



JEPPIAAR INSTITUTE OF TECHNOLOGY



“Self-Belief | Self Discipline | Self Respect”

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CS8651-INTERNET PROGRAMMING - SYLLABUS

OBJECTIVES:

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

UNIT I WEBSITE BASICS, HTML 5, CSS 3, WEB 2.0

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

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

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

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

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.

OUTCOMES:

At the end of the course, the students should be 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 BOOK:

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

REFERENCES:

- 1.Stephen Wynkoop and John Burke —Running a Perfect Website, 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.
- 4.Gopalan N.P. and Akilandeswari J., —Web Technology, Prentice Hall of India, 2011.
- 5.UttamK.Roy, —Web Technologies, Oxford University Press, 2011.