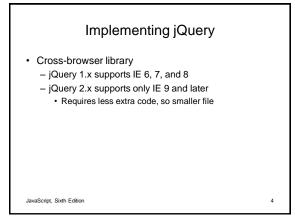


#### Introduction to jQuery

jQuery

- Commonly used library
- Enables developers to implement common JavaScript tasks with minimal code

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#### Including the Library

- · Link .js file containing library to HTML document
  - Can download from jquery.com
  - Can specify public location on CDN

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#### Selecting Elements with jQuery

- \$ followed by reference to elements on which statement operates
  - Reference contained in parentheses
- Use CSS selector in quotes to select elements
- Example-to operate on h1 elements: <sup>("h1")</sup>
- Example—to select elements in odd class: (".odd")
- Concise version of querySelectorAll() method: document.querySelectorAll('.odd')

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## Traversing the DOM with jQuery Methods

Can select other elements in relation to selection

 Use jQuery DOM traversal methods

METHOD	DESCRIPTION
children()	Selects the child elements of each element matched by the main selector
first()	Narrows the group of selected elements to the first element
last()	Narrows the group of selected elements to the last element
next()	Changes the selection to the sibling element immediately following each selected element
parent()	Selects the parent element of each element matched by the main selector
previous()	Changes the selection to the sibling element immediately preceding each selected element
siblings()	Selects the sibling elements of each element matched by the main selector
	Table 12-1 jQuery methods for DOM traversal

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#### Traversing the DOM with jQuery Methods (cont'd.)

- Select children of original selection: \$("ul.mainmenu li").children()
- Narrow selected items with selector in method's parentheses: \$("ul.mainmenu li").children("ul")

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### Manipulating the DOM with jQuery Methods

- Plain JavaScript
  - JavaScript without jQuery
- jQuery API includes methods for performing actions on selected elements

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#### Manipulating the DOM with jQuery Methods (cont'd.)

METHOD	DESCRIPTION
addClass()	Adds the specified class name(s) to the selection
clone()	Creates a duplicate of the selection
css ()	Retrieves values for one or more CSS properties for the first element in the selection, or sets a specified CSS property to a specified value
height()	Retrieves the calculated height of the first element in the selection, or sets the height of the selected elements
html()	Retrieves the HTML content of the first element in the selection, or sets the HTML content of the selected elements
removeClass()	Removes the specified class name(s) from the selection
val()	Retrieves the value of the first element in the selection, or sets the value of the selected elements
width()	Retrieves the calculated width of the first element in the selection, or sets the width of the selected elements
Tat	ble 12-2 jQuery methods for manipulation
vaScript. Sixth Edition	

# Manipulating the DOM with jQuery Methods (cont'd.) • Many jQuery methods serve dual function – Look up a value – Set that value 1 \$(".odd").width():

- 2 /\* returns the computed width value for the first
- 3 element with the class name "odd" \*/

#### 4 \$(".odd").width("5em");

5 /\* sets the width of all elements with the class name 6 "odd" to 5em \*/

```
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```

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#### Specifying an Event Handler

· Can group jQuery statements into functions - Standard JavaScript syntax

fu	nction display() { \$("ul.mainmenu li").children("ul").addClass("show");
}	
lo	vaScript. Sixth Edition

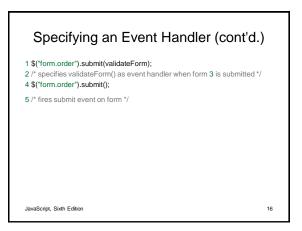
#### Specifying an Event Handler (cont'd.)

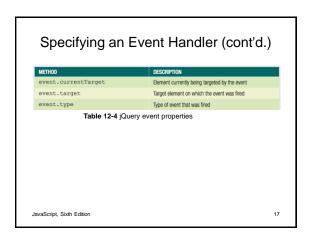
- · Backward-compatible event listener easier in jQuery - Start with \$
  - Specify selector for element(s) associated with event
  - Finish with method that specifies event and action(s)

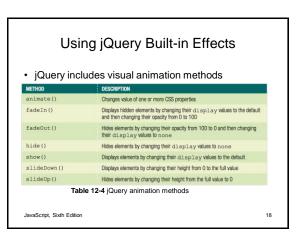
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METHOD	DESCRIPTION
blur()	Specifies code to execute on blur event
click()	Specifies code to execute on click event
focus()	Specifies code to execute on focus event
hover()	Specifies code to execute when the pointer enters an element, as well as code to execute when the pointer leaves the element
load()	Specifies code to execute on load event
submit()	Specifies code to execute on submit event
	Table 12-3 jQuery methods for common events







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#### Using jQuery Built-in Effects (cont'd.)

- All methods take value in milliseconds as argument
   Animation occurs in specified time frame
- Some also support slow and fast keywords

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#### Summary

- jQuery enables developers to implement common tasks with minimal code
- Must link .js file containing library to HTML document
- Every jQuery statement starts with \$
- Select elements in jQuery with CSS selector in quotes
- Can modify a selection
  - Append DOM traversal method to selection code

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#### Summary (cont'd.)

- jQuery API includes methods for performing actions on elements
- · Many methods allow you to look up or set value
- · Event listener consists of
  - \$
  - selector
  - method
- · jQuery includes visual animation methods

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