

I010 - HTML, JavaScript and XML

Course Objectives

This standard course provides an in-depth 5-day development programme to cover and explore the main development technologies used to develop internet ready applications.

Uniquely combining HTML, JavaScript and XML within a standard 5-day class, students will learn the full Internet development tools necessary to understand and deliver Internet pages and applications using any overlaying development technology. This course also provides the necessary skills needed to act as pre-requisite to Java development for the Internet.

Oracle is used as the example database platform.

Who Should Attend	Prerequisites	Duration
Web Developers Web Programmers Analyst/Programmers	None	5 Days

Course Contents

Introduction to HTML

Introduction to Internet Technology, History of the Internet, TCP/IP

HTML Document Structure

HTML tags, Using reserved/special characters in HTML, Inserting Comments, The title & body tags

Basic Text Commands

Physical style tags
Content Style tags
Working with fonts

Images & Multimedia

Image formats - a discussion of using images and its impact on download time. The tag - using images in your web document.
Using audio in your web document
Image Maps

Using Hyperlinks

IP addresses, linking to other areas of your website, linking to other web sites

Using Tables

Detailed look at using tables to format your HTML document

Advanced table tags - using captions, headers and footers

Cascading Style Sheets

In-line styles, Document level styles, External style sheets, A discussion of the benefits and drawbacks of using the various style types.

HTML Forms

Methods of sending data using forms, Encryption of form's content, Emailing a form's content, Text fields, check boxes, radio buttons, text areas, pull-down lists, password and hidden field types
Form design

Frames

Using frames and frameset tags
Coping with non-frame browsers, Inline frames

The JavaScript Language

Syntax, Datatypes, Variables
JavaScript operators
Flow control statements
Strings methods
indexOf(), substring(), split()
Functions
Arrays

The Document Object Model

The Math object
The Date Object

Controlling Windows

Windows features
Overview of DHTML

Controlling Frames

Frames and the DOM
Using JavaScript to control frames

Timing your JavaScript

Using setTimeout()

Event Handlers

Images & JavaScript

Simple & complex rollovers

Forms & JavaScript

Using JavaScript to validate a form's fields

Introduction to XML

History, Overview of Concepts

XML Concepts

What is XML?
XML Syntax and Structure, DTD
XML parser and APIs
DOM and SAX
XSL,

Namespaces

XSQL

Benefits
Retrieve data with XSQL
XSQL and XSL

XML Schemas

What is an XML schema?
Schemas and DTD
XSD features

Formatting and Presenting

XML and Data (XSL)

XSL Language
XSL for transformation
XPath, CSS

Parsing and Validating XML Documents

Review of parsing, XML parsers for programming languages, The DOM parser, Business logic and computation, SAX: Simple API for XML

Using XSU

The XML SQL Utilities
Benefits of XSU
Generating DTD
XSU: inserting and updating rows
XSU: installation and requirements
Storing and Searching XML
Methods for storing XML
Storage as LOBs, CLOB
Untagged data
Storage as relational data