

1/46



# 6MMCS001W MOBILE USER EXPERIENCE

10/18/2020

jQuery Mobile UI – structure; links; transitions; navigation;  
buttons; lists

2/46

# jQuery Mobile UI



# Demo of jQuery Mobile UI elements

3/46

## Pages & Navigation

- Pages
- Navigation
- Loader
- Transitions

## CSS Framework

- Theming
- Buttons
- Icons
- Grids
- Body and bar classes

## Widgets

- Toolbar, Navbar
- Tabs, Panel, Popup
- Listview
- Collapsible, Collapsible set
- Table Reflow, Table Column Toggle
- Filterable

## Form widgets

- Checkboxes, Radio buttons
- Selectmenu, Custom menu
- Flipswitch
- Slider, Rangeslider
- Input button
- Controlgroup

# jQuery mobile

- A user interface framework based on jQuery that works across all popular phones, tablet, e-reader, and desktop platforms.
- Built with accessibility and universal access in mind, we follow progressive enhancement and responsive web design (RWD) principles.
- HTML5 Markup-driven configuration makes it easy to learn, but a powerful API makes it easy to deeply customize the library.

5/46

# jQuery Mobile basic pages anatomy

# HTML5 document

---

6/46

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>jQuery Mobile Page</title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

# jQuery, Mobile + Theme CSS [URL]

7/46

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>jQuery Mobile Page</title>
```



Check latest versions on  
jQuery Mobile Website

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```



```
<!-- the three things that jQuery Mobile needs to work -->
```

```
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css" />
```

```
<script src="http://code.jquery.com/jquery-1.11.1.min.js"></script>
```

```
<script src="http://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
```

```
</head>
```

# jQuery, Mobile + Theme CSS [locally defined]

8/46

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>jQuery Mobile Page</title>
```



Check latest versions on  
jQuery Mobile Website

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
<!-- the three things that jQuery Mobile needs to work -->
```

```
<link rel="stylesheet" href="css/jquery.mobile-1.4.5.css" />
```

```
<script src="js/jquery.js" type="text/javascript"></script>
```

```
<script src="js/jquery.mobile-1.4.5.js" type="text/javascript"></script>
```

```
</head>
```



# Data-role="page"

---

9/46

```
<body>
```

```
  <!-- This is page 1 -->
```

```
  <div data-role="page" id="Page1">
```

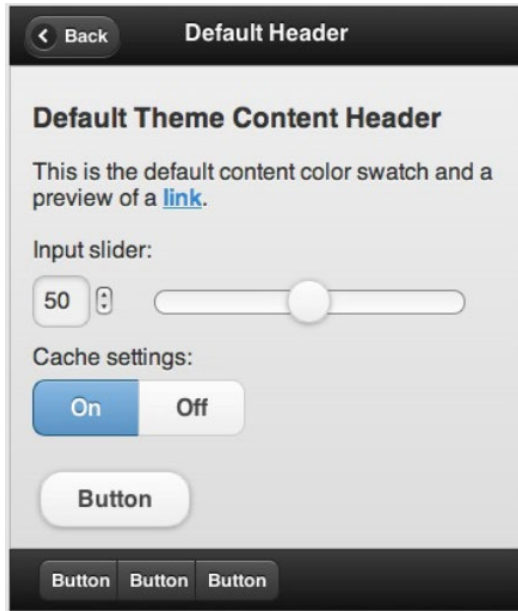
```
    <!-- jQuery Mobile page content goes here -->
```

```
  </div> <!-- /page -->
```

```
</body>
```

# Page data-roles

10/46



header

```
<div data-role="page">
```

```
<div data-role="header">...</div>
```

content

```
<div role="main" class="ui-content">...</div>
```

footer

```
<div data-role="footer">...</div>
```

```
</div>
```

# Simple content

---

11/46

```
<div data-role="page">
  <div data-role="header">
    <h1>Page Title</h1>
  </div><!-- /header -->

  <div role="main" class="ui-content">
    <p>Page content goes here.</p>
  </div><!-- /content -->

  <div data-role="footer">
    <h4>Page Footer</h4>
  </div><!-- /footer -->
</div>

<!-- /page -->
</body>
```

12/46

# jQuery Mobile Navigation

# Connecting pages

13/46

```
<body>
<!-- This is page 1 -->
  <div data-role="page" id="Page1">
    <div data-role="header"><h1>Page 1</h1></div>
    <div role="main" class="ui-content">
      <p>This is the content for page 1 with a <a href="#Page2">link to page 2</a></p>
    </div>
    <div data-role="footer"><h1>Footer</h1></div>
  </div>

<!-- This is page 2 -->
  <div data-role="page" id="Page2">
    <div data-role="header"><h1>Page 2</h1></div>
    <div role="main" class="ui-content">
      <p>This is the content for page 2 with a <a href="#Page1">link to page 1</a>
    </div>
    <div data-role="footer"><h1>Footer</h1></div>
  </div>
</body>
```

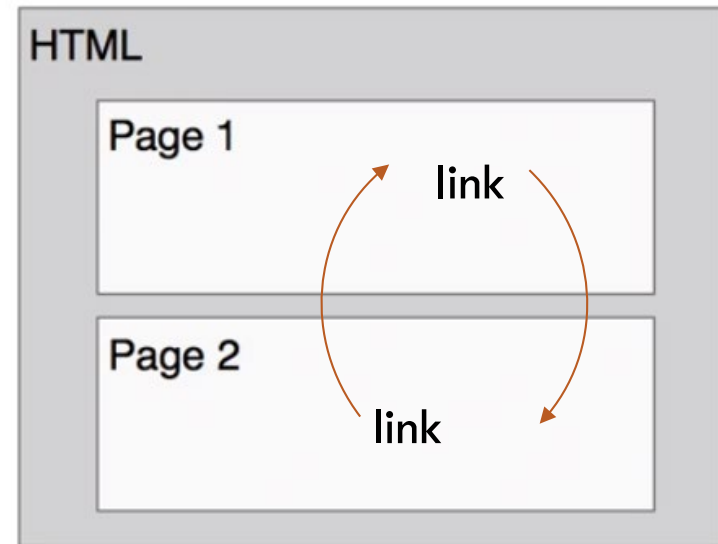
# Recap mobile page architecture

14/46

## □ Internal pages

```
<body>
  <div data-role="page">
    (page content)
  </div>

  <div data-role="page">
    (page content)
  </div>
</body>
```



# Various types of links

15/46

```
<div role="main" class="ui-content">
  <h2>Demo of various types of links</h2>
  <p>This page contains various types of links:</p>
  <p>This is the content for page 1 with a
    <a href="#Page1">an internal link to page 1</a></p>
  <p>This is a local link to (the web site) a page named
    <a href="Basic_Page_Header_Container_footer.html"
    target="_blank">Basic_Page_Header_Container_footer.html<
    /a></p>
  <p>This is an external link
    <a href=https://www.google.co.uk/
    target="_blank">Google</a></p>
  <p>This is a <a data-rel="back">Back</a> Back button.</p>
</div>
```

# Navigation with transitions

16/46

```
<div class="ui-content">
  <h2>Transitions</h2>
  <ul data-role="listview">
    <li><a href="#page2" data-transition="fade">Go to page 2 with fade</a></li>
    <li><a href="#page2" data-transition="flip" >Go to page 2 with flip</a></li>
    <li><a href="#page2" data-transition="pop">LGo to page 2 with pop</a></li>
    <li><a href="#page2" data-transition="slide">Go to page 2 with slide</a></li>
    <li><a href="#page2" data-transition="slidedown">Go to page 2 with
      slidedown</a></li>
    <li><a href="#page2" data-transition="slideup">Go to page 2 with
      slideup</a></li>
  </ul>
</div>
```

example



# dialogues

---

17/46

```
<div id="page2" data-role="page" data-dialog="true">
```

Then try to change the theme

```
<div id="page2" data-role="page" data-dialog="true" data-theme="a">
```

```
<div id="page2" data-role="page" data-dialog="true" data-theme="b">
```

example

18/46

# jQueryMobile navigation UI elements

Buttons

Navbars

# jQueryMobile buttons

---

19/46

```
<button>Button</button>
```

```
<input type="button" value="Button"/>
```

```
<a href="#" class="ui-btn">Button</a>
```

# Link button

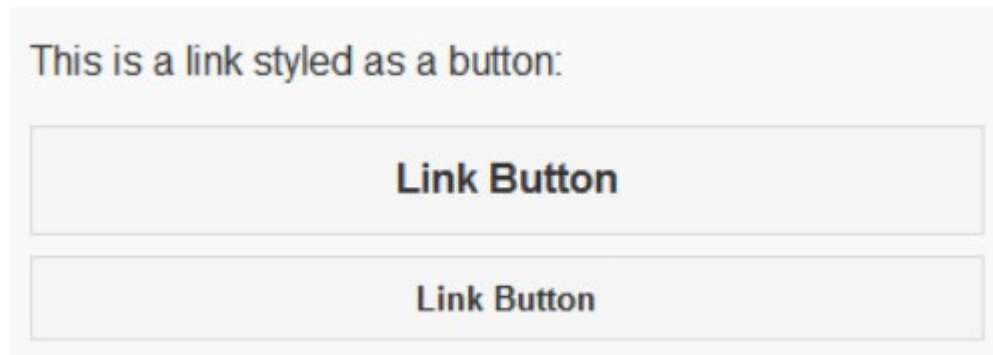
20/46

<!-- styling a link as a button -->

<p>This is a link styled as a button:</p>

<a href="#" class="ui-btn">Link Button</a>

<a href="#" class="ui-btn ui-mini">Link Button</a>



# Button element

21/46

<!-- automatic conversion of a button element -->

<p>This is a &lt;button> element:</p>

<**button** id="btn1" **class="ui-btn"** disabled="disabled">button element</button>

<**button** id="btn2" **class="ui-btn ui-mini"**>button element mini</button>

This is a <button> element:

button element

disabled

button element mini

active

# Input button

---

22/46

<!-- input elements -->

<p>&lt;input&gt; elements:</p>

<input type="button" value="Button" />

<input> elements:

Button

# Button styles

---

23/46

```
<a href="#" class="ui-btn ui-corner-all">Anchor</a>
```

```
<button class="ui-btn ui-corner-all">Button</button>
```

```
<a href="#" class="ui-btn ui-shadow">Anchor</a>
```

```
<button class="ui-btn ui-shadow">Button</button>
```

```
<a href="#" class="ui-btn ui-mini">Anchor</a>
```

```
<button class="ui-btn ui-mini">Button</button>
```

```
<a href="#" class="ui-btn ui-btn-b">Anchor</a>
```

```
<button class="ui-btn ui-btn-b">Button</button>
```

# vertical vs. inline buttons

24/46

<!-- vertical vs. inline buttons -->

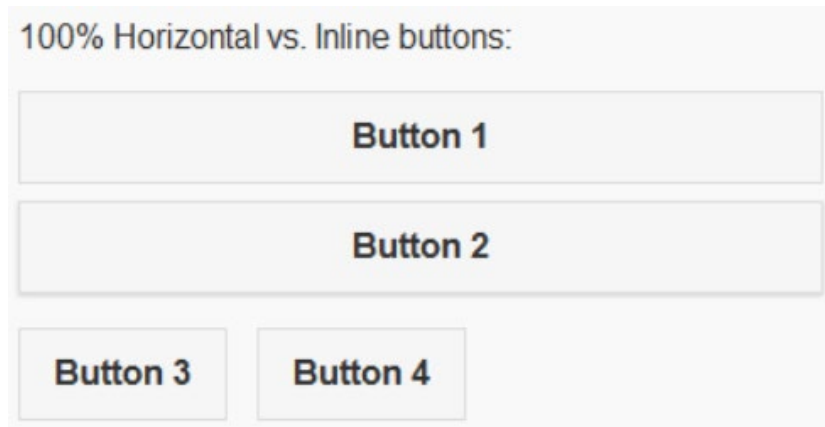
<p>100% Horizontal vs. Inline buttons:</p>

<a href="#" class="ui-btn">Button 1</a>

<a href="#" class="ui-btn ui-shadow">Button 2</a>

<a href="#" class="ui-btn ui-btn-inline">Button 3</a>

<a href="#" class="ui-btn ui-btn-inline" >Button 4</a>





# grouping buttons in a controlgroup

25/46

```
<!-- grouping buttons together in a controlgroup -->
```

```
<p>These buttons are part of a control group:</p>
```

```
<div data-role="controlgroup" data-type="horizontal">
```

```
<button class="ui-btn">button a</button>
```

```
<button class="ui-btn">button b</button>
```

```
<button class="ui-btn">button c</button>
```

```
</div>
```

These buttons are part of a control group:

button a

button b

button c

# buttons with icons

26/46

<!-- buttons with icons -->

<a href="#" class="ui-btn ui-icon-arrow-u ui-btn-icon-top">Up</a>

<a href="#" class="ui-btn ui-icon-arrow-d ui-btn-icon-bottom">Down</a>

<a href="#" class="ui-btn ui-icon-arrow-l ui-btn-icon-left">Left</a>

<a href="#" class="ui-btn ui-icon-arrow-r ui-btn-icon-right">Right</a>

<a href="#" class="ui-btn ui-icon-delete ui-corner-all ui-btn-icon-notext">Delete</a>

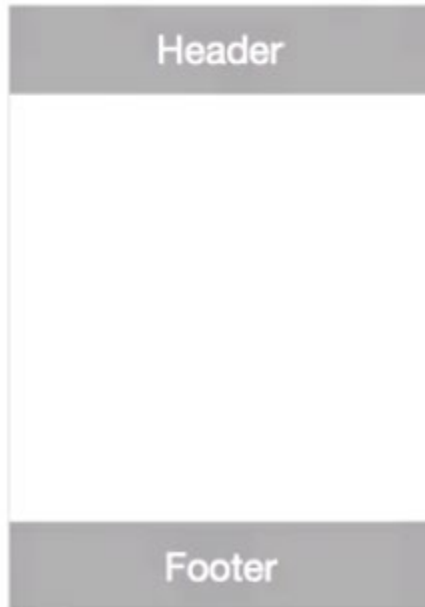


example

# iQueryMobile toolbars

27/46

## Two types of Toolbars: Headers and Footers



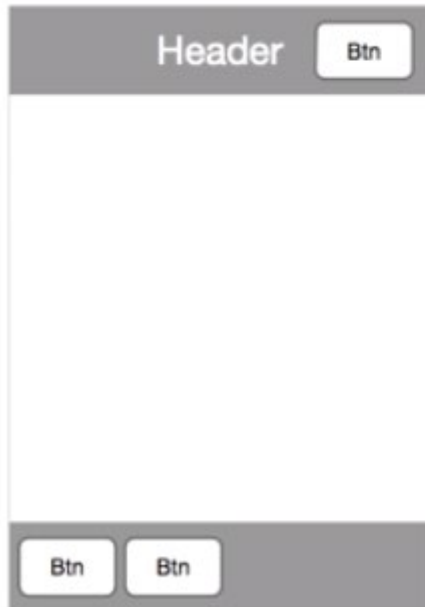
```
<div data-role="header">  
  <h1>Header</h1>  
</div>
```

```
<div data-role="footer">  
  <h2>Footer</h2>  
</div>
```

# jQueryMobile toolbars with controls

28/46

## Toolbars can contain controls



```
<div data-role="header">  
  <h1>Header</h1>  
  <a href="#" class="ui-btn-right">Btn</a>  
</div>
```

```
<div data-role="footer">  
  <a href="#" class="ui-btn">Btn</a>  
  <a href="#" class="ui-btn">Btn</a>  
</div>
```

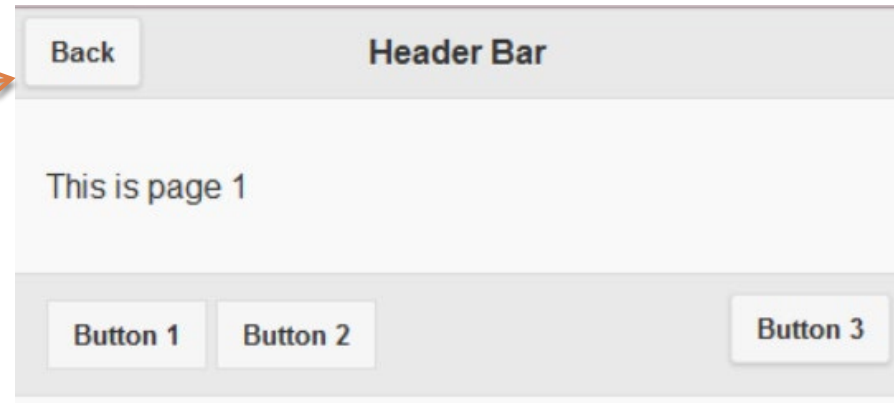
# jQueryMobile toolbars with controls

29/46

```
<section id="firstpage" data-role="page">
  <div data-role="header">
    <h1>Header Bar</h1>
    <a href="#" class="ui-btn-left">Back</a>
  </div>
```

```
<div class="ui-content">
  <p>This is page 1</p>
</div>
```

```
<footer data-role="footer" class="ui-bar">
  <a href="#" class="ui-btn">Button 1</a>
  <a href="#" class="ui-btn">Button 2</a>
  <a href="#" class="ui-btn-right">Button 3</a>
</footer>
</section>
```



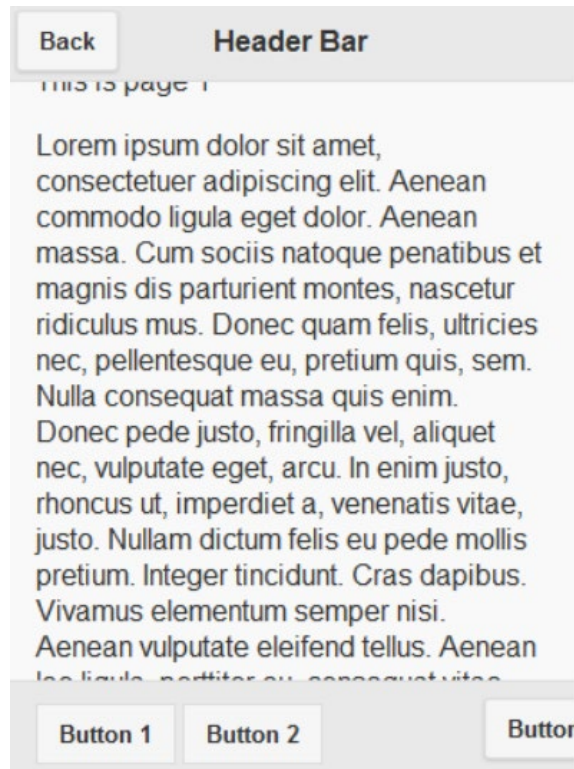
—————> This allows a larger padding in the footer to fit the buttons

example

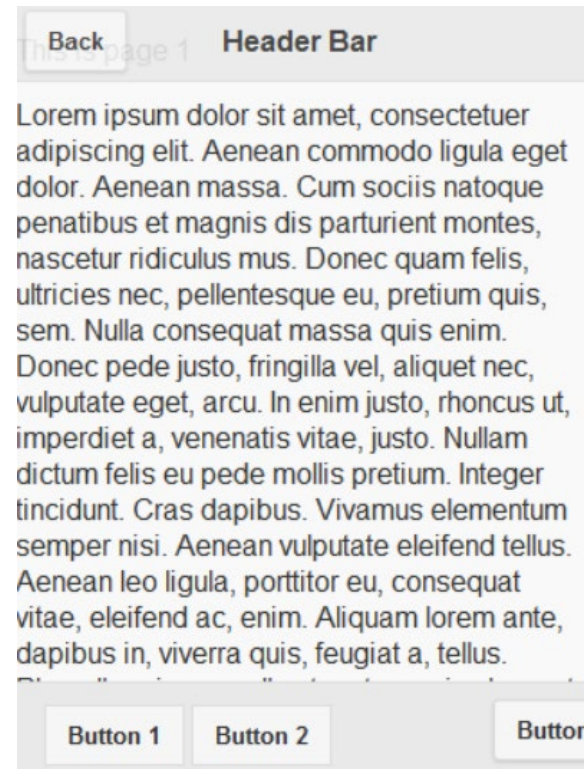
# Fixed position of toolbars

30/46

`data-position="fixed"`



`data-fullscreen="true"`



# navbar

31/46

```
<!-- This is the first page -->
<section id="firstpage" data-role="page">
  <header data-role="header">
    <h1>Header Bar</h1>
    <nav data-role="navbar">
      <ul>
        <li><a href="#" class="ui-btn ui-icon-home ui-btn-icon-top ui-btn-active ui-state-persist">Home</a></li>
        <li><a href="#secondpage" class="ui-btn ui-icon-calendar ui-btn-icon-top">Calendar</a></li>
        <li><a href="#" class="ui-btn ui-icon-clock ui-btn-icon-top">Time</a></li>
        <li><a href="#" class="ui-btn ui-icon-phone ui-btn-icon-top">Calls</a></li>
      </ul>
    </nav>
  </header>
  <div class="ui-content">
    <p>This is home page</p>
  </div>
</section>
```

example

# Recap

---

32/46

- Introduced jQueryMobile
- Introduced jQueryMobile UI
- Pages structure
- Basic navigation



33/46

# jQueryMobile content lists

# Simple list

34/46

## Using Lists

### Ordered List Example

1. List Item 1
2. List Item 2
3. List Item 3
4. List Item 4
5. List Item 5
6. List Item 6

### Unordered List Example

- List Item 1
- List Item 2
- List Item 3
- List Item 4
- List Item 5
- List Item 6

```
<div class="ui-content">  
  <h2>Ordered List Example</h2>  
  <ol data-role="listview">  
    <li>List Item 1</li>  
    <li>List Item 2</li>  
    <li>List Item 3</li>  
    <li>List Item 4</li>  
    <li>List Item 5</li>  
    <li>List Item 6</li>  
  </ol>  
  <h2>Unordered List Example</h2>  
  <ul data-role="listview">  
    <li>List Item 1</li>  
    <li>List Item 2</li>  
    <li>List Item 3</li>  
    <li>List Item 4</li>  
    <li>List Item 5</li>  
    <li>List Item 6</li>  
  </ul>  
</div>
```

## Using Lists

### Ordered List Example

1. List Item 1
2. List Item 2
3. List Item 3
4. List Item 4
5. List Item 5
6. List Item 6

### Unordered List Example

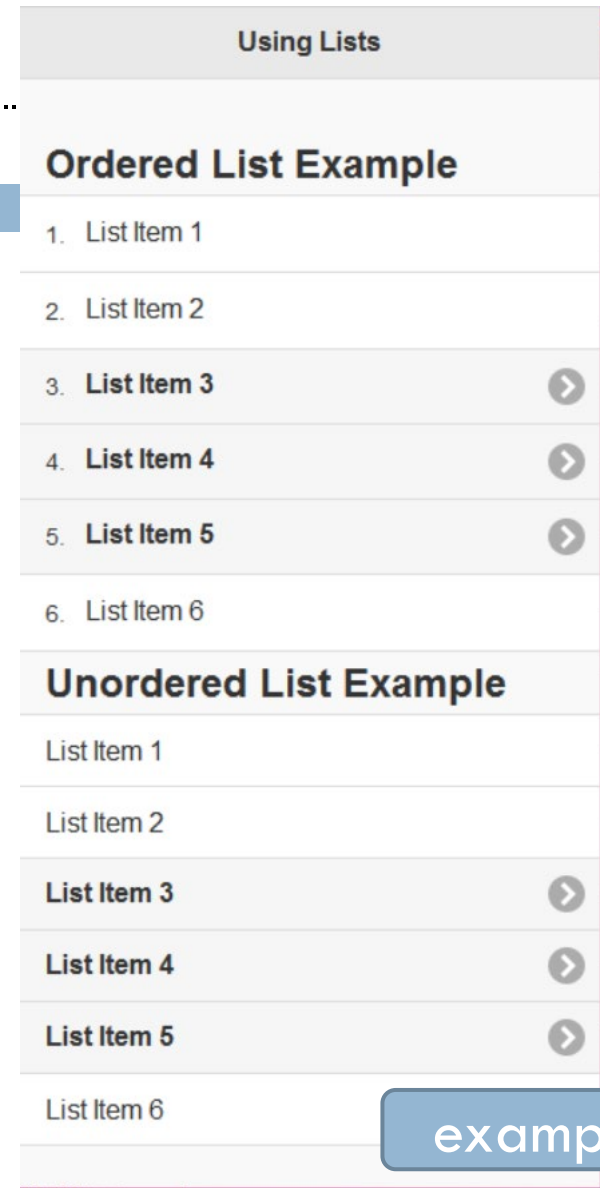
- List Item 1
- List Item 2
- List Item 3
- List Item 4
- List Item 5
- List Item 6

example

# Linked list items

35/46

```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview">
    <li>List Item 1</li>
    <li>List Item 2</li>
    <li><a href="#">List Item 3</a></li>
    <li><a href="#">List Item 4</a></li>
    <li><a href="#">List Item 5</a></li>
    <li>List Item 6</li>
  </ol>
  <h2>Unordered List Example</h2>
  <ul data-role="listview">
    <li>List Item 1</li>
    <li>List Item 2</li>
    <li><a href="#">List Item 3</a></li>
    <li><a href="#">List Item 4</a></li>
    <li><a href="#">List Item 5</a></li>
    <li>List Item 6</li>
  </ul>
</div>
```



# List divider

36/46

```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview">
    <li><a href="#"> List Item 1 </a></li>
    <li><a href="#"> List Item 2 </a></li>
    <li><a href="#">List Item 3 </a></li>
    <li data-role="list-divider">Other items</li>
    <li><a href="#">List Item 4 </a></li>
    <li><a href="#">List Item 5 </a></li>
    <li><a href="#">List Item 6 </a></li>
  </ol>
  <h2>Unordered List Example</h2>
  <ul data-role="listview">
    <li><a href="#"> List Item 1 </a></li>
    <li><a href="#"> List Item 2 </a></li>
    <li><a href="#">List Item 3 </a></li>
    <li><a href="#">List Item 4 </a></li>
    <li><a href="#">List Item 5 </a></li>
    <li><a href="#">List Item 6 </a></li>
  </ul>
</div>
```

List View Dividers	
Ordered List Example	
1. List Item 1	>
2. List Item 2	>
3. List Item 3	>
Other items	
1. List Item 4	>
2. List Item 5	>
3. List Item 6	>
Unordered List Example	
List Item 1	>
List Item 2	>
List Item 3	>
List Item 4	>
List Item 5	>
List Item 6	>

# Count bubble

37/46

```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview">
    <li><a href="#"> List Item 1 <span class="ui-li-count">5</span></a></li>
    <li><a href="#"> List Item 1 <span class="ui-li-count">8</span></a></li>
    <li><a href="#"> List Item 1 <span class="ui-li-count">10</span></a></li>
    <li data-role="list-divider">Other items</li>
    <li><a href="#">List Item 4 </a></li>
    <li><a href="#">List Item 5 </a></li>
    <li><a href="#">List Item 6 </a></li>
  </ol>
  <h2>Unordered List Example</h2>
  <ul data-role="listview">
    <li><a href="#"> List Item 1 </a></li>
    <li><a href="#"> List Item 2 </a></li>
    <li><a href="#">List Item 3 </a></li>
    <li><a href="#">List Item 4 </a></li>
    <li><a href="#">List Item 5 </a></li>
    <li><a href="#">List Item 6 </a></li>
  </ul>
</div>
```

List View Dividers

## Ordered List Example

- |                |    |   |
|----------------|----|---|
| 1. List Item 1 | 5  | > |
| 2. List Item 2 | 8  | > |
| 3. List Item 3 | 10 | > |

## Other items

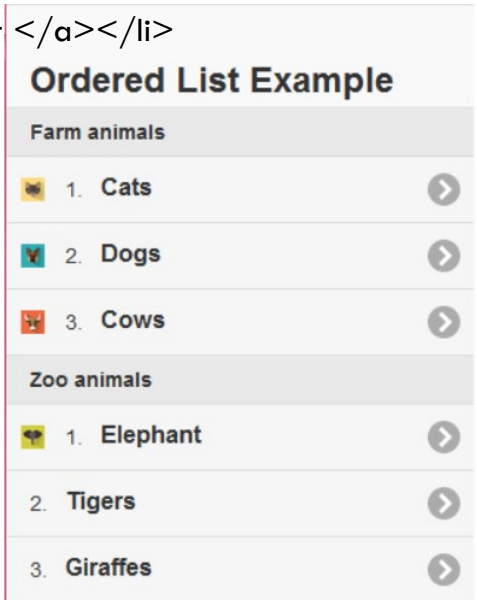
- |                |   |
|----------------|---|
| 1. List Item 4 | > |
| 2. List Item 5 | > |
| 3. List Item 6 | > |

example

# Icons

38/46

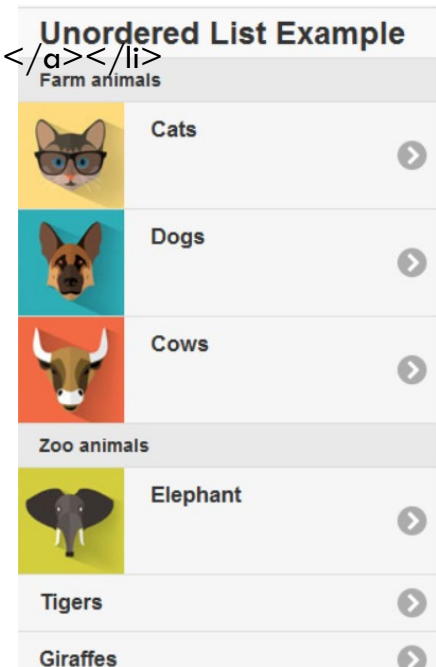
```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview">
    <li data-role="list-divider">Farm animals</li>
    <li><a href="#">Cats</a></li>
    <li><a href="#">Dogs </a></li>
    <li><a href="#">Cows </a></li>
    <li data-role="list-divider">Zoo animals</li>
    <li><a href="#">Elephant </a></li>
    <li><a href="#">Tigers</a></li>
    <li><a href="#">Giraffes</a></li>
  </ol>
</div>
```



# Thumbnails

39/46

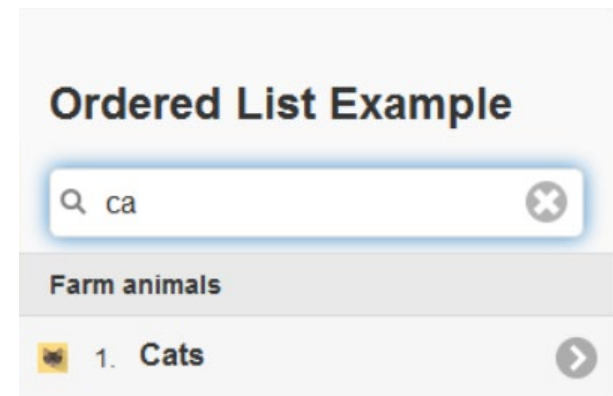
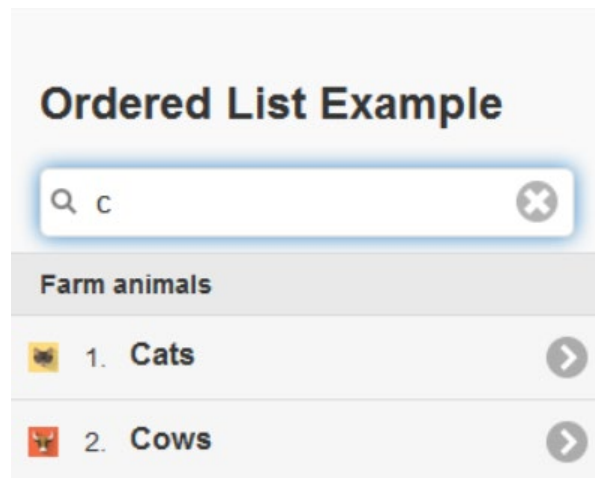
```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview">
    <li data-role="list-divider">Farm animals</li>
    <li><a href="#">Cats</a></li>
    <li><a href="#">Dogs </a></li>
    <li><a href="#">Cows </a></li>
    <li data-role="list-divider">Zoo animals</li>
    <li><a href="#">Elephant </a></li>
    <li><a href="#">Tigers</a></li>
    <li><a href="#">Giraffes</a></li>
  </ol>
</div>
```



# List filtering

40/46

```
<div class="ui-content">
  <h2>Ordered List Example</h2>
  <ol data-role="listview" data-filter="true">
    <li data-role="list-divider">Farm animals</li>
    <li><a href="#">Cats</a></li>
    <li><a href="#">Dogs </a></li>
    <li><a href="#">Cows </a></li>
    <li data-role="list-divider">Zoo animals</li>
    <li><a href="#">Elephant </a></li>
    <li><a href="#">Tigers</a></li>
    <li><a href="#">Giraffes</a></li>
  </ol>
</div>
```



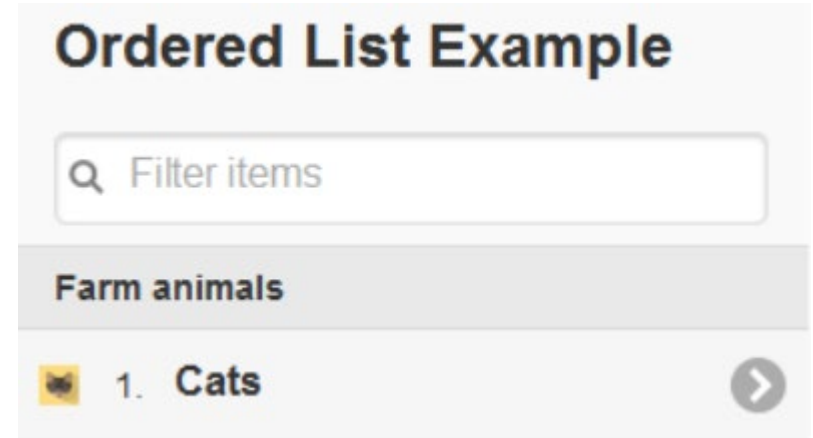


# filter-placeholder

---

41/46

`data-filter-placeholder="Filter items"`

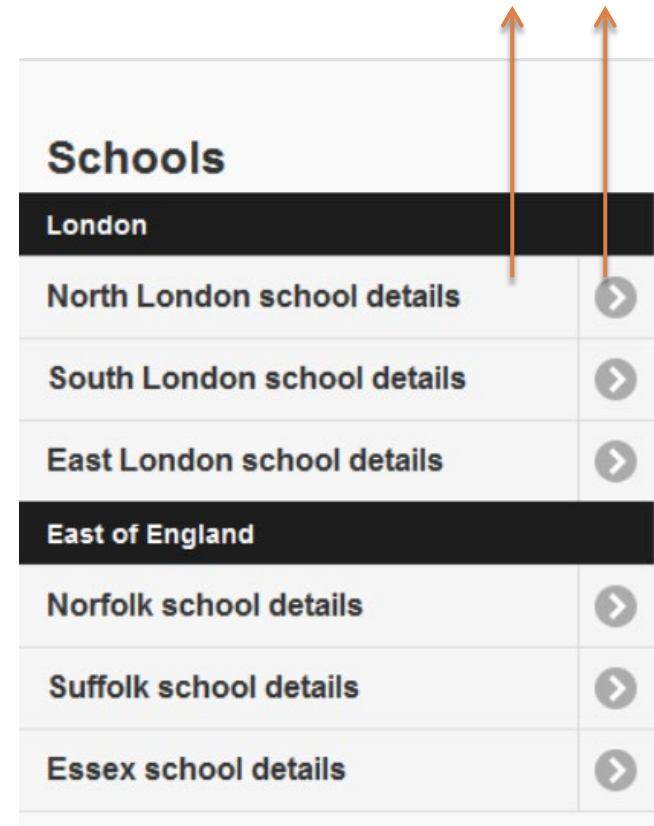


# Split buttons

42/46

```
<div class="ui-content">
  <h2>Schools</h2>
  <ul data-role="listview" data-divider-theme="b">
    <li data-role="list-divider">London</li>
    <li>
      <a href="#school-details">North London school details</a>
      <a href="#school-notes">School notes</a>
    </li>
    <li>
      <a href="#school-details">South London school details</a>
      <a href="#school-notes">School notes</a>
    </li>
    <li>
      <a href="#school-details">East London school details</a>
      <a href="#school-notes">School notes</a>
    </li>
  </ul>
  <li data-role="list-divider">East of England</li>
  <li>
    <a href="#school-details">Norfolk school details</a>
    <a href="#school-notes">School notes</a>
  </li>
  <li>
    <a href="#school-details">Suffolk school details</a>
    <a href="#school-notes">School notes</a>
  </li>
  <li>
    <a href="#school-details">Essex school details</a>
    <a href="#school-notes">School notes</a>
  </li>
</ul>
</div>
```

It can take us to separate pages

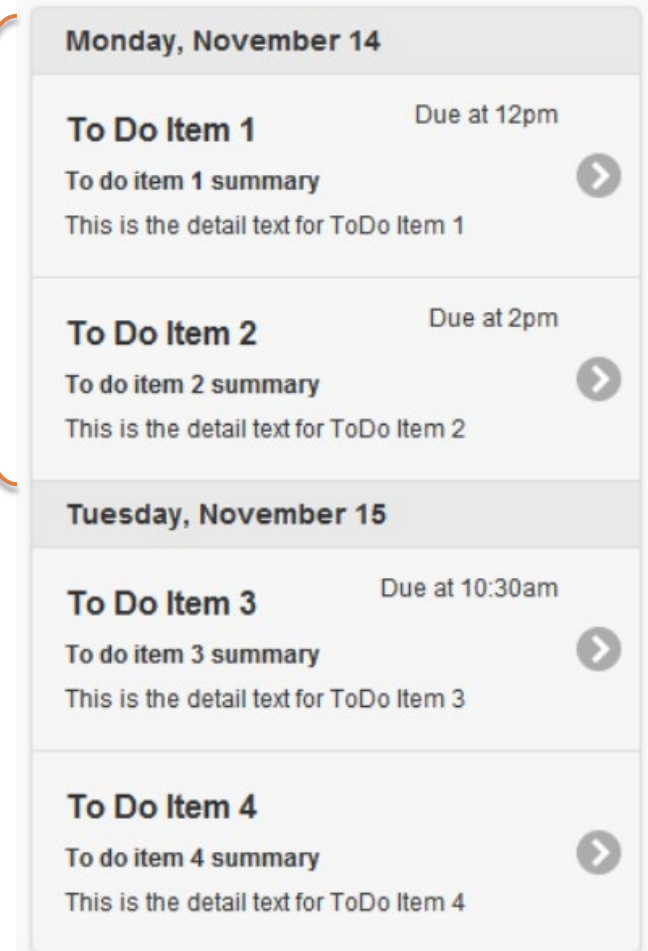


# Rich content

43/46

```
<ul data-role="listview" data-inset="true">
  <li data-role="list-divider">Monday, November 14</li>
  <li><a href="#">
    <h4>To Do Item 1</h4>
    <p style="font-weight:bold">To do item 1 summary</p>
    <p class="ui-li-aside">Due at 12pm</p>
    <p>This is the detail text for To Do Item 1</p>
  </a></li>
  <li><a href="#">
    <h4>To Do Item 2</h4>
    <p style="font-weight:bold">To do item 2 summary</p>
    <p class="ui-li-aside">Due at 2pm</p>
    <p>This is the detail text for To Do Item 2</p>
  </a></li>
</ul>
```

How would you add a thumbnail image?



# Practise and challenges for revision

44/46

- Create 3 pages with a fixed header and footer
- The header should contain a back button
- The footer should contain a home button and two more buttons to navigate to page 2 and 3
- Page one should contain a list with at least two dividers and 3 items in each divider and allow filtering
- Page 2 should contain a list with rich content
- Page 3 should contain a button that loads as forth page as dialogue with a pop up effect



# Reading

---

45/46

- jQueryMobile – structure; lists; dialogue; buttons; icons; navigation; grouping; transitions
- <http://demos.jquerymobile.com/1.4.5/>