

Chapter 4



JQuery

- ☐ jQuery.
- ☐ How to use jQuery library?
- ☐ jQuery Syntax.
- ☐ jQuery Selectors.
- ☐ jQuery Attribute Selectors.
- ☐ DOM traversal.
- ☐ jQuery event handling.
- ☐ jQuery CSS Manipulation.
- ☐ jQuery Effects.

JQuery

- Current Version 3.6.3
- Scope
 - DOM traversing
 - AJAX
 - Effects
 - Easy Extensibility

<http://jquery.com/>



Lightweight Footprint

Only 32kB minified and gzipped. Can also be included as an AMD module



CSS3 Compliant

Supports CSS3 selectors to find elements as well as in style property manipulation



Cross-Browser

[Chrome, Edge, Firefox, IE, Safari, Android, iOS, and more](#)



Download jQuery

v3.2.1

The 1.x and 2.x branches no longer receive patches.

[View Source on GitHub →](#)

[How jQuery Works →](#)

JQuery

- *Advantages*
 - Friendly API's
 - DOM traversing is very easy especially for complex search criteria (as query in DB).
 - The core library size is very small *16 kb*.
 - Includes Effects and Animation in the core library
 - Plugins are available to cover all needs
 - jQuery UI Extension provides very rich controls

JQuery

- DOM manipulation
- Event handling
- AJAX Support
- Animations
- Lightweight
- Cross Browser Support
- Latest Technology

Write *less*, do *more*.

JQuery

How to use ?

1. Download the latest jQuery version. <http://jquery.com/>
2. Put jquery-.....js file in a directory of your website.
3. Include jquery library in your HTML file.

```
<html>
<head>
<title>The jQuery Example</title>
  <script type="text/javascript"
    src="/jquery/jquery-1.3.2.min.js"></script>
  <script type="text/javascript">
    // you can add our javascript code here
  </script>
</head>
<body>
.....
</body>
</html>
```

JQuery

How to use ?

4. Enjoy

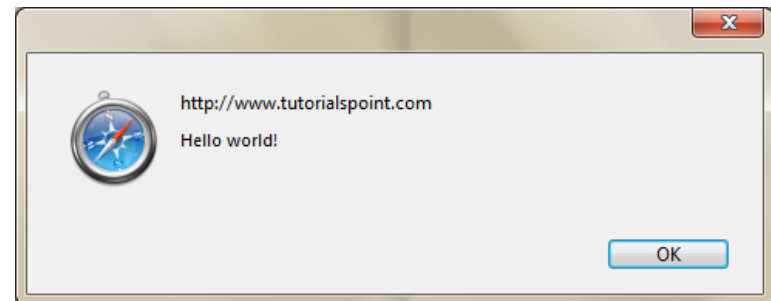
```
<html>
<head>
  <script type="text/javascript" src="/jquery/jquery-1.3.2.min.js" ></script>

  <script type="text/javascript" language="javascript">

    $(document).ready(function() {
      $("div").click(function() {
        alert("Hello world!");
      });
    });

  </script>

</head>
<body>
  <div id="newdiv">
    Click on this to see a welcome dialogue.
  </div>
</body>
</html>
```



JQuery

Syntax

- can use all the functions and other capabilities available in JavaScript.

`$(selector).action()`

- A dollar sign to define jQuery (`$.noConflict()`).
- A (selector) to "query (or find)" HTML elements (`CSS selector syntax`).
- A jQuery action() to be performed on the element(s).

```
<script type="text/javascript" language="javascript">
```

```
$(this).hide()           // hides current element
```

```
$("p").hide()            //hides all paragraphs
```

```
$("p.test").hide()       //hides all paragraphs with class="test"
```

```
$("#test").hide()        //hides the element with id="test"
```

```
</script>
```


JQuery

Selectors

- Uses CSS selectors to select HTML elements.

Selector	Description
Name	Selects all elements which match with the given element Name .
#ID	Selects a single element which matches with the given ID
.Class	Selects all elements which match with the given Class .
Universal (*)	Selects all elements available in a DOM.
Multiple Elements E, F, G	Selects the combined results of all the specified selectors E , F or G .

- \$("p") selects all <p> elements.
- \$("p.intro") selects all <p> elements with class="intro".
- \$("#demo") selects element with id="demo".

JQuery

Selectors Attribute

```

```

•**Get** : `var title = $("img").attr("src");`

•**Set** : `$("#myImage").attr("src", "/images/jquery.jpg");`

•**Apply style** :

```
<style>
    .selected { color:red; }
    .highlight { background:yellow; }
</style>
```

```
$("p").addClass("selected");
$("#myid").addClass("highlight");
```

JQuery

Methods	Description
<code>attr(properties)</code>	Set a key/value object as properties to all matched elements.
<code>attr(key, fn)</code>	Set a single property to a computed value, on all matched elements.
<code>removeAttr(name)</code>	Remove an attribute from each of the matched elements.
<code>hasClass(class)</code>	Returns true if the specified class is present on at least one of the set of matched elements.
<code>removeClass(class)</code>	Removes all or the specified class(es) from the set of matched elements.
<code>toggleClass(class)</code>	Adds the specified class if it is not present, removes the specified class if it is present.
<code>html()</code>	Get the html contents (innerHTML) of the first matched element.
<code>html(val)</code>	Set the html contents of every matched element.
<code>text()</code>	Get the combined text contents of all matched elements.
<code>text(val)</code>	Set the text contents of all matched elements.

JQuery

DOM traversal

Method	Description
<code>after(content)</code>	Insert content after each of the matched elements.
<code>append(content)</code>	Append content at last index to the inside of every matched element.
<code>appendTo(selector)</code>	Append all of the matched elements to another, specified, set of elements.
<code>before(content)</code>	Insert content before each of the matched elements.
<code>empty()</code>	Remove all child nodes from the set of matched elements.
<code>insertAfter(selector)</code>	Insert all of the matched elements after another, specified, set of elements.
<code>insertBefore(selector)</code>	Insert all of the matched elements before another, specified, set of elements.
<code>prepend(content)</code>	Prepend content at first index to the inside of every matched element.
<code>prependTo(selector)</code>	Prepend all of the matched elements to another, specified, set of elements.
<code>remove(expr)</code>	Removes all matched elements from the DOM.
<code>replaceAll(selector)</code>	Replaces the elements matched by the specified selector with the matched elements.
<code>replaceWith(content)</code>	Replaces all matched elements with the specified HTML or DOM elements.

JQuery

- Binding event handlers:

selector.bind(eventType[, eventData], handler)

```
$('#div').bind('click', function( event ){  
    alert('Hi there!');  
});
```

•**eventType:** A string containing a JavaScript event type, such as click or submit. Refer to the next section for a complete list of event types.

•**eventData:** This is optional parameter is a map of data that will be passed to the event handler.

•**handler:** A function to execute each time the event is triggered.

JQuery

- **Binding Methods:**

```
$("#div").click( function () {  
    // do something here  
});
```

- **eventType:** A string containing a JavaScript event type, such as click or submit. Refer to the next section for a complete list of event types.

- **eventData:** This is optional parameter is a map of data that will be passed to the event handler.

- **handler:** A function to execute each time the event is triggered.

JQuery

- **Apply CSS Properties:**

```
$("#p").css("background-color","yellow");
```

- **Apply Multiple CSS Properties:**

```
$("#p").css({"background-color":"yellow","font-size":"200%"});
```

- **height() and width() Methods:**

```
$("#div1").height("200px");
```

```
$("#div2").width("300px");
```

JQuery

- Showing and Hiding elements:

```
[selector].show( speed, [callback] );
[selector].hide( speed, [callback] );
[selector].toggle([speed][, callback]);
[selector].animate({params},[duration],[easing],[callback])
:
:
```

```
$("#show").click(function () {
    $(".mydiv").show( 1000 );
});
```

```
$("#button").click(function(){
    $("#div").animate({height:300},"slow");
    $("#div").animate({width:300},"slow");
    $("#div").animate({height:100},"slow");
    $("#div").animate({width:100},"slow");
});
```

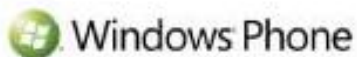

Chapter 4



<http://jquerymobile.com>

What is JQuery-Mobile ?

A unified , **HTML5-based** interface system for all popular **mobile device platforms**, built on the **rock- solid jQuery** and jQuery **UI foundation**

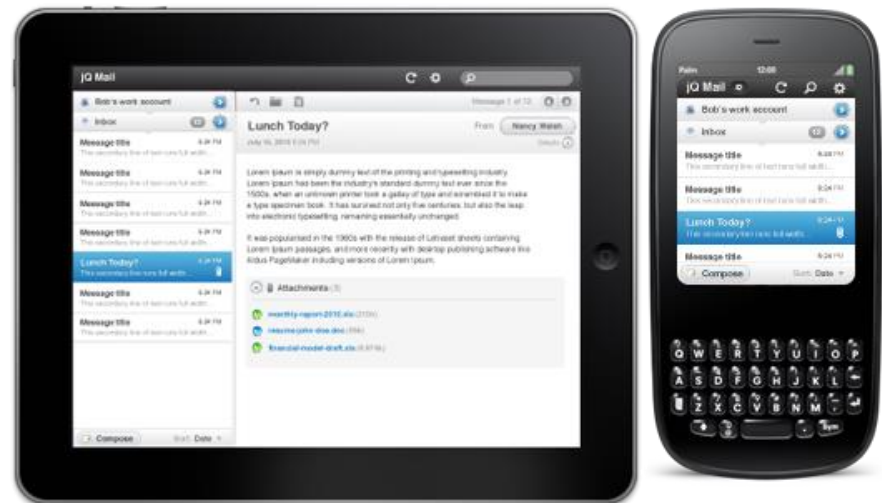


Why we use JQuery-Mobile?

- Wide browser and device coverage
- jQuery is free, open source software
- smaller files and faster loading web pages
- Touch-friendly form inputs and UI widgets
- jQuery can perform all of the fancy animations and transitions as Flash, but in a cleaner, simpler, and friendly


jQuery Mobile features

- Pages & Dialogs, Navigation system
- Form controls (sliders, toggles, enhanced radio)
- Toolbars(Header & Footer bars)
- Content formatting
- Buttons (Icons)
- List view control



jQuery – Mobile Demo

- <http://demos.jquerymobile.com/1.2.0/>



The screenshot shows the jQuery Mobile demo website. On the left, there is a navigation menu with an 'Overview' section highlighted in green. The 'Overview' section includes links to 'Intro to jQuery Mobile', 'Quick start guide', 'Features', 'Accessibility', and 'Supported platforms'. In the center, the jQuery Mobile logo is displayed above the text 'A Touch-Optimized UI Framework built with jQuery and HTML5.' Below this, a 'Welcome' message states: 'jQuery Mobile is the easiest way to build sites and apps that are accessible on all popular smartphone, tablet and desktop devices. For jQuery 1.7.0 to 1.8.2.' On the right, there is a 'Components' section with a blue header, followed by a list of components: 'Pages & dialogs', 'Toolbars', 'Buttons', 'Content formatting', 'Form elements', and 'Listviews'. Below this is an 'API' section with a blue header, followed by a list of API topics: 'Configuring defaults', 'Events', 'Methods & Utilities', 'Data attribute reference', and 'Theme framework'. Each item in the lists has a right-pointing arrow icon.

jQuery mobile
A Touch-Optimized UI Framework built with
jQuery and HTML5.

Welcome. jQuery Mobile is the easiest way to build sites and apps that are accessible on all popular smartphone, tablet and desktop devices. For jQuery 1.7.0 to 1.8.2.

Overview

- Intro to jQuery Mobile
- Quick start guide
- Features
- Accessibility
- Supported platforms

Components

- Pages & dialogs
- Toolbars
- Buttons
- Content formatting
- Form elements
- Listviews

API

- Configuring defaults
- Events
- Methods & Utilities
- Data attribute reference
- Theme framework

jQuery Mobile

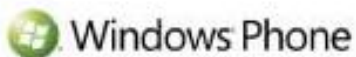
- Supported Devices

<http://jquerymobile.com/browser-support/>

A-grade – Full enhanced experience with Ajax-based animated page transitions

B-grade – Enhanced experience except without Ajax navigation features.

C-grade – Basic, non-enhanced HTML experience that is still functional



How To Use jQuery Mobile ?!

```
<head>
```

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

CSS

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

jQuery

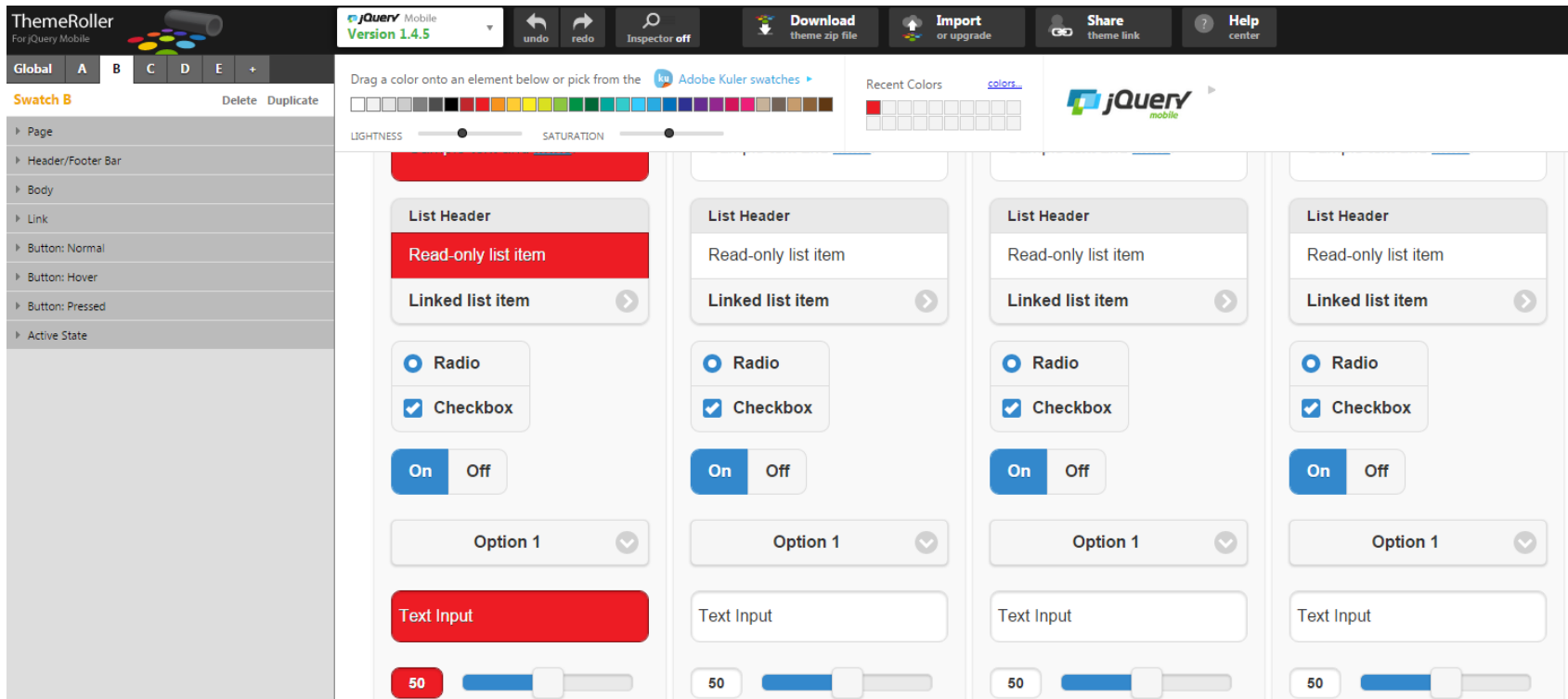
```
<script type="text/javascript"  
src="http://code.jquery.com/jquery-1.11.3.min.js">  
</script>
```

Mobile jQuery

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

Customize Theme

- <http://themeroller.jquerymobile.com/>



```
<link rel="stylesheet" href="CSS/Custom_theme.css" />
```


Pages in jQuery Mobile

Inside the **<body>** tag

- ♦ Every page on a mobile device is identified with an element with **data-role="page"**

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

Within a page

- ♦ Any valid HTML markup can be used
- ♦ But for true jQuery Mobile Page the immediate children are semantic elements with data-roles
- ♦ **"header"**, **"content"**, and **"footer"**.

Pages in jQuery Mobile

```
<!DOCTYPE html>
<html>
<head> .....
</head>
<body>
  <section data-role="page" id="firstPage">
    <header data-role="header">
      <h1> Page one Title</h1>
    </header>

    <article data-role="content">
      <h1>Page 1 Content</h1>
    </article>

    <footer data-role="footer">
      <h1> Page One Footer</h1>
    </footer>
  </section>
```

Page

The Page Header

The Page Content

The Page Footer

Multi-page jQuery Mobile – Local Pages

```
<section data-role="page" id="firstPage">
```

```
<article data-role="content">
```

```
<h1>Page 1 Content</h1>
```

```
<a href="#secondPage" data-transition="flip"> go to second Page</a>
```

```
</article>
```

```
</section>
```

To Page2

```
<section data-role="page" id="secondPage" data-add-back-btn="true">
```

```
<article data-role="content">
```

```
<h1>Page 2 Content</h1>
```

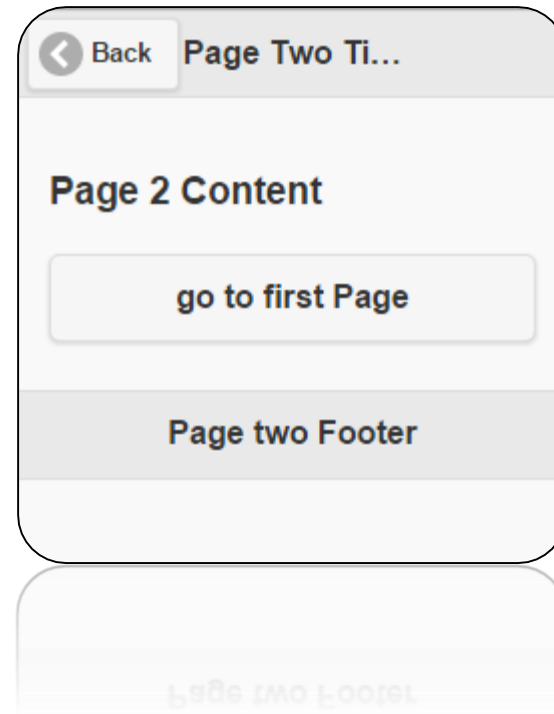
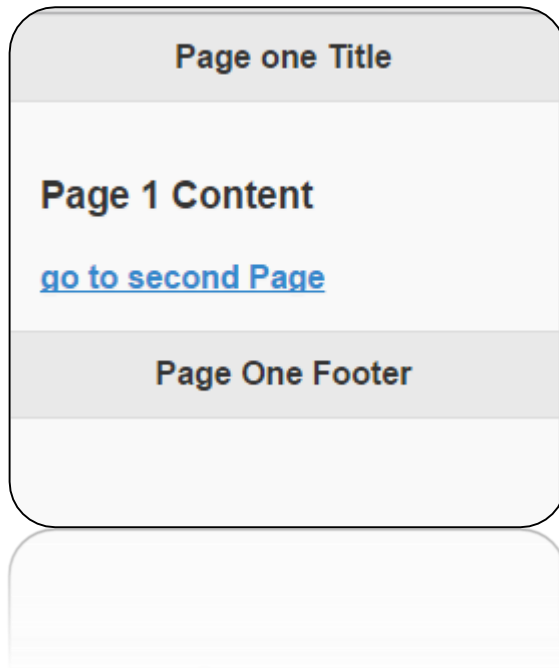
```
<a href="#firstPage" data-role="button"> go to First Page</a>
```

```
</article>
```

```
</section>
```

To Page1

Multi-page jQuery Mobile – Local Pages



jQuery Mobile – Dialog

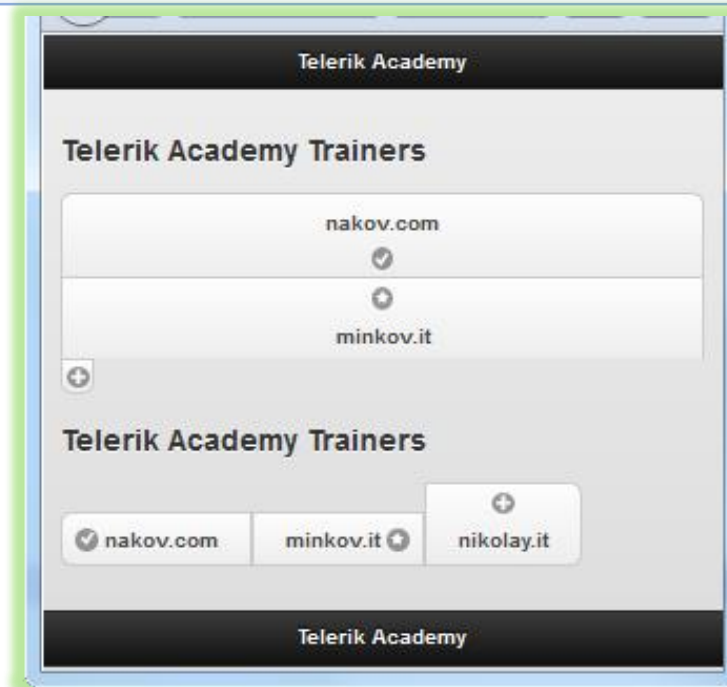
```
<section data-role="page" id="firstPage">
    .....
    <a href="#dialog" data-rel="dialog"> Open </a>
</section>
```



```
<section data-role="dialog" id="dialog">
    .....
</section>
```

jQuery Mobile Buttons

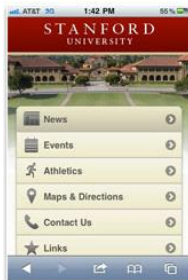
```
<a data-role="button" data-icon="plus"> Add </a>
```



.....Next

<http://www.jqmgallery.com/>

jQuery Mobile Gallery



Stanford



American Century



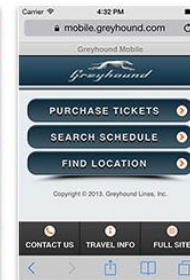
Bownty



Norwegian Getaway



insurance market



Greyhound



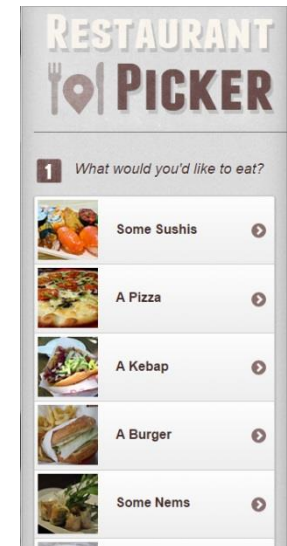
Truecar



LendingTree




http://www.stephaniewalter.fr/demos/restaurant_picker/




Lab Exercise


Lab Exercise


- **1st Assignment :**
 - Create a simple “ Phone book:” Application
 - Many Pages / dialogs
 - Form validation
 - Call option / edit/ add new / delete


 Add


Contact List





Mona Ab...





Karim Ali





Mohame...








Eman Ali


Contact List


 Back

Mona Abdo



Contact List

 Back

New Contact



Name

Phone

email

Gender:

☒ female
 ☐ male

 Save
  Cancel

Contact List

Delete Contact?

Cancel

Delete