

WEB DESIGN LABORATORY

LAB MANUAL

B.E IN COMPUTER ENGINEERING (TECO - SEM V)

(2019-20)

DEPARTMENT OF COMPUTER ENGINEERING



School of Engineering & Technology

Affiliated to: University of Mumbai, Recognised by: DTE (Maharashtra) & Approved by: AICTE (New Delhi)

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COURSE OBJECTIVES:

- 1. To design and create web pages using HTML5 and CSS3.
- 2. To create web pages and provide client side validation.
- 3. To create dynamic web pages using server side scripting.
- 4. To use MVC framework for web application development.

COURSE OUTCOMES:

On completion of course learner will be able to:

- 1. Understand the core concepts and features of Web Technology.
- 2. Design static web pages using HTML5 and CSS3.
- 3. Apply the concept of client side validation and design dynamic web pages using JavaScript and JQuery.
- 4. Evaluate client and server side technologies and create Interactive web pages using PHP , AJAX with database connectivity using MySQL.
- 5. Understand the basics of XML, DTD and XSL and develop web pages using XML / XSLT.
- 6. Analyze end user requirements and Create web application using appropriate web technologies and web development framework.



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TEXTBOOKS:

- 1. Ralph Moseley, M.T. Savliya, Developing Web Application, Willy India, Second Edition, ISBN: 978-81-265-3867-6
 - 2. Web Technology Black Book, Dreamtech Press, First Edition, 978-7722-997
 - 3. Robin Nixon, "Learning PHP, MySQL, JavaScript, CSS & HTML5" Third Edition, O'REILLY,2014.

(http://www.ebooksbucket.com/uploads/itprogramming/javascript/Learning_PHP_MySQL_ Javascript_CSS_HTML5__Robin_Nixon_3e.pdf)

4. Professional Rich Internet Applications: AJAX and Beyond, Dana Moore, Raymond Budd, Edward Benson, Wiley publications.

https://ebooks-it.org/0470082801-ebook.htm

REFERENCE BOOKS:

- 1. Harvey & Paul Deitel& Associates, Harvey Deitel and Abbey Deitel, —Internet and World Wide Web How To Program, Fifth Edition, Pearson Education, 2011.
- 2. Achyut S Godbole and AtulKahate, —Web Technologies, Second Edition, Tata McGraw Hill, 2012.
- 3. Thomas A Powell, Fritz Schneider, —JavaScript: The Complete Reference, Third Edition, Tata McGraw Hill, 2013.
- 4. David Flanagan, —JavaScript: The Definitive Guide, Sixth Edition, O'Reilly Media, 2011
- 5. Steven Holzner, —The Complete Reference PHP, Tata McGraw Hill, 2008
- 6. Mike Mcgrath, —PHP & MySQL in easy Steps, Tata McGraw Hill, 2012.

DIGITAL MATERIALS:

- 1. www.nptelvideos.in
- 2. www.w3schools.com
- 3. http://spoken-tutorial.org



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INDEX PAGE

Name:			Roll No:		
Class: TE		Semester: V	Scheme: CBCS		
Programn	ne: Computer Engineering		Batch:	2017-21	
Course: W	/EB DESIGN LAB		Course	Code: CSL504	

Sr		Dage	Evaluation Parameters			(10)		Sign
No.	Experiment Title	Page No.	Executi on (3)	On Time (2)	Quiz(5)	Total (10)	DOP	(Dated)
1	Installation and Setting of LAMP / WAMP / XAMP							
2	Create Simple web page using HTML5							
3	Design and Implement web page using CSS3 and HTML5							
4	Form Design and Client Side Validation using: a. Javascript and HTML5 b. Javascript and JQuery							
5	Develop simple web page using PHP							
6	Develop interactive web pages using PHP with database connectivity MYSQL							
7	Develop XML web page using DTD, XSL							
8	Implement a webpage using Ajax and PHP							
9	Hosting the website with Domain Registration Process.							
10	Design a Web application using Laravel Framework							
	Mini Project							

Course Owner



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No	Title	Page No
1	Installation and Setting of LAMP / WAMP / XAMP	
2	Create Simple web page using HTML5	
3	Design and Implement web page using CSS3 and HTML5	
4	Form Design and Client Side Validation using :	
	a. Javascript and HTML5	
	b. Javascript and JQuery	
5	Develop simple web page using PHP	
6	Develop interactive web pages using PHP with database connectivity MYSQL	
7	Develop XML web page using DTD, XSL	
8	Implement a webpage using Ajax and PHP	
9	Hosting the website with Domain Registration Process.	
10	Design a Web application using Laravel Framework	

^{* *}Setting up /buying the web host management system for hosting of mini project is recommended.

Term Work: The distribution of marks for term work shall be as follows:

Lab Assignments: 10 Marks

Mini Project: 10 Marks Attendance: 05 Marks

Practical & Oral Examination:

Practical & Oral examination is to be conducted by pair of internal and external examiners based on the above syllabus.



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COURSE CODE: CSL504 ROLL NO: COURSE NAME: WEB DESIGN LAB NAME: CLASS: TECO - SEM V BATCH:

EXPERIMENT NO:01

AIM: Installation and Setting of LAMP / WAMP / XAMP

PROCEDURE:

- 1. Select the Operating System and Database software to setup the web server.
 - LAMP Linux Apache MySQL PHP
 - WAMP Windows Apache MySQL PHP/PERL
 - XAMPP Windows Apache MariaDB PHP/PERL
 - MAMP MacOS Apache MySQL PHP/PERL
- 2. Execute the command line commands or run the exe depending on the OS selected.
 - a) sudo apt install apache2
 - b) sudo apt install mysql-server
 - c) sudo apt install php-pear php-fpm php-dev php-zip php-curl php-xmlrpc php-gd php-mysql php-mbstring php-xml libapache2-mod-php
 - d) sudo service apache2 restart
 - e) http://localhost/
 - f) Create a info.php file in /var/www/html folder or type the following command in console under /var/www/html/ folder php -r 'echo "\n\nYour PHP installation is working fine.\n\n\n";'

REFERENCES:

https://howtoubuntu.org/how-to-install-lamp-on-ubuntu

https://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-php-lamp-stack-ubuntu-18-04

https://www.makeuseof.com/tag/how-to-set-up-your-own-wampserver/

https://premium.wpmudev.org/blog/setting-up-xampp/

CONCLUSION:		



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EXPERIMENT NO:02

AIM: Create a simple web page using HTML5.

PROCEDURE:

- 1. Open Text Editor / Visual Code / Sublime Text
- 2. Create a new file and save as index.html.
- 3. Add code by using the HTML5 semantics.
 - a) Header
 - b) Footer
 - c) Article
 - d) Section
 - e) Nav
 - f) Audio
 - g) Video
- 4. Save the code and open the file in browser.
- 5. Create contact.html and profile.html similarly by including the following HTML tags.
 - a) HTML Text
 - b) HTML Links
 - c) HTML Lists
 - d) HTML Tables
 - e) HTML Forms
 - f) HTML Images

REFERENCES:

https://www.w3schools.com/html/html5_intro.asp https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5 https://html.spec.whatwg.org/

CONCLUSION:



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EXPERIMENT NO:03

AIM: Design and Implement web page using CSS3 and HTML5

PROCEDURE:

- 1. Create about.html and registration.html page in your project folder.
- 2. Create a navigation bar and link all the pages using anchor tag.
- 3. Add the content of your team members in about.html page and create a sign-up form in registration.html by considering the following attributes:
 - name, rollno, department, class, sem, gender, email, phone, dob, password, batch, etc.
- 4. Create a css file as mystyle.css and save it in css folder in your project folder.
- 5. Add the CSS3 styles for all the elements used in the HTML page.
- 7. Open the webpages (about.html and registration.html) in browser.

REFERENCES:

https://www.w3schools.com/css/ https://developer.mozilla.org/en-US/docs/Web/CSS https://css-tricks.com/

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EXPERIMENT NO:04

AIM: Form Design and Client Side Validation using:

a. Javascript and HTML5 b. Javascript and JQuery

PROCEDURE:

A. JavaScript and HTML5

- 1. Requires the contact.html and registration.html webpage for validation.
- 2. Create 2 files (validate.js and app.js) under js folder in the project folder.
- 3. Write the JavaScript code for validating the HTML Form elements of contact.html page.
- 4. Link the JS file at the end of the HTML webpage by including the following line: <script src="js/validate.js"></script>
- 5. Validate the contact webpage by opening in the browser.
- B. JavaScript and Jquery
 - 1. Browse jquery.com for downloading the latest compressed version (jquery-3.4.1.min.js)
 - 2. Save this file under js folder in the project folder.
 - 3. Write the jQuery code for validating the HTML for elements of registration.html
 - 4. Link the JS file at the end of the HTML webpage by including the following line: <script src="js/jquery-3.4.1.min.js"></script> <script src="js/app.js"></script>
 - 5. Validate the registration webpage by opening in the browser.

REFERENCES:

https://www.javascript.com/

https://developer.mozilla.org/en-US/docs/Web/JavaScript

https://www.w3schools.com/js/

https://jquery.com/

https://www.w3schools.com/jquery/default.asp

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EXPERIMENT NO:05

AIM: Develop simple web page using PHP

PROCEDURE:

- 1. Create two pages in text editor (login.php and home.php) in the project folder under /var/www/html directory.
- 2. Update the navigation menu with the proper links.
- 3. Write the code for login.php and home.php using PHP and Jquery.
- 4. Open the php page by using the link:
 <a href="http://localhost/<your_project_folder_name">http://localhost/<your_project_folder_name/login.php
- 5. Enter the credentials and navigate to home.php.

REFERENCES:

https://www.php.net/
https://www.w3schools.com/php/default.asp
https://www.codecademy.com/learn/learn-php

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EXPERIMENT NO:06

AIM: Develop interactive web pages using PHP with database connectivity MYSQL

PROCEDURE:

- 1. Create your own mysql user by login from root user.
 - a) create user 'abdul' @ 'localhost' identified by 'pass123';
 - b) grant all on *.* to 'abdul' @ 'localhost';
 - c) flush privileges;
 - d) exit
- 2. Login with your mysql account and create a new database.
 - a) mysql u abdul p
 - b) create database smartsystem;
 - c) use smartsystem;
- 3. Create two tables (users and contactform) by identifying the elements of HTML webpage register.html and contact.html
- 4. Create two php webpages (checkdb.php and submitreg.php) for linking the HTML webpages with the MySQL database.
- 5. Write the DB connectivity code in checkdb.php and check for any errors.
- 6. Write the PHP code for fetching the values submitted through HTML form and inserting those values in the MySQL database.
- 7. Similarly repeat the above step for linking the contact HTML form with MySQL table.
- 8. Create a new php page (viewusers.php) and write the PHP-MySQL code to view the registered users.
- 9. Create action buttons in the viewusers.php for editing and deleting a record.

REFERENCES:

https://www.php.net/manual/en/book.mysql.php https://www.w3schools.com/php/php_mysql_intro.asp http://www.mysqltutorial.org/php-mysql/

CONCLUSION:			