VERTICALS

CCS375 WEB TECHNOLOGIES L T P C
2 0 2 3

COURSE OBJECTIVES:

- To understand different Internet Technologies
- To learn java-specific web services architecture
- To Develop web applications using frameworks

UNIT I WEBSITE BASICS, HTML 5, CSS 3, WEB 2.0 7

Web Essentials: Clients, Servers and Communication – The Internet – World wide web – HTTP Request Message – HTTP Response Message – Web Clients – Web Servers – HTML5 – Tables – Lists – Image – HTML5 control 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. Bootstrap Framework

UNIT II CLIENT SIDE PROGRAMMING 6

Java Script: An introduction to JavaScript–JavaScript DOM Model-Exception Handling-Validation-Built-in objects-Event Handling- DHTML with JavaScript- JSON introduction – Syntax – Function Files.

UNIT III SERVER SIDE PROGRAMMING 5

Servlets: Java Servlet Architecture- Servlet Life Cycle- Form GET and POST actions- Session Handling- Understanding Cookies- DATABASE CONNECTIVITY: JDBC.

UNIT IV PHP and XML 6

An introduction to PHP: PHP- Using PHP- Variables- Program control- Built-in functions- Form Validation. XML: Basic XML- Document Type Definition- XML Schema, XML Parsers and Validation, XSL ,

UNIT V INTRODUCTION TO ANGULAR and WEB APPLICATIONS FRAMEWORKS 6

Introduction to AngularJS, MVC Architecture, Understanding ng attributes, Expressions and data binding, Conditional Directives, Style Directives, Controllers, Filters, Forms, Routers, Modules, Services; Web Applications Frameworks and Tools – Firebase- Docker- Node JS- React- Django-UI & UX.

COURSE OUTCOMES:

CO1: Construct a basic website using HTML and Cascading Style Sheets

CO2: Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms.

CO3: Develop server side programs using Servlets and JSP.

CO4: Construct simple web pages in PHP and to represent data in XML format.

CO5: Develop interactive web applications.

30 PERIODS

PRACTICAL EXERCISES: 30 PERIODS

List Of Experiments:

1. Create a web page with the following using HTML.
   - To embed an image map in a web page.
   - To fix the hot spots.
   - Show all the related information when the hot spots are clicked.

2. Create a web page with all types of Cascading style sheets.
3. Client Side Scripts for Validating Web Form Controls using DHTML.
4. Installation of Apache Tomcat web server.
5. Write programs in Java using Servlets:
   - To invoke servlets from HTML forms.
   - Session Tracking.
6. Write programs in Java to create three-tier applications using JSP and Databases
   - For conducting on-line examination.
   - For displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
7. Programs using XML – Schema – XSLT/XSL.

TOTAL:60 PERIODS

TEXTBOOKS

1. Deitel and Deitel and Nieto, Internet and World Wide Web - How to Program, Prentice Hall, 5th Edition, 2011.
2. Jeffrey C and Jackson, Web Technologies A Computer Science Perspective, Pearson Education, 2011.
3. Angular 6 for Enterprise-Ready Web Applications, Doguhan Uluca, 1st edition, Packt Publishing

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. Gopalan N.P. and Akilandeswari J., —Web Technology‖, Prentice Hall of India, 2011.
4. UttamK.Roy, —Web Technologies‖, Oxford University Press, 2011.
5. Angular: Up and Running: Learning Angular, Step by Step, Shyam Seshadri, 1st edition, O′Reilly

CO's- PO's & PSO's MAPPING

CO's	PO's												PSO's	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
1	2	2	3	3	3	-	-	-	2	-	-	3	3	-
2	3	2	3	2	3	-	-	-	2	-	-	3	3	-
3	1	2	2	3	3	-	-	-	1	-	-	2	2	2
4	3	3	3	2	3	-	-	-	2	-	-	3	3	-
5	2	2	3	1	2	-	-	-	3	-	-	2	3	1
AVg.	2.2	2.2	2.8	2.2	2.8	-	-	-	2	-	-	2.6	2.8	1.5

1 - low, 2 - medium, 3 - high, '-' - no correlation

CCS332 **APP DEVELOPMENT** **L T P C**
2 0 2 3

COURSE OBJECTIVES:

- To learn development of native applications with basic GUI Components
- To develop cross-platform applications with event handling
- To develop applications with location and data storage capabilities
- To develop web applications with database access