

300- Introduction to JavaScript: DOM Scripting (DHTML)

Review of JavaScript and the DOM

- What is JavaScript?
- Debugging JavaScript
- What is the DOM?
- What is DHTML? What is DOM Scripting?
- History of DHTML
- Browser Independence

Review of DOMScripting/DHTML

Review of Basic Structures

- window Object
- Prompts: alert(), prompt(), confirm()
- Nesting Quotes
- Multiple Statements
- link Object
- Functions
- Passing an Argument
- Concatenating Strings and Variables
- Calling from Other Functions
- getElementById
- getElementsByTagName
- External File
- Embedded
- Inline

Review of Basic Event Handlers

- OnClick
- OnMouseover, OnMouseout
- OnLoad, OnUnload
- OnSubmit
- OnFocus, OnBlur
- Value

Calling Functions from Other Functions

Introduction to Scalar Variables

- JavaScript Data
- Storing Information from a Prompt

Working with Numbers

- Casting Numbers to Strings using Numbers()
- Comparing Numeric Data

Storing a List of Variable in an Array

Introduction to the If Conditional

- The if Conditional
- The Switch Case Statement

Loop Structures

- Basic Arithmetic Operators
- Loop Structures

A Review of Forms in JavaScript

- Forms and Form Elements in Dot Syntax Notation
- The Value Property
- Form Portability

More Event Handlers & Methods

- Event Handlers for Text Fields
- Event Methods
- Radio Buttons
- Checkboxes
- Marking Radio Buttons and Checkboxes

The return Statement

- Using the return statement to validate radio buttons

Advanced Forms

- Validating Numeric Data
- The String Object and Form Validation
- The onSubmit Event Handler and Form Validation
- Extending Classes for Improved Form Validation

More on Advanced Forms

- Regular Expressions
- String Methods that can Use Regular Expressions

Building a Form Toolbox

- Accessing a JavaScript Library
- Tools

Inter-Window Communication

- Working with the window Object
- window.open() and window.close()
- document.write()
- document.close()
- Focusing and Closing a Window
- Opening a Child Window from the Parent Page
- Two Windows = Two Object Hierarchies
- Parent-Child Interaction

Working with Advanced Objects

- The Date Object
- The Location Object
- The Navigator Object
- Custom Objects

Objects within Objects

- New Syntax for Accessing Objects
- The for/in Loop
- Multi-Tiered Objects

Images in JavaScript

- Pre-loading Images
- The Images Collection
- Image Flipping & Form Validation

Positioning Objects with CSS

- CSS Positioning Properties

Dynamic Positioning

- Initializing function
- Using document.getElementById() in positioning
- Finding browser width and height

Appendix A: Color Values and Hexadecimal Triplets

Appendix B: DHTML in Various Browsers

Appendix D: Inter-Frame Communication: Frames Based Order Forms

Appendix E: Regular Expression References

- Character Types and Ranges
- Quantity Indicators
- Location Indicators
- Other Special Characters
- Attributes/Modifiers

Appendix G: Recommended Resources

Timed Animation with CSS

- Animation Steps

“Phasing” Elements with the Clip Style

- Event Handling
- Clipping

JavaScript Effects

- Fading
- Page Loading
- InnerHTML
- Create Element, Append Child

Dragable Content

Shopping Carts

Calendars

DHTML Menus

- Drop Down Menus
- Menus without DHTML... and the future of Menus

DHTML with Data

- Searching Data

Advanced Regular Expressions and Backreferences

- Working with Backreferences
- Inline Backreferences

Cookies

- Cookies in JavaScript
- Cookies Demonstration

Auto-Populating SELECT Lists

Appendix A: Color Values and Hexadecimal Triplets

Appendix B: DHTML in Various Browsers

Appendix C: Generating Status Bar Messages

- The window's status Property

Appendix E: Regular Expression References

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- Location Indicators
- Other Special Characters
- Attributes/Modifiers

Appendix F: The future in AJAX: JavaScript and XML

- A Survey of AJAX Libraries

Appendix G: Recommended Resources