

# jQuery Mobile

## Lesson 07 : jQuery Mobile Events

# Lesson Objectives

## ➤ In this lesson, you will learn :

- Touch events
- Orientation events
- Scroll events
- Page initialization and load events
- Page change and transition events



# Touch Events

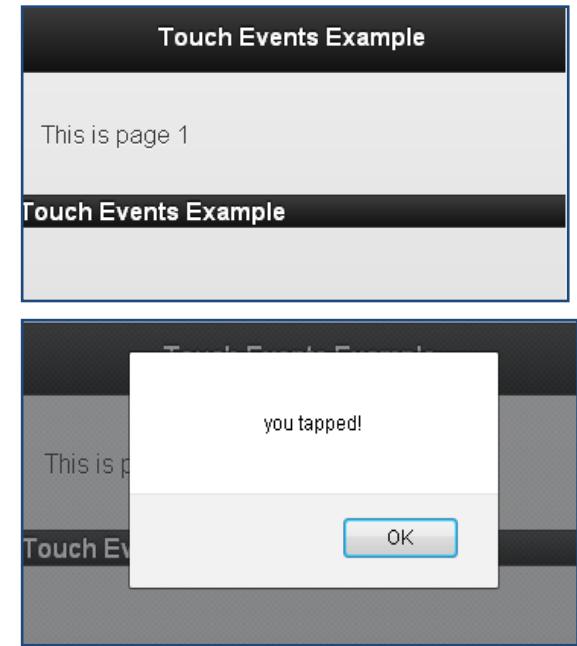
- **jQuery Mobile provides a set of events geared around mobile applications.**
- **They can be classified into:**
  - Touch events
  - Scroll events
  - Page-related events
- **Touch events are triggered when user touches any part of the page. Fall into several categories:**
  - Tap
  - taphold
  - swipe
  - swipeleft
  - swiperight

# Touch Events : Example

```

<head>
<script>
    $("#firstpage").live('pageinit', function (evt) {
        $("#firstpage").bind("tap", function (e) { alert("you tapped!"); });
        $("#firstpage").bind("swiperight", function (e) { alert("you swiped right!"); });
        $("#firstpage").bind("swipeleft", function (e) { alert("you swiped left!"); });
    });
</script>
</head>
<body>
    <section id="firstpage" data-role="page">
        <header data-role="header">
            <h1>Touch Events Example</h1>
        </header>
        <div data-role="content">
            <p>This is page 1</p>
        </div>
        <footer data-role="footer">Touch Events Example</footer>
    </section> </body> </html>

```



## Orientation events

- **Orientationchange** : Triggers when a device orientation changes (by turning it vertically or horizontally).
  - When bound to this event, the callback function has one argument, the event object.
  - The event object contains an orientation property equal to either "portrait" or "landscape".

```
$(window).bind('orientationchange', _orientationHandler);
```

```
function _orientationHandler(Event event) {  
    if(event.orientation){  
        if(event.orientation == 'portrait'){  
            //do something  
        }  
        else if(event.orientation == 'landscape') {  
            //do something  
        }  
    }  
}
```

# Scroll events

- **Scroll events are triggered when any type of scrolling is done.**
- **Categorized into:**
  - Scroll : a native jQuery event
  - Scrollstart : Triggers when a scroll begins
  - Scrollstop : Triggers when a scroll finishes.

```
<script>
    $("#firstpage").live('pageinit', function (evt) {
        //scrollstart fires when the user starts to scroll the contents in the view.
        //scrollstop fires when the scrolling stops
        $(document).bind("scrollstop", function (e) {
            alert("scrolling stopped");
        });
    });
</script>
```

## Page Initialization events

- When jQuery Mobile initializes a page (an element that has data-role="page"), it triggers the **pagebeforecreate** event (before a page is initialized) and **pagecreate** (after a page is initialized).
  - Since page initialization only happens once, these events only fire once for a given page
  - These events can be bound to the page element itself

```
<script>
    $("#firstpage").live('pageinit', function (evt) {
        alert("pageinit event fired");
    });
    $("#firstpage").live('pagebeforecreate', function (evt) {
        alert("pagebeforecreate fired");
    });
    $("#firstpage").live('pagecreate', function (evt) {
        alert("pagecreate fired");
    });
</script>
```

# Page load events

- **Whenever an external page is loaded into the application DOM, 2 events are fired (in the sequence given):**
- **pagebeforeload** : Triggered before any load request is made.
    - Callbacks bound to this event can call `preventDefault()` on the event to indicate that they are handling the load request.
  - **pageload** : Triggered after the page is successfully loaded and inserted into the DOM.
    - A `pageloadfailed` is triggered if the page load request failed.

```
$(document).bind('pagebeforeload', function (evt,data) {  
    alert("page before load");  
});  
$(document).bind('pageload', function (evt,data) {  
    alert("page loaded:\nURL: " + data.url);  
});  
$(document).bind('pageloadfailed', function (evt,data) { alert("page not found"); });  
$(document).bind('pageremove', function (evt,data) { alert("page removed"); });
```



## Page Change events

- **jQuery Mobile allows navigating between pages in the application through a call to `$.mobile.changePage()`.**
- **`changePage()` fires 2 events:**
  - `pagebeforechange` : is triggered before any page loading or transition
  - `pagechange` : is triggered after the `changePage()` request has finished loading the page into the DOM and all page transition animations have completed.
    - A `pagechangefailed` event is triggered when the `changePage()` request fails to load the page.

# Page Transition events

- **Page transitions are used to animate the change from the current active page to a new page.**
  - Events are triggered before and after these transitions.
  - This allows observers to be notified whenever pages are shown or hidden.
- **The events triggered are:**
  - `pagebeforeshow` : is triggered on the "toPage" we are transitioning to, before the actual transition animation is kicked off.
  - `pagebeforehide` : is triggered on the "fromPage" we are transitioning away from, before the actual transition animation is kicked off.
  - `pageshow` : is triggered on the "toPage" after the transition animation has completed.
  - `pagehide` : is triggered on the "fromPage" after the transition animation has completed.

# Summary

## ➤ In this lesson, you learnt:

- Touch events
- Orientation events
- Scroll events
- Page initialization and load events
- Page change and transition events

