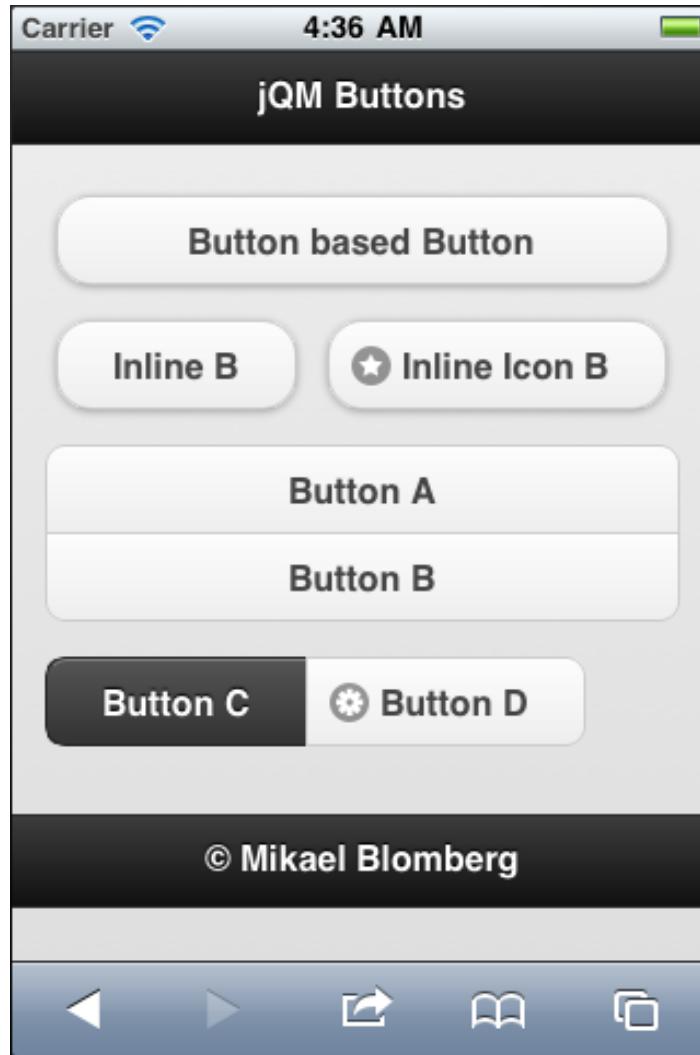
jQuery Mobile : List Views demo

The image displays three side-by-side screenshots of a mobile application interface, likely demonstrating jQuery Mobile's list view features. Each screenshot shows a header with 'Carrier' and signal strength, and a timestamp.

- Screenshot 1 (Left): jQM List View**
 - Unordered list:**
 - Item A
 - Item B
 - Ordered list:**
 - 1. Item A
 - 2. Item B
 - Nested list:**
 - Item A
 - © Mikael Bloomberg
- Screenshot 2 (Middle): Item A**
 - Split button A
 - Divider
 - Split button B
- Screenshot 3 (Right): Split button A**
 - Filter items...
 - Item A
 - Item B1
 - Item B2
 - Item B3
 - Item B3C



jQuery Mobile : Buttons goal



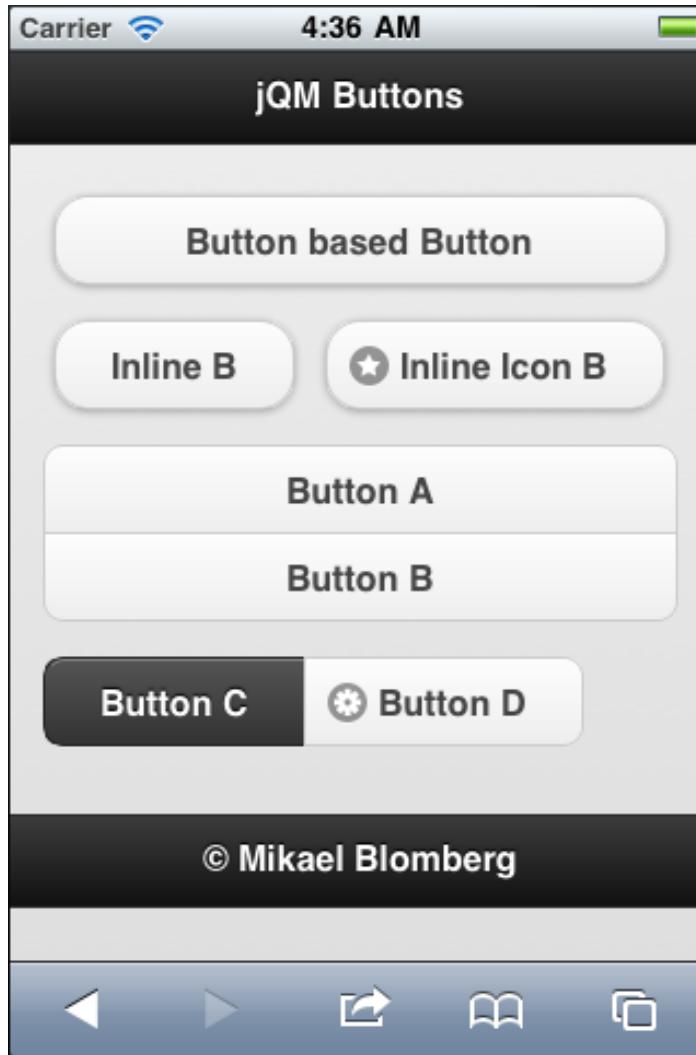
jQuery Mobile : Buttons

- jQuery Mobile enhanced buttons to be touch-friendly
- Typically there are two types of buttons
 - link buttons for navigation
 - form-based buttons for form submissions
- Automatic input and button enhancement
- Any element can be used as a button using
 - `data-role="button"`
- Buttons can be inline using
 - `data-inline="true"`

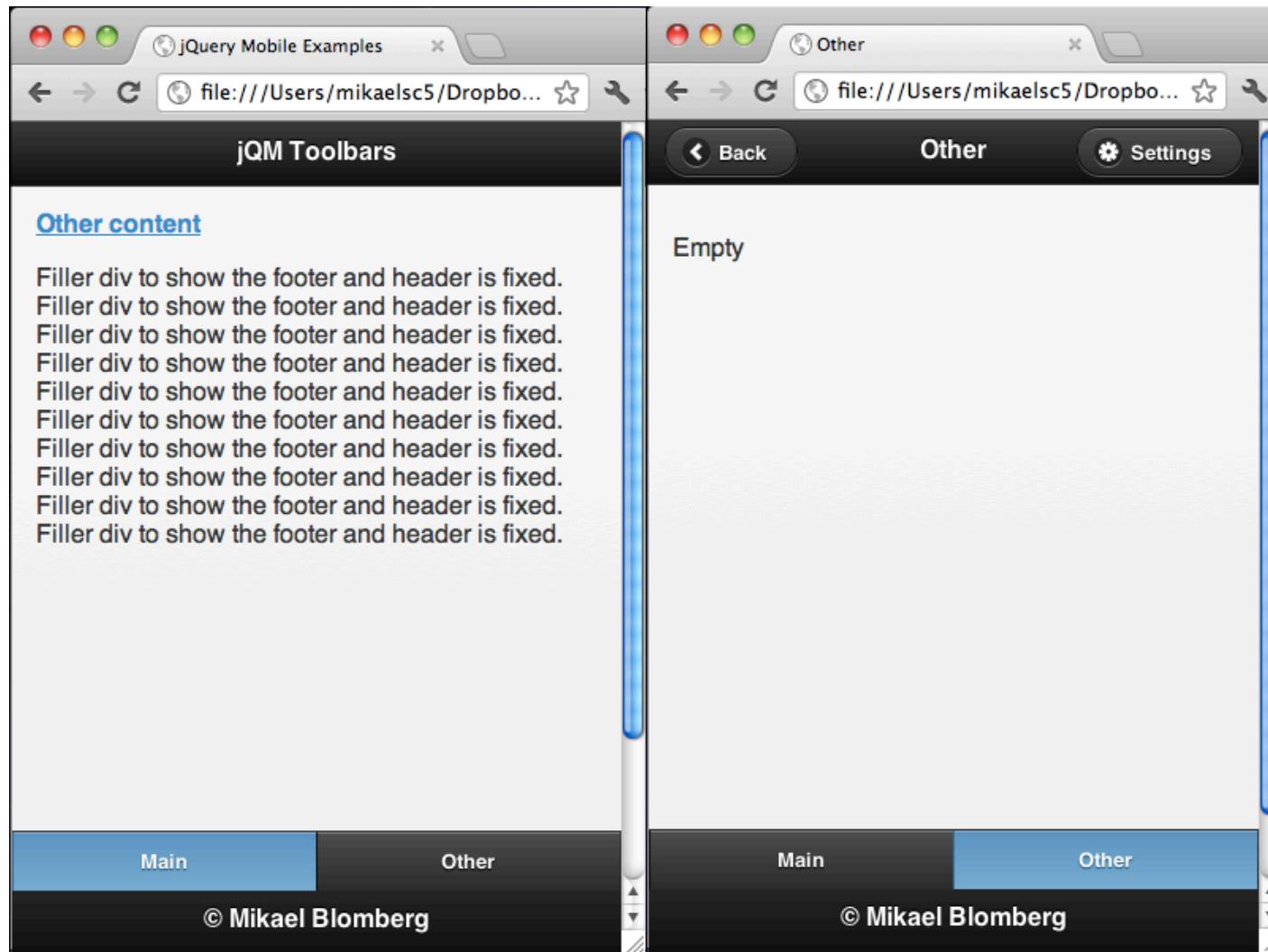
jQuery Mobile : Buttons continued

- Button icons can be set using
 - `data-icon="star"` ([available icons](#))
- Buttons can be grouped and aligned using
 - `data-role="controlgroup"`
 - `data-type="horizontal"` (vertical by default)
- Buttons can be themed using
 - `data-theme="a"`
 - other alternatives are b,c,d, and e

jQuery Mobile : Buttons demo



jQuery Mobile : Toolbars goal



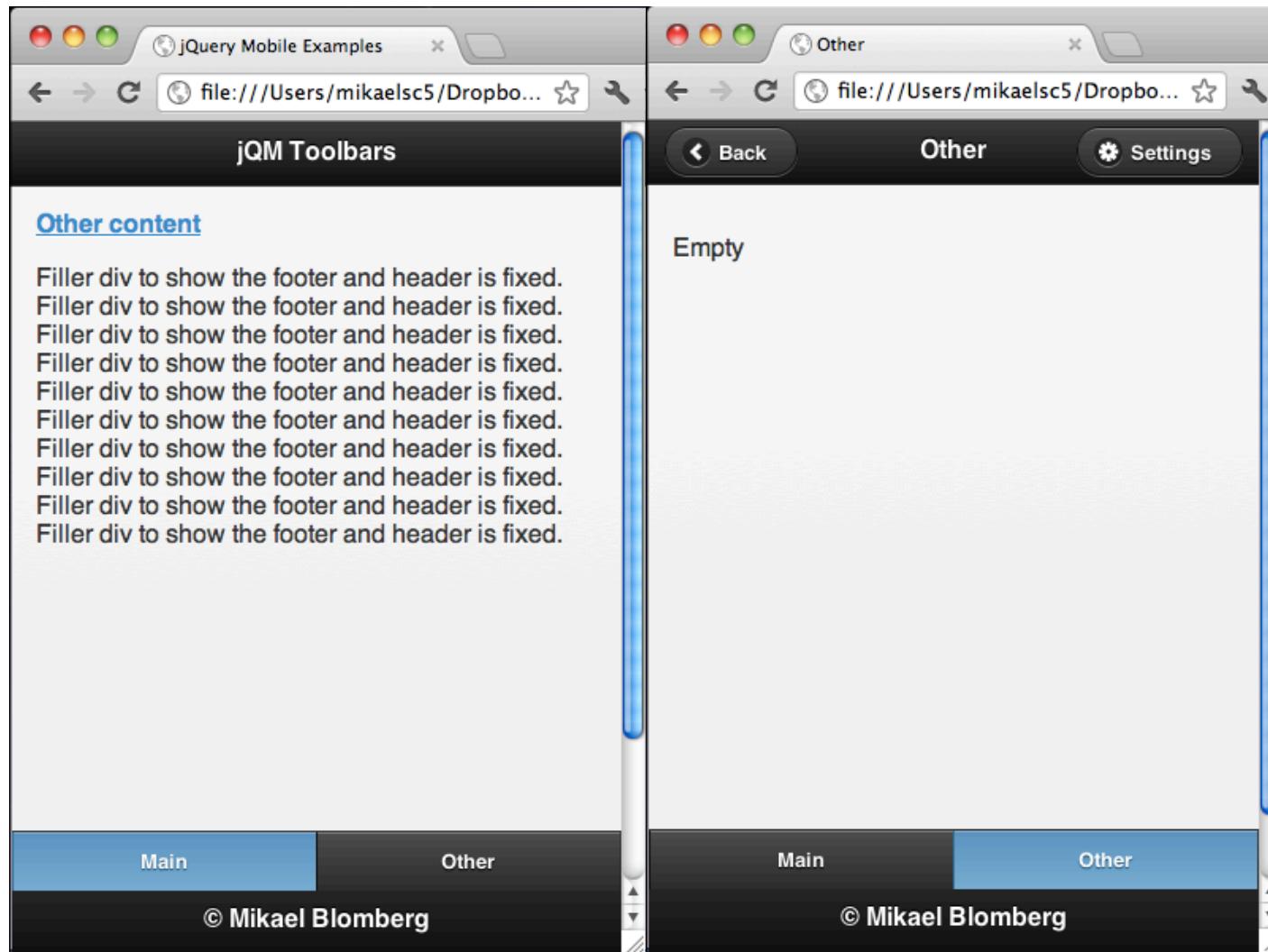
jQuery Mobile : Toolbars

- There are three types of toolbars
 - Header, footer, and navbar
- Automatically positions the header to the top of the page and footer to the bottom of the page
- Header and footer toolbars can be fixed using
 - `data-position="fixed"`
- Persisting toolbar in transitions by using
 - `data-id="exampleId"` (same id in all)
 - `class="ui-btn-active ui-state-persist"`

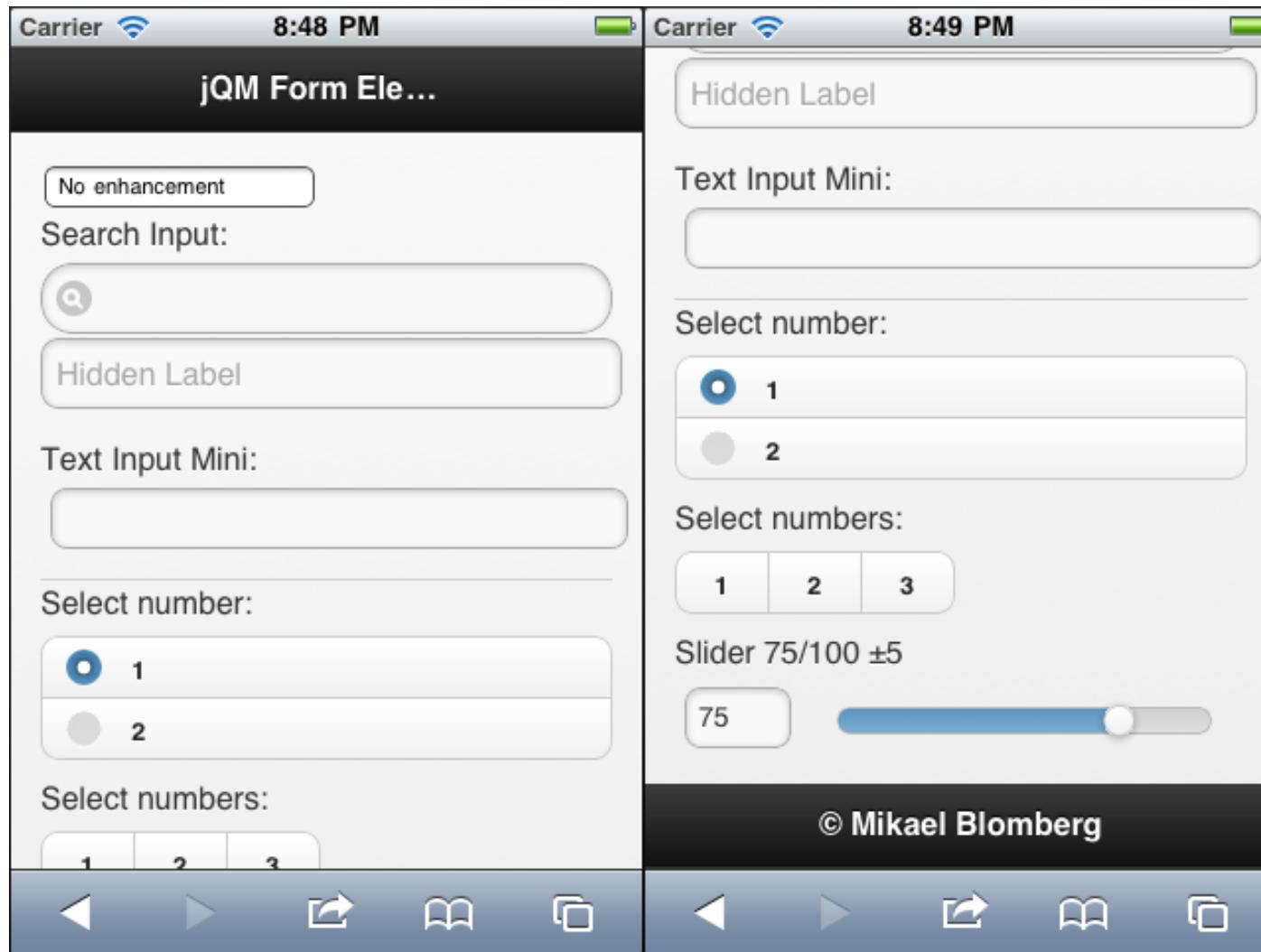
jQuery Mobile : Toolbars continued

- Navbars are unordered anchor lists inside containers
 - data-role="navbar"
 - class="ui-btn-active"
- Navbar button widths are automatically adjusted
 - up to 5 buttons are on a single row
 - 6+ buttons are on multiple rows (two per row)
- Button icons are positioned above the text
 - data-iconpos="top" by default
 - alternatives are “bottom”, “left”, and “right”

jQuery Mobile : Toolbars demo



jQuery Mobile : Form Elements goal



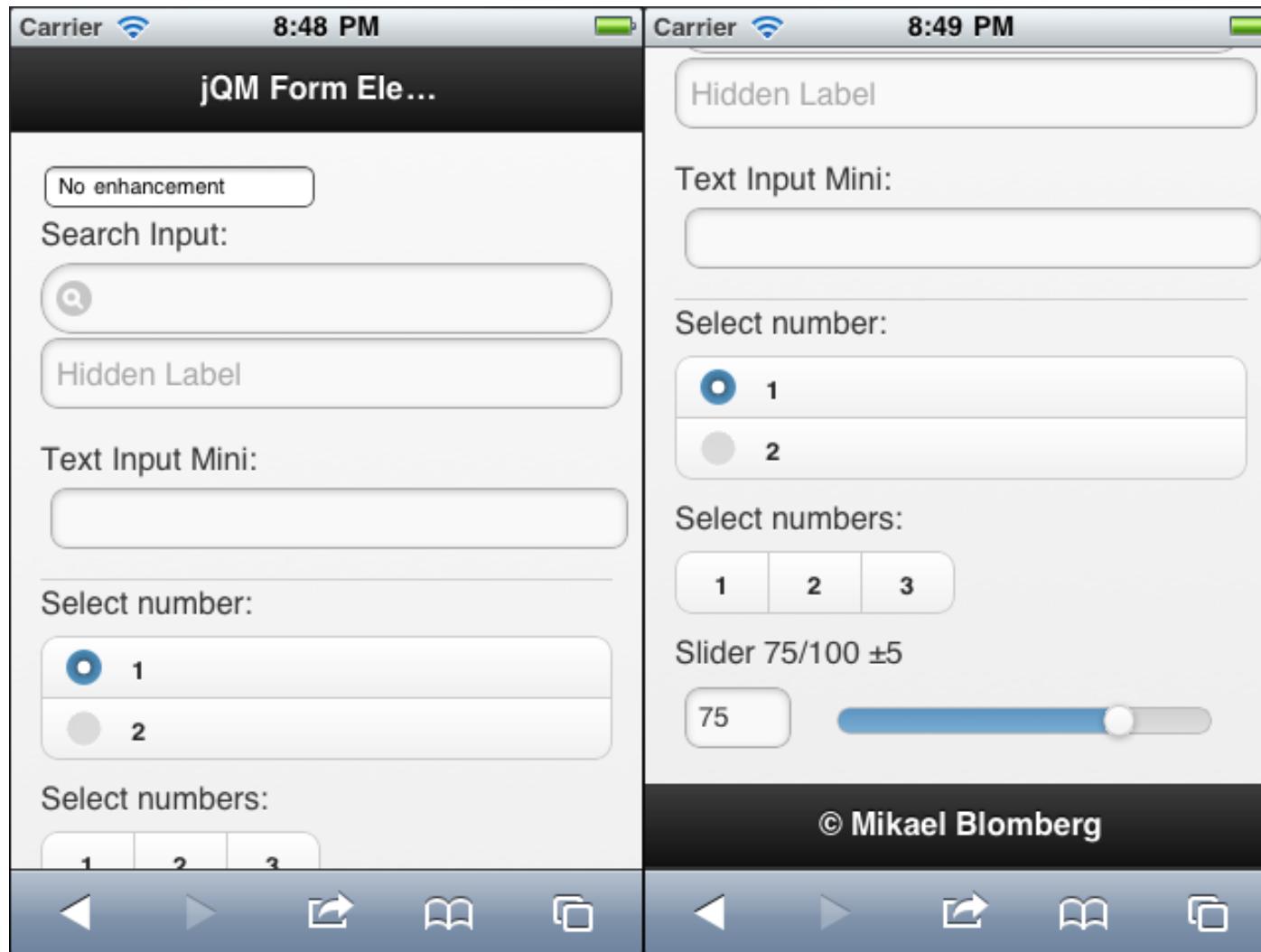
jQuery Mobile : Form Elements

- Automatically enhances native form elements to rich touch-friendly component
- Prevent progressive enhancement by using
 - `data-role="none"`
- Enforced accessibility by requiring labels
- Labels can be hidden using
 - `class="ui-hidden-accessible"` or `"ui-hide-label"`

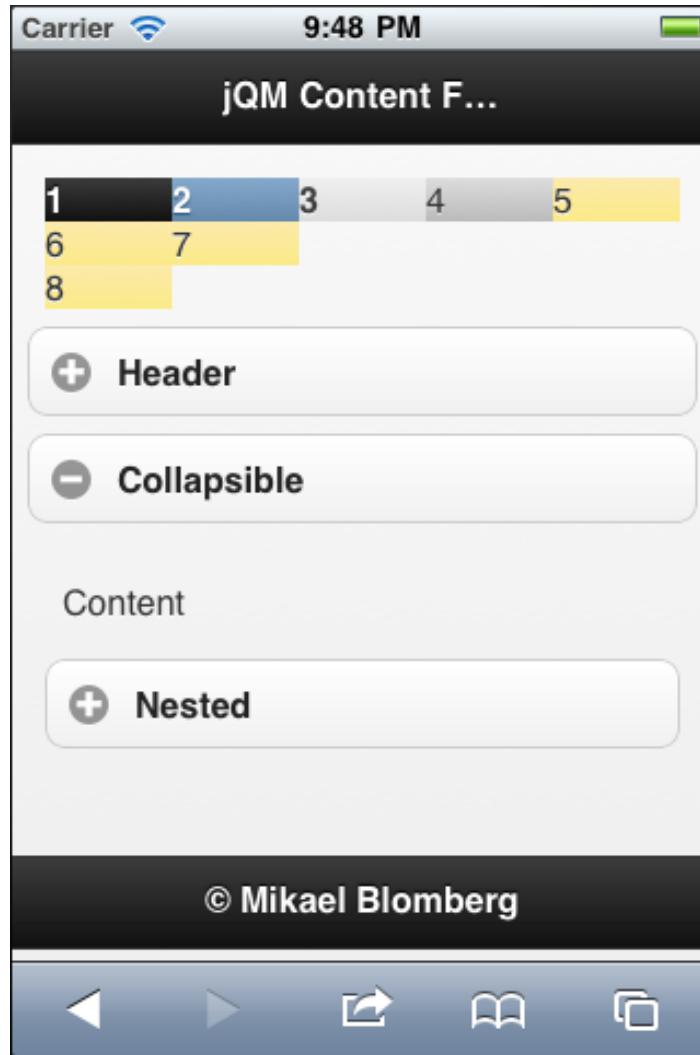
jQuery Mobile : Form Elements continued

- Compact forms are rendered using
 - `data-mini="true"`
- Labels and components inline by using
 - `data-role="fieldcontain"`
- Automatically increases textarea height
- Form elements can be grouped and aligned using
 - `data-role="controlgroup"`
 - `data-type="horizontal"` (vertical by default)

jQuery Mobile : Form Elements demo



jQuery Mobile : Content Formatting goal



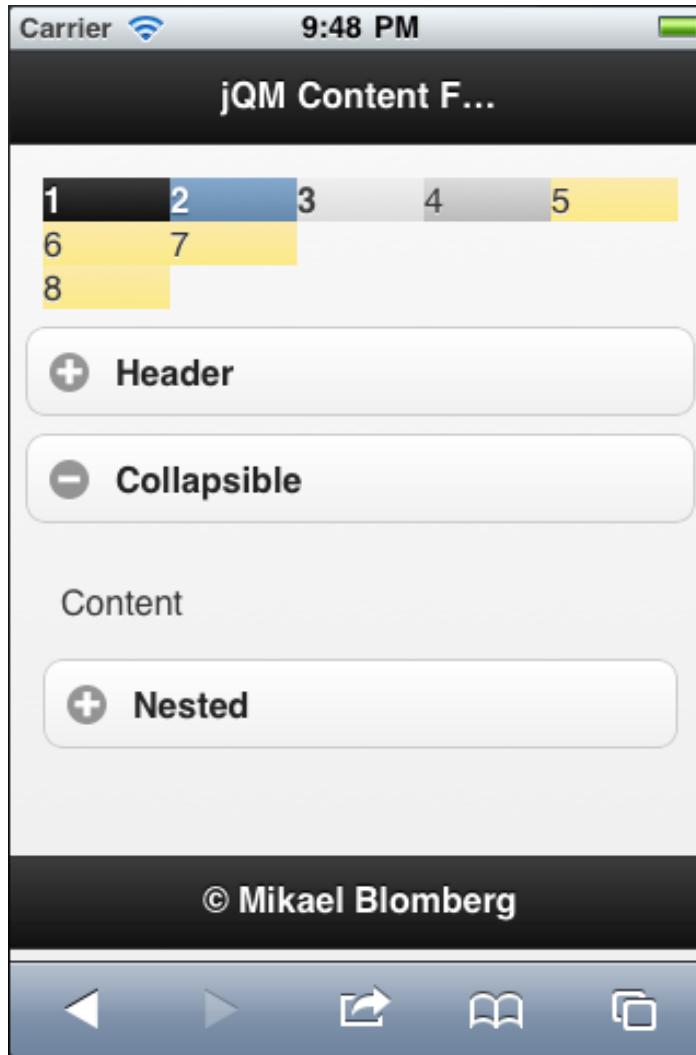
jQuery Mobile : Content Formatting

- There are four preset grid layouts
 - class="ui-grid-a" for a two-column layout ...
 - class="ui-grid-d" for a five-column layout
- Content blocks with class="ui-block-a" (a/b/c/d/e)
 - class="ui-block-a" creates a new row
- Collapsible content by using
 - data-role="collapsible"
 - data-collapsed="true" by default
 - data-iconpos="left" by default

jQuery Mobile : Content Formatting continued

- Nested collapsible content
 - <div data-role="collapsible">
 <h3>Collapsible</h3>
 <div data-role="collapsible">
 <h3>Nested</h3>...
- Collapsible sets (Accordion)
 - data-role="collapsible-set"
 - <div data-role="collapsible-set">
 <div data-role="collapsible"><h3>Title</h3>...

jQuery Mobile : Content Formatting demo



Questions



Thank you for attending!

Mikael Blomberg

Senior Developer
SC5 Online Oy



mikael.blomberg@sc5.fi

