



## Introduction to Programming Using JavaScript (98-382)

In association with : **Silver  
Microsoft  
Partner**



## **Program with JavaScript Operators, Methods, and Keywords**

Complete or debug code that uses assignment and arithmetic operators

- Assignment; increment; decrement; addition; subtraction; division; multiplication; modulus; compound assignment operators

Apply JavaScript best practices

- Comments; indentations; naming conventions; noscript; constants; reserved keywords; debugger keyword; setting breakpoints; console.log

Evaluate the use of inline and external scripts

- When to use, how to use, and what happens when both are

used Implement exception handling

- try; catch; finally

Complete and debug code that interacts with the Browser Object Model (BOM)

- Manage state; display dialogs; determine screen size

## **Program with Variables, Data Types, and Functions**

Declare and use variables of primitive data types

- Number; Boolean; String; Null; Undefined; typeof operator; type checking functions; use strict; converting between data types; formatting numbers; string operations; single quote vs double quote (nesting); initialization

Declare and use arrays

- Single-dimensional arrays; multi-dimensional arrays; iteration; initialization; define an array; sort and search an array; use push, pop, shift, and unshift methods; use the length property; access an array element;

Complete and debug code that uses objects

- Properties; methods; instantiation; Date object; retrieve date and time parts; localize date format (MM/DD vs DD/MM); add and subtract dates

Complete and debug code that uses built-in Math functions

- Random; round; abs; floor; ceiling; min; max; pow; sqrt

Complete and debug a function that accepts parameters and returns a value

- Reusable code; local versus global scope, redefine variables, pass parameters, value versus reference, return values

## **Implement and Analyze Decisions and Loops**

Evaluate expressions that use logical and comparison operators

- ==; !=; <; >; <=; >=; !; &&; ||

Complete and debug decision statements

- if; else if; switch; nested if

Complete and debug loops

- for; while; do; break; continue

## **Interact with the Document Object Model**

Identify and construct the Document Object Model (DOM) tree

- window; document; body; other HTML

elements Identify and handle HTML events

- onchange; onmouseover; onload; onclick; onmouseout; onkeydown

Complete and debug code that outputs to an HTML document

- innerHTML; document.write

Complete and debug code that locates, modifies, and adds HTML elements and attributes

- getElementById; getElementsByTagName; getElementsByClassName; setAttribute; createElement

## **Interact with HTML Forms**

Complete and debug code that retrieves input from forms and sets form field values

- Retrieve form values; identify the DOM path; get values from different types of elements; prepopulate values; mask values

Complete and debug code that performs input validation

- Case; string comparisons; Not-A-Number (NaN)

Describe the form submission process

- onsubmit; post versus get; potential targets for submission





# Thank You

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