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WEB PROGRAMMING

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Course Objectives

- To understand different Internet Technologies.
- To learn java-specific web services architecture

UNIT I WEBSITE BASICS 9 Hours

Web Essentials: Clients, Servers and Communication – The Internet – Basic Internet protocols – World wide web – HTTP Request Message – HTTP Response Message – Web Clients – Web Servers – HTML5 – Tables – Lists – Image – HTML5 control elements – Semantic elements – Drag and Drop – Audio – Video controls - CSS3 – Inline, embedded and external style sheets – Rule cascading – Inheritance – Backgrounds – Border Images – Colors – Shadows – Text – Transformations – Transitions – Animations.

UNIT II

CLIENT SIDE PROGRAMMING

9 Hours

Java Script: An introduction to JavaScript–JavaScript DOM Model-Date and Objects,- Regular Expressions- Exception Handling-Validation-Built-in objects-Event Handling- DHTML with JavaScript- JSON introduction – Syntax – Function Files – Http Request – SQL.

UNIT III

SERVER SIDE PROGRAMMING

9 Hours

Servlets: Java Servlet Architecture- Servlet Life Cycle- Form GET and POST actions- Session Handling- Understanding Cookies- Installing and Configuring Apache Tomcat Web Server-DATABASE CONNECTIVITY: JDBC perspectives, JDBC program example - JSP: Understanding Java Server Pages-JSP Standard Tag Library (JSTL)-Creating HTML forms by embedding JSP code.

UNIT IV

PHP and XML

9 Hours

An introduction to PHP: PHP- Using PHP- Variables- Program control- Built-in functions- Form Validation- Regular Expressions - File handling – Cookies - Connecting to Database. XML: Basic XML- Document Type Definition- XML Schema DOM and Presenting XML, XML Parsers and Validation, XSL and XSLT Transformation, News Feed (RSS and ATOM).

UNIT V

INTRODUCTION TO AJAX AND WEB SERVICES

9 Hours

AJAX: Ajax Client Server Architecture-XML Http Request Object-Call Back Methods; Web Services: Introduction- Java web services Basics – Creating, Publishing, Testing and Describing a Web services (WSDL)-Consuming a web service, Database Driven web service from an application –SOAP.

UNIT VI

RECENT TRENDS

Recent Trends on Web Services

TOTAL PERIODS: 45

Course Outcomes:

At the end of the course, Students can able to

- Construct a basic website using HTML and Cascading Style Sheets.
- Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms.
- Develop server side programs using Servlets and JSP.
- Construct simple web pages in PHP and to represent data in XML format.
- Use AJAX and web services to develop interactive web applications

Text books:

1. Deitel and Deitel and Nieto, —Internet and World Wide Web - How to Program, Prentice Hall, 5th Edition, 2011.

Reference Books:

- 1. Stephen Wynkoop and John Burke —Running a Perfect Websitell, QUE, 2nd Edition, 1999.
- **2.** Chris Bates, Web Programming Building Intranet Applications, 3rd Edition, Wiley Publications, 2009.
- **3.** Jeffrey C and Jackson, —Web Technologies A Computer Science Perspective, Pearson Education, 2011.