Savitribai Phule Pune University

T.Y.B.Sc. (Computer Science) - Sem - V

Course Type:DSEC – II Course Code: CS - 353

Course Title: Web Technologies - I

Teaching Scheme	No. of Credits	Examination Scheme	
03 Lect/ week	2	IE: 15 marks	
		UE: 35 marks	

Prerequisites

HTML basics for form designing

Course Objectives

- To Design dynamic and interactive Web pages.
- To Learn Core-PHP, Server Side Scripting Language
- To Learn PHP-Database handling

Course Outcomes

On completion of the course, student will be able to-

• Understand how to develop dynamic and interactive Web Page

Course Contents

Chapter 1 Introduction to HTML, HTTP and PHP

10 Lects

Overview of HTML and Basic Tags , Creating Forms , Tables, HTML5 Semantics.

CSS basic concept ,Three ways to use CSS, Box Model, Navigation Bar .

Introduction to Web server and Web browser.

HTTP basics.

PHP Basics: Use of PHP, Lexical structure, Language basics.

Chapter 2 Function and String

8 Lects

Defining and calling a function

Default parameters

Variable parameters, Missing parameters

Variable function, Anonymous function

Types of strings in PHP

Printing functions

Encoding and escaping

Comparing strings

Manipulating and searching strings

Regular expressions

Chapter 3 Arrays

6 Lectures

Indexed Vs Associative arrays

Identifying elements of an array

Storing data in arrays

Multidimensional arrays

3.4Extracting multiple values

Converting between arrays and variables

Traversing arrays

Sorting

Action on entire array

Chapter 4 Files and database handling

10 Lectures

Working with files and directories

Opening and Closing, Getting information about file, Read/write to file,

Splitting name and path from file, Rename and delete files

Reading and writing characters in file

Reading entire file

Random access to file data

Getting information on file

Ownership and permissions

Using PHP to access a database

Relational databases and SQL

PEAR DB basics

Advanced database techniques

Chapter 5 | Handling email with php

2 Lectures

Email background

Internet mail protocol

Structure of an email message

Sending email and validation of Email_id with php

Reference Books:

- 1. HTML & CSS: The Complete Reference, Fifth Edition Author: Thomas A. Powell First published: 01 Jan 2010.
- 2. Programming PHP By Rasmus Lerdorf and Kevin Tatroe, O'Reilly publication
- 3. Beginning PHP 5, Wrox publication
- 4. PHP web sevices, Wrox publication
- 5. Mastering PHP, BPB Publication
- 6. PHP cookbook, O'Reilly publication
- 7. PHP for Beginners, SPD publication
- 8. Programming the World Wide Web, Robert W Sebesta(3rd Edition)
- 9. HTML 5 Black Book : Covers Css3, Javascript, XML, XHTML, Ajax, PHP And Jquery by Kogent Learning Solutions Inc, Published November 2011 by Dreamtech Press
- 10. Spurlock Jake, Bootstrap: Responsive Web development. O'Reilly Media, Inc

Ref. Links

- 11. www.php.net.in
- 12. www.W3schools.com
- 13. www.wrox.com
- 14 https://coreui.io/docs/layout/grid/#grid-options
- 15. https://www.tutorialrepublic.com/twitter-bootstrap-tutorial/bootstrap-grid-system.php

Savitribai Phule Pune University

T.Y.B.Sc. (Computer Science)- Sem - VI

Course Type:DSEC – V Course Code: CS - 363

Course Title: Web Technologies - II

Teaching Scheme	No. of Credits	Examination Scheme
3 Lect / week	2	IE: 15 marks
		UE: 35 marks

Prerequisites

- HTML5.CSS
- Core PHP
- · Bootstrap framework utility

Course Objectives

- To Learn different technologies used at client Side Scripting Language
- To Learn XML and XML parsers.
- To One PHP framework for effective design of web application.
- To Learn Java Script to program the behavior of web pages.
- To Learn AJAX to make our application more dynamic.
- Framework has

Course Outcomes

On completion of the course, student will be able to-

- Build dynamic website.
- Using MVC based framework easy to design and handling the errors in dynamic website.

Course Contents

Chapter 1 Introduction to Web Techniques

6 Lect

Variables

Server information

Processing forms

Setting response headers

Maintaining state

PHP error handling

Chapter 2 XML 6 Lect

What is XML?

XML document Structure

PHP and XML

XML parser

The document object model

The simple XML extension

Changing a value with simple XML

Chapter 3	Java Script and Jquery	10 Lect

Overview of JavaScript

Object Orientation and JavaScript Basic Syntax(JS datatypes, JS variables)

Primitives, Operations and Expressions

Screen Output and keyboard input(Verification and Validation)

JS Control statements and JS Functions

JavaScript HTML DOM Events(onmouseup, onmousedown, onclick, onload, onmouseover, onmouseout).

JS Strings and JS String methods

JS popup boxes(alert, confirm, prompt).

Jquery library, Including jquery library in page

Jquery selector, DOM manipulation using jquery

Chapter 4 AJAX

6 Lect

Introduction of AJAX

AJAX web application model

AJAX –PHP framework

Performing AJAX validation

Handling XML data using php and AJAX

Connecting database using php and AJAX

Chapter 5 PHP framework CodeIgniter

8 Lect

CodeIgniter - Overview, Installing CodeIgnite

Application Architecture

MVC Framework, Basic concept of CodeIgniter, Libraries

Working with databases

Load external JS and CSS page & redirecting from controller, Adding JS and CSS,

Page redirection.

Loading dynamic data on page & session management, cookies management

Reference Books:

- 1. Programming PHP By Rasmus Lerdorf and Kevin Tatroe O'Reilly publication
- 2. Beginning PHP 5, Wrox publication
- 3. AJAX Black Book Kogent solution
- 4. Mastering PHP BPB Publication
- 5. Professional Codeigniter By Thomas Myer, Wrox Publication,
- 6. Codeinniter 2 CookBook By Rob Foster ,PACKT Publication ,
- 7. JQuery CookBook, O'reilly Publication.

Ref. Links:

- 1. www.php.net.in
- 2. www.W3schools.com
- 3. https://www.tutorialspoint.com/codeigniter/index.htm
- 4. https://api.jquery.com/
- 5. http://codeigniter.com/docs