

Lecture 18

1

Quick Overview to JQuery

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- ▶ jQuery is a library of helper functions that are cross browser-compatible.
- ▶ It is an open source add-in that provides an easy, browser-agnostic means for writing JavaScript.
- ▶ jQuery is written in JavaScript, so it is JavaScript.
- ▶ Make your JavaScript code shorter, faster and cross browser.
- ▶ Manipulate your HTML, like showing or hiding something from the page.
- ▶ Handles events – it can do something when a user click a button or any other activity a user can do with a mouse.
- ▶ Animation – for example make a part of your page fade in, fade out or just simply make something move.
- ▶ AJAX – do a server request without refreshing your whole web page

jQuery Selectors

- ▶ The most important purpose of jQuery is: ***select elements and do some action on those selected elements.***
- ▶ The jQuery selectors allow you to search or select HTML elements and then perform intended action on those.
- ▶ *Selectors in jQuery start with: `$()`*
- ▶ ***For example: `$(‘tag_name’)` , `$(“#ID”)`, `$(“.class”)`***

- ▶ ***Note: Run Jquery when DOM is ready !;e;***
 - ▶ ***`$(document).ready()`***

Categories of functionality jQuery Provides

- ▶ **Ajax** (Asynchronous JavaScript and XML) Methods that provide synchronous and asynchronous calls to the server
- ▶ **Attributes** Methods that get and set attributes of document object model (DOM) elements
- ▶ **Callbacks object** An object that provides many methods for managing callbacks
- ▶ **Core** Methods that provide core jQuery functionality
- ▶ **CSS** Methods that get and set CSS-related properties
- ▶ **Data** Methods that assist with associating arbitrary data with DOM elements
- ▶ **Deferred object** A chainable object that can register multiple callbacks into call-back queues and relay the success or failure state of any synchronous or asynchronous functions

- ▶ **Dimensions** Helper methods for retrieving and setting DOM element dimensions
- ▶ **Effects** Animation techniques that can be added to your webpage
- ▶ **Events** Methods that provide the ability to register code to execute when the user interacts with the browser
- ▶ **Forms** Methods that provide functionality when working with form controls
- ▶ **Offset** Methods for positioning DOM elements
- ▶ **Selectors** Methods that provide the ability to access DOM elements by using CSS selectors
- ▶ **Traversing** Methods that provide the ability to traverse the DOM
- ▶ **Utilities** Utility methods This lesson only scratches the surface of jQuery's capabilities, but subsequent lessons use jQuery whenever possible.

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jQuery Events

- ▶ `$("#button").click(function(){
 // do something when user click the button
});`
- ▶ `$("#form").submit(function(){
 // do something when user submits a form
});`
- ▶ `$("#myDiv").hover(function(){
 // do something when user hover an HTML element
});`
- ▶ `$("#myTextbox").keyup(function(){
 // do something when user types on a textbox with ID
myTextbox`

Class Practical Examples

- ▶ Hide Show Content on Button Click
- ▶ Slide Down & Slide Up Content on Click
- ▶ Toggle & Fade Text on Button Click
- ▶ Animations on Click