jQuery

Course Summary

Description

Our Web Development with jQuery course teaches you how to tap into the power of jQuery to build extremely rich, yet elegant web UIs using one of the most simple and popular cross-browser JavaScript libraries out there.
Not only will you learn by doing, but you'll have a lot of fun along the way because jQuery is all about instant gratification!

Objectives

By the end of this course, students will be able to:

- Understand what's so good about jQuery - Google, IBM, Netflix, and even Microsoft are all using it!
- Be able to add support for jQuery into your own UIs - and let Google host it for you
- Get how jQuery works: DOM selection, decoration, enchancing
- Be able to use jQuery's effects, animation, scrolling, and resizing capabilities
- Build lightboxes, slideshows, and manipulate images - all in JavaScript!
- Be able to render pro-looking panels, menus (including drop-down), accordions, tabs, tooltips UI widgets in your apps
- Learn about jQuery's AJAX facilities and create amazing interactive applications
- Be able to enhance your forms with hints, autosuggestions, client-side validation, star ratings, and more!
- Learn about jQuery's controls, including date pickers, sliders, progress bar, sorting, and drag'n'drop
- Be able to create/manage lists, trees, and tables - again all in JavaScript
- Understand jQuery's plugins, themes, and other advanced concepts, including best-practices

Topics

- Overview of jQuery
- Getting Started with jQuery
- Using jQuery
- Advanced Animations
- Handling User Scolling
- Handling Resizing
- Images and Slideshows
- Menus
- Tabs

- Panels and Panes
- Tooltips
- Ajax with jQuery
- Forms
- Controls
- Dialogs and Notifications
- jQuery Widgets
- Advanced Concepts

Audience

Web Development with jQuery training course is for you if you are a web developer who wants to build best-of-breed web UIs with the simplicity and elegance of jQuery.

Prerequisites

To get the most benefit from this training you absolutely need to be comfortable with basic JavaScript, HTML, and CSS. Don't worry, you don't need to be a guru (but you will be after this course!) to take your client-side programming skills to the next level.

Familiarity with XML, and basic server-side programming (e.g. PHP, Java, Perl, Python) is recommended, but not required.

Duration

Three days

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Course Outline

I. Overview of jQuery
- A. What's jQuery and what's so good about it?
- B. Who is using it?
- C. Cross-browser compatibility
- D. jQuery UI and Plugins

II. Getting Started with jQuery
- A. Downloading and including jQuery
- B. Google and Microsoft CDN
- C. Developer vs. Production versions (compressed vs uncompressed)
- D. jQuery namespace and jQuery '$' alias
- E. Revisiting HTML DOM
- F. Debugging jQuery problems
- G. Accessibility concerns

III. Using jQuery
- A. Making sure that the page is ready
- B. Selections using CSS3
- C. Filters
- D. Multiple item selectors
- E. Best practices
- F. Decorating with CSS
- G. Changing styles
- H. Adding/removing classes
- I. Effects with jQuery (e.g. hiding, revealing, and toggling elements)
- J. Basic Animations
- K. Callback functions
- L. Event handlers
- M. Adding and removing HTML elements
- N. Modifying content

IV. Advanced Animations
- A. Animating with CSS
- B. Color animation
- C. Easing
- D. Bouncy Content Panes
- E. Animation Queues
- F. Chaining Actions
- G. Animating Navigation
- H. jQuery User Interface (UI) Library

V. Handling User Scolling
- A. The scroll event
- B. Floating navigation
- C. Scrolling the document
- D. Customizing scroll bars

VI. Handling Resizing
- A. The resize event
- B. Layout switcher
- C. Resizable elements (textarea, plane splitter)

VII. Images and Slideshows
- A. Building our own lightbox
- B. Using ColorBox plugin
- C. Cropping images with jCrop plugin
- D. Slideshows
- E. Faders (cross, rollover)
- F. Timers
- G. Using Cycle plugin
- H. Scrolling
- I. Thumbnails
- J. Customizing events that trigger scrolling

VIII. Menus
- A. Expandable and collapsible menus
- B. Open-closed indicators
- C. Expand on hover
- D. Hover intents
- E. Drop-down menus
- F. Accordion menus
- G. Simple
- H. Multi-level
- I. jQuery UI Accordion

IX. Tabs
- A. Basic tabs
- B. jQuery UI tabs
- C. Tab options and controls

X. Panels and Panes
- A. Slide-downs
- B. Sliding overlay

XI. Tooltips
- A. Simple
- B. Advanced (using sprites)

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Course Outline (cont'd)

XII. Ajax with jQuery
- A. Overview of Ajax
- B. Loading content asynchronously
- C. Fetching JSON data
- D. jQuery's .ajax facilities
- E. Common settings
- F. GET and POST requests
- G. Ajax Events
- H. Consuming XML
- I. Sending HTML form data
- J. Loading external scripts dynamically
- K. Interactive Ajax
- L. Spinners and progress indicators
- M. Endless scrolling

XIII. Forms
- A. Simple form validation
- B. The submit event
- C. Validation plugin
- D. Form hints
- E. Checkbox checker
- F. Inline editing
- G. Autocomplete
- H. Star rating input

XIV. Controls
- A. Date picker
- B. Date validation
- C. Sliders
- D. Drag and drop
- E. Sorting with jQuery UI's sortable
- F. Progress bar

XV. Dialogs and Notifications
- A. Simple modal dialog
- B. jQuery UI dialog
- C. Growl-style notifications
- D. 1-up notification

XVI. jQuery Widgets
- A. Lists
- B. jQuery UI selectables
- C. Sorting
- D. Swapping list elements
- E. Searching
- F. Selecting
- G. Trees
- H. Expandable/collapsable trees
- I. Event delegation
- J. Tables
- K. Fixed headers
- L. Repeating headers
- M. Data grids
- N. Pagination
- O. Row editing
- P. DataTables plugin
- Q. Selecting rows and columns

XVII. Advanced Concepts
- A. Best Practices
- B. Clean code
- C. Comments
- D. Map objects
- E. Namespacing
- F. Scoping
- G. Client-side templating
- H. Why browser-sniffing should be avoided
- I. Feature detection
- J. Plugins
- K. Extending jQuery
- L. Creating your own selectors
- M. Events
- N. The special event
- O. Coexisting with other JavaScript libraries (like prototype.js)
- P. Queing and dequeuing animations
- Q. Themes
- R. Parting thoughts