



Skillsfuture@PA JavaScript

Duration : 15 hrs

Course Outline

Introduction:

Programming JavaScript into your HTML webpages to produce a powerful dynamic HTML (DHTML) effects.

Objective:

This basic course covers the mechanics and the key concepts of JavaScript and illustrates it's usage and application in today web design. It will arm the attendee with the necessary skills to create highly dynamic and interactive web pages.

Teaching Approach:

There will be brief lecture presentation interspersed with examples, demonstration and hands-on exercises. Case Studies will be used to reinforce participants learning of the topics covered.

Who Should Attend:

This course is for anybody who has keen interest in web design and wishes to enhance their webpages with dynamic effects. Those who are interested to setup eCommerce online Shopping site may find some tips on how to do it here.

Requirements:

You should preferably completed:

- C language
- HTML or have practical programming experience

Course Outline

Overview of Client-Side JavaScript

- Including JavaScript in a Page
 - Using the <script> Tag
 - Where to enter Javascript in HTML documents
 - How to enter Javascript in HTML documents
 - Using an Event Handler
 - Using a URL

JavaScript Fundamentals

- Adding Comments
- Debugging JavaScript Code error
- Declaring Variables
- Interacting with the User
 - alert
 - prompt
 - confirm
- Working with JavaScript Operators
 - Arithmetic Operators



- Assignment Operators
- Using the Math and Date Objects

Controlling Flow

- Looping Constructs
 - while
 - for
- Equality and Identity Operators
- Logical and Comparison Operators

Working with Arrays

- Creating Arrays
 - Using the Array Constructor
 - Using Literal Notation
- Accessing Array Elements
- Common Array Methods
- Defining and Using Associative Arrays
- Predefined Object Arrays

Browser Object Model

- Overview of the Browser Object Model
- Using the window Object
 - Opening and Closing Windows
- Using the document Object
 - Writing to the Webpage
 - Accessing Properties of the Document
- navigator Object
- location Object

Event Handling in JavaScript

- Overview of JavaScript Events
 - Identifying Differences Between Browsers
 - The event Object
 - Event Capturing
- Adding Event Handlers

- Registering Events in JavaScript
- addEventListener
- attachEvent
- Mouse and Keyboard Events
- Cancelling Events

Working with Forms

- Accessing Forms from JavaScript
- Working with Form Elements
- Validating Form Fields
 - Checking Required Fields
 - Checking Length of Input
- Cancelling Form Submission