jQuery Fundamentals

jQuery is fast becoming a must-have skill for front-end developers. The purpose of this 3-day jQuery training course is to provide an overview of the jQuery JavaScript library. When you complete this training course, you will be able to complete basic tasks using jQuery, and you will have a solid basis from which to continue your learning.

Course Objectives:

- Learn to work with jQuery Core.
- Learn to handle events with jQuery.
- Learn to create cool effects with jQuery.
- Learn to build Ajax applications with jQuery.
- Learn to write and use jQuery plugins
- Learn to write high-performing jQuery applications.

Audience: Front-end developers.

Prerequisites: Experience in HTML and JavaScript, and experience in CSS would be beneficial.

Number of Days: 3 days

1 jQuery Introduction
- How jQuery Works
- A First Example

2 JavaScript Basics
- Syntax Basics
- Reserved Words
- Operators
- Operations on Numbers and Strings
- Logical Operators
- Comparison Operators
- Conditional Code
- Conditional Variable Assignment with the Ternary Operator
- Switch Statements
- Loops
- Arrays
- Objects
- Functions
- Testing Type
- Scope
- Closures

3 jQuery Basic Concepts
- Basic Flow of a jQuery Application
- Using $(document)ready()
- Selecting Elements
- Operating on Selections
- Working with Selections
- CSS, Styling, and Dimensions
- Traversing
- Manipulating the DOM

4 jQuery Core
- $ vs jQuery
- $ vs $()
- Utility Methods
- Checking Types
- Storing and Retrieving Data Related to an Element
- DOM-Related Utilities
- Feature and Browser Detection
- Avoiding Conflicts with Other Libraries

5 Events and Event Handlers
- Connecting Events to Elements
- Removing Event Handlers
- Namespacing Events
- Inside the Event Handling Function
- Triggering Event Handlers
- Increasing Performance with Event Delegation

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Removing Delegated Event Handlers
Event Helpers
6 Effects
Built-in Effects
Changing the Duration of Built-in Effects
jQueryfxspeeds
Limitations on Effects
Queuing of Effects with Other Operations
Callbacks - Doing Something When an Effect is Done
Running Code When an Effect is Complete
Custom Effects with $.fn.animate
Easing
Managing Effects
jQuery.fx.off
7 AJAX
Key Concepts
GET vs POST
The Same Origin Policy
Data Types
A is for Asynchronous
Same-Origin Policy and JSONP
Ajax and Firebug
jQuery's Ajax-Related Methods
Convenience Methods
$.ajax
Convenience Methods
$.fn.load
Ajax and Forms
Working with JSONP
Ajax Events
8 Plugins
How to Create a Basic Plugin
Testing Our Plugin
Finding and Evaluating Plugins
9 Best Practices
JavaScript Best Practices
Namespacing Variables
Cache Frequently Used Values
Beware Anonymous Functions
jQuery Best Practices
Optimize Selectors
Use "Safe" Selectors
Use Event Delegation
Detach Elements to Work with Them
Use Stylesheets for Changing CSS on Many Elements
Use $.data Instead of $.fn.data
Code Organization
Key Concepts
Don't Treat jQuery as a Black Box
10 Custom Events
About Custom Events
Recap: $.fn.on, $.fn.trigger, and $.fn.triggerHandler
Summary
11 jQuery Mobile jQuery UI
jQuery UI
jQuery Mobile

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