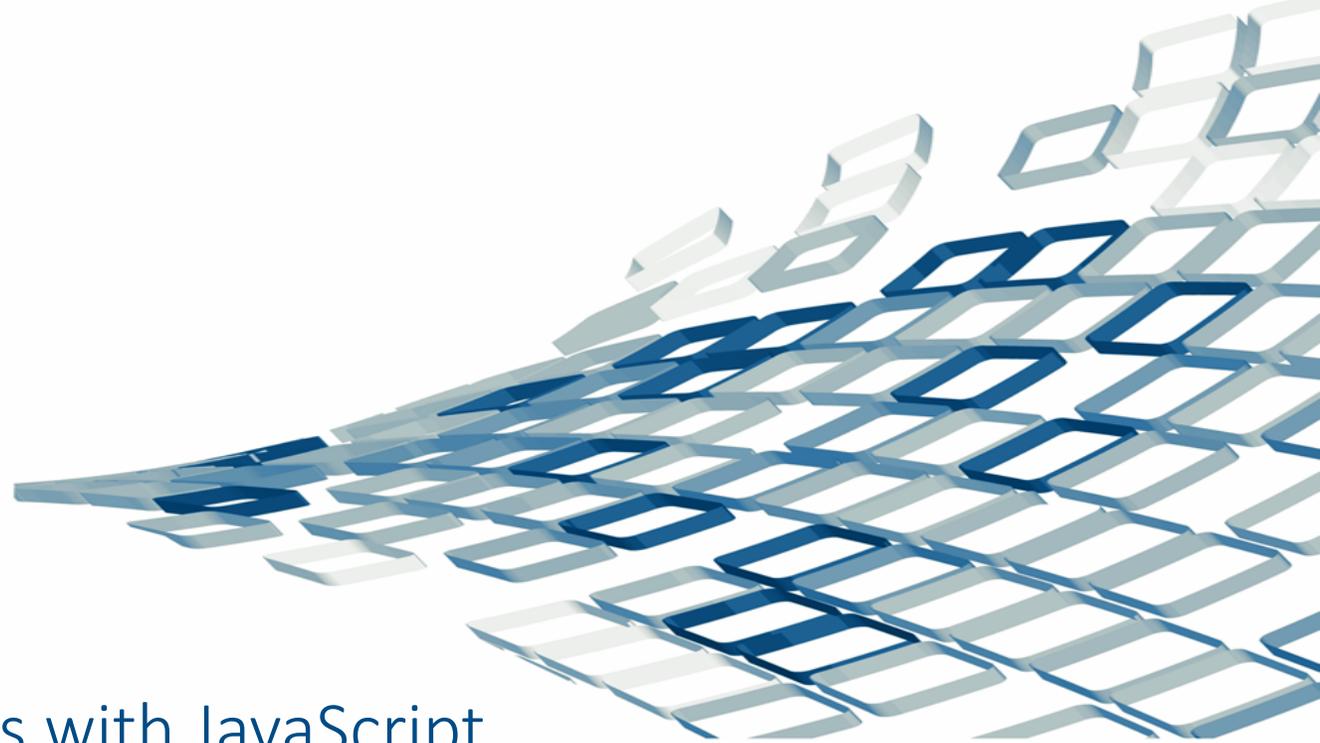




Certified Internet  
Web Professional

## Lesson 7: Developing Interactive Forms with JavaScript



# Objectives

- Identify and use form controls, including X/HTML form elements
- Refer to form objects, including *form*, *radio*, *select*, *button*, *text*, *textarea* and *checkbox*
- Define the *form* object
- Use the *button* object
- Use the *checkbox* object
- Evaluate text with the *text* and *textarea* objects
- Process *radio* object options
- Capture choices from a select list with the *select* object
- Conduct form validation, including valid X/HTML code

# Interactive Forms

- The ability to retrieve and verify data from the user through an X/HTML form
- From a Web developer's perspective, the most common need for JavaScript

# Overview of Form Elements

## X/HTML form elements

- *button*
- *checkbox*
- *hidden*
- *password*
- *radio*
- *reset*
- *select*
- *submit*
- *text*
- *textarea*

## Corresponding JavaScript objects

# Referring to Form Elements

- You can refer to a form element in the *form* object's *elements* array in two ways:
  - By its name
  - By its index number

# The *form* Object

- The *form* object
  - Represents an X/HTML form in JavaScript
  - Available when `<form>` tags are present in the X/HTML document
- Properties, methods and event handlers of *form* object

# The *button* Object

- The *button* object
  - Provides a basic push-button type of user interface element on an X/HTML page
- Properties, methods and event handlers of *button* object

# The *checkbox* Object

- The *checkbox* object
  - An input object in the shape of a small square (called a check box) that can be selected, or "checked," on or off
  - Users can select as many as they like or all check boxes in a group (not mutually exclusive)
- Properties, methods and event handlers of *checkbox* object

# The *text* and *textarea* Objects

- The *text* object
  - Displays a single line of text
- The *textarea* object
  - Displays multiple, scrolling lines of text
- Properties, methods and event handlers of *text* and *textarea* objects
- Checking user input

# The *radio* Object

- The *radio* object
  - Small round button that can be selected on or off
  - Used to select one option from among two or more mutually exclusive options
- Properties, methods and event handlers of *radio* object

# The *select* Object

- The *select* object
  - A drop-down selection list or a list box of items used in an X/HTML form
  - Allows you to choose one item from a list of mutually exclusive items
- Properties, methods and event handlers of the *select* object
- Working with selection lists
- Multiple-selection list box
  - Allows you to choose as many items as they like from a list (not mutually exclusive)

# Form Validation

- Benefits of client-side form validation:
  - Increased validity of form submissions
  - Increased end-user satisfaction
  - Conservation of bandwidth
- Form validation tips

# Summary

- ✓ Identify and use form controls, including X/HTML form elements
- ✓ Refer to form objects, including *form*, *radio*, *select*, *button*, *text*, *textarea* and *checkbox*
- ✓ Define the *form* object
- ✓ Use the *button* object
- ✓ Use the *checkbox* object
- ✓ Evaluate text with the *text* and *textarea* objects
- ✓ Process *radio* object options
- ✓ Capture choices from a select list with the *select* object
- ✓ Conduct form validation, including valid X/HTML code

# Lesson 7 Quiz

1. Which example shows proper JavaScript syntax for referring to a form object?

- a. `document.newForm.fieldName.value;`
- b. `window.newForm.fieldName.value;`
- c. `form.newForm.fieldName."value"`
- d. `document.newForm[fieldName].value;`

# Lesson 7 Quiz

1. Which example shows proper JavaScript syntax for referring to a form object?

- a. **document.newForm.fieldName.value;**
- b. window.newForm.fieldName.value;
- c. form.newForm.fieldName."value"
- d. document.newForm[fieldName].value;

# Lesson 7 Quiz

2. In JavaScript, what is the purpose of the form object?
- a. To enclose the X/HTML <form> tags
  - b. To represent all the forms in a single Web site
  - c. To access all properties of a form
  - d. To replace the X/HTML <form> tags

# Lesson 7 Quiz

2. In JavaScript, what is the purpose of the form object?
- a. To enclose the X/HTML <form> tags
  - b. To represent all the forms in a single Web site
  - c. To access all properties of a form**
  - d. To replace the X/HTML <form> tags

# Lesson 7 Quiz

3. Which JavaScript input object can a user click to return a Boolean value of true or false?
- a. The reset object
  - b. The checkbox object
  - c. The button object
  - d. The select object

# Lesson 7 Quiz

3. Which JavaScript input object can a user click to return a Boolean value of true or false?
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  - b. The checkbox object**
  - c. The button object
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# Lesson 7 Quiz

4. Which attribute defines a group of radio buttons for the radio object?
- a. checked
  - b. name
  - c. type
  - d. value

# Lesson 7 Quiz

4. Which attribute defines a group of radio buttons for the radio object?
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  - b. name**
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  - d. value

# Lesson 7 Quiz

5. Which of the following best describes the main purpose of client-side form validation with JavaScript?
- a. To verify that all user-entered data is true and correct
  - b. To correct typing errors in user-entered data before processing
  - c. To detect whether form elements hold properly formatted values
  - d. To impress users with intervention from the program

# Lesson 7 Quiz

5. Which of the following best describes the main purpose of client-side form validation with JavaScript?
- a. To verify that all user-entered data is true and correct
  - b. To correct typing errors in user-entered data before processing
  - c. To detect whether form elements hold properly formatted values**
  - d. To impress users with intervention from the program

# Lesson 7 Quiz

6. Write JavaScript and XHTML code to create a text object (named myText in a form named myForm) that contains the read-only string *CIW Certified*.

# Lesson 7 Quiz

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```
<input type="text" name="myText" value="CIW Certified" onfocus="this.blur();" />
```

# Lesson 7 Quiz

7. Write JavaScript and XHTML code to create a checkbox object that, when clicked, displays its state (checked or not checked) and value in an alert dialog box.

# Lesson 7 Quiz

7. Write JavaScript and XHTML code to create a checkbox object that, when clicked, displays its state (checked or not checked) and value in an alert dialog box.

```
<input type="checkbox" value="myValue" name="myCheckbox"  
onclick="alert('The check box\'s state is ' + this.checked + 'with  
a value of ' + this.value + '.');" />
```