

COURSE CONTENT

UNIT-1

Introduction , Web Browser , Web 2.0

Introduction , W3C, Web 2.0 , Personal, Distributed and Client/Server Computing , Browser Portability , Software Technologies , Web Resources, Customizing Browser Setting , Searching the Internet, Keeping Track of Your Favorite Sites, File Transfer Protocol (FTP), Online Help, Web Resources, Web 2.0?, Search, Content Networks , User-Generated Content, Blogging, Social Networking, Social Media, Tagging , Social Bookmarking , Software Development , Rich Internet Applications (RIAs), Web Services, Mashups, Widgets and Gadgets, Location-Based Services, XML, RSS, Atom, JSON and VoIP, Web 2.0 Monetization Models, Web 2.0 Business Models, Future of the Web , Where to GO for more Web 2.0 **Information ,**

XHTML , Cascading Style Sheets(CSS)

Introduction , Editing XHTML, First XHTML Example, W3CXHTML Validation Service, Headings, Linking , Images, Special Characters and Horizontal Rules , Lists, Tables, Forms, Internal Linking , Meta Elements, Inline Styles, Embedded Style Sheets, Conflicting Style, Linking External Style sheets, Positioning Elements, Backgrounds, Element Dimensions, Box Model and Text Flow, Media Types, Building a CSS Drop-Down Menu, User Style Sheets, CSS 3, Web Resources

UNIT-2

JavaScript: Introduction to Scripting

Introduction , Simple Program: Displaying a Line of Text in a Web Page , Modifying Our First Program , Obtaining User Input with Prompt Dialogs, Dynamic Welcome Page, Adding Integers, Memory Concepts, Arithmetic, Decision Making: Equality and Relational Operators, Web Resources,

JavaScript: Control Statements

Introduction, Algorithms, Pseudo code, Control Structures, if Selection Statement, if ...else selection Statement, Formulating Algorithms: Counter-Controlled Repetition , Formulating Algorithms: Sentinel-Controlled Repetition, Formulating Algorithms: Nested Control Statements, Assignment Operators, Increment and Decrement Operators, Essentials of Counter-Controlled Repetition , For Repetition Statement , Examples Using

the for Statement, Switch **Multiple-Selection** Statement , do....while Repetition Statement , break and continue Statements, Labeled break and Continue Statements, Logical Operators, Summary of Structures Programming , Web Resources

JavaScript: Functions

Introduction , Program Modules in JavaScript, Programmer-Definitions Functions, Function Defamations , Random Number Generation, Example: Game of Chance, Another Example: Random Image Generation , JavaScript Global Functions, Recursion , Recursion vs. Iteration ,

JavaScript: Arrays

Introduction, Arrays, Declaring and Allocating Arrays, Examples Using Arrays, Random Image Generator Using Arrays, References **and** Reference Parameters, Passing Arrays to Functions, Sorting Arrays, Searching Arrays: Linear Search and Binary Search, Multidimensional Arrays, Building an Online Quiz, Introduction to Object Technology, Math Object, String Object, Fundamentals of Characters and Strings, Methods of the string Object , Character-Processing Methods, Searching Methods, Splitting Steins and Obtaining Substrings, XHTML Markup Methods, Date Object, Boolean and Number Objects

Document object Model (DOM): Objects and Collections, introduction , Modeling a Document: DOM Nodes and Trees , Traversing and Modifying a DOM Tree, DOM Collections, Dynamic Styles, Summary of the DOM Objects and Collection, **Web Resources** , JavaScript: Events, Introduction, Registering Event Handlers, Event onload , Event onmousemove, the event Object and this , Rollovers with onmouseover and onmouseout, From Processing with onfocus and onblur, More Form Processing with onsubmit and onreset , Event Building , More Events

UNIT-3

XML and RSS

Introduction, XML Basics, Structuring Data, **XML Namespaces**, Document Type Definitions (DTDs), W3CXML Schema Documents, XML Vocabularies, MathML™, Other Markup Languages, Extensible **Stylesheet** Language and XSL Transformations, Document Object Model (DOM), RSS,

Ajax- Enabled Rich Internet Applications

Introduction, Traditional Web Application vs. Ajax Applications, Rich Internet Applications (RIAs) with Ajax, **History of Ajax**, “Raw” Ajax Example Using the **XMLHttpRequest** Object, Using XML and the DOM, Creating a Full-Scale Ajax-Enabled Application, Dojo Toolkit

UNIT-4

IIS and Apache: introduction, architecture, client – server side scripting, requesting documents.

Database: Introduction, RDBMS, SQL – simple queries, ADO.NET object model, Java DB/ Apache Derby

PHP: introduction, basics, form processing and business logic, connecting to a database, using cookies.

Ruby on Rails: Intro, Ruby, Rails Framework, scripting

UNIT-5

ASP.NET and ASP.NET Ajax: introduction, creating and running a simple web form example, relationship, generating XHTML code, web controls, sessions tracking.

JavaServer Faces Web Applications:

Java Web technologies, creating and running a simple application in Netbeans, examining a JSP file, event processing life cycle, JSF components, Text vs. graphics components, validation, session cookies, web services