



WEB DESIGN LABORATORY

LAB MANUAL

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

(2019-20)

DEPARTMENT OF COMPUTER ENGINEERING



ANJUMAN-I-ISLAM'S KALSEKAR TECHNICAL CAMPUS **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 Atul Kahate, —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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Name: _____

Roll No: _____

Class: TE **Semester:** V

Scheme: CBCS

Programme: Computer Engineering

Batch: 2017-21

Course: WEB DESIGN LAB

Course Code: CSL504

Sr No.	Experiment Title	Page No.	Evaluation Parameters			Total (10)	DOP	Sign (Dated)
			Execution (3)	On Time (2)	Quiz(5)			
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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2	Create Simple web page using HTML5	
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4	Form Design and Client Side Validation using : a. Javascript and HTML5 b. Javascript and JQuery	
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6	Develop interactive web pages using PHP with database connectivity MYSQL	
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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-xmllrpc 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:

SCREENSHOTS / OUTPUTS:



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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/>

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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.
6. Link the CSS file with each of your HTML pages by adding the following code:
`<link rel="stylesheet" href="css/mystyle.css" type="text/css"`
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 : 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 :
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/>

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EXPERIMENT NO : 07

AIM: Develop XML web page using DTD, XSL

PROCEDURE:

1. Create 3 files (marksheet.xml, marksheet.dtd and loadxml.html)
2. Write the XML code consisting of course (courseid, title, credit, ese oral prac, tw, oe, total) for all the subjects of Semester.
3. Write the XML dtd code in marskheet.dtd file.
4. Write the JavaScript code in loadxml.html to fetch and display the contents of xml file.
5. Run the loadxml.html to view the output.

REFERENCES:

<https://www.w3schools.com/xml/>
https://www.w3schools.com/xml/xml_dtd.asp
https://www.w3schools.com/xml/dom_intro.asp
https://www.w3schools.com/xml/dom_nodes_nodelist.asp
https://www.w3schools.com/xml/ajax_xmlfile.asp
https://www.w3schools.com/xml/ajax_intro.asp
https://www.w3schools.com/xml/ajax_xmlhttprequest_create.asp
https://www.w3schools.com/xml/ajax_xmlhttprequest_send.asp

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EXPERIMENT NO : 08

AIM: Implement a webpage using Ajax and PHP

PROCEDURE:

1. Create two files (register.php, checkuser.php)
2. Create a input field of text type and write the jQuery code to handle the events.
3. Include the checkdb.php file in checkuser.php and accept the username from the register.php to validate the availability of username from the database.
4. Run the register.php to check the output.

REFERENCES:

https://www.w3schools.com/xml/ajax_php.asp

https://www.w3schools.com/xml/ajax_database.asp

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EXPERIMENT NO : 09

AIM: Hosting the website with Domain Registration Process.

PROCEDURE:

1. Register and create a domain such as (abdulsalam.tech, abdulsalam.live, abdulsalam.com) from the service providers (Bigrock, GoDaddy, Hostgator, Midphase, etc)
2. Update the Nameservers after login to the web hosting provider control panel
for. eg. Nameserver 1 : ns1.byet.org Nameserver 2 : ns2.byet.org
Nameserver 3 : ns3.byet.org Nameserver 4 : ns4.byet.org
3. Register for free hosting on www.byethost.com
4. Activate account by clicking on the mail received in Inbox or Spam folder.
5. After activating account, check for login credentials in Inbox / Spam folder and save all of them in a separate text file on your desktop.
6. Login to Control Panel (cpanel) (<http://cpanel.byethost7.com>)
7. Change your account password and see the statistics on the right side of the window.
8. Navigate to Online File Manager and browse to httdocs folder to upload your source code via online upload with zip file option or download FTP client such as Filezilla to upload with FTP details provided in login credentials.
9. Click on Dashboard and click on MySQL databases to create a new database.
10. Click on Connect Now to open PhpMyAdmin page to manage the databases.
11. Note the MySQL servername, username and password and update the values in checkdb.php file under Online File Manager.
12. Open terminal (Ctrl + Alt+ T) and run the following command to export your database.
Mysqldump -u abdul -p abdul smartsystem > smartsystem.sql
13. In PhpMyAdmin, click on the database created and go to Import option. Click on browse and import the sql file (smartsystem.sql) and click on Go.
14. After the database and the source code are uploaded, browse your website <http://www.abdulsalam.byethost7.com> or (<http://www.abdulsalam.tech>)
Navigate through all the pages and check the working.

REFERENCES:

<http://cpanel.byethost.com/index.php>

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EXPERIMENT NO : 10

AIM: Design a Web application using Laravel Framework

PROCEDURE:

Install the following pre-requisites:

Linux Environment:

- LAMP
<https://kalaweeza.com/2018/09/18/install-lamp-server-linux-mint-19-cinnamon-commands/>
- Composer - <https://getcomposer.org/download/>
- Node JS - <https://nodejs.org/en/>
- Visual Code - <https://code.visualstudio.com/download>

Windows Environment:

- XAMPP: <https://www.apachefriends.org/download.html>
- Git Bash : <https://git-scm.com/downloads>
- Composer - <https://getcomposer.org/download/>
- Node JS - <https://nodejs.org/en/>
- Visual Code - <https://code.visualstudio.com/download>

Verify the following links:

Apache : <http://localhost>

PhpMyAdmin - <http://localhost/phpmyadmin>

Login into PhpMyAdmin and create a new database - laravelapp

In terminal or Git Bash, install composer from the link given above.

```
sudo mv composer.phar /usr/local/bin/composer
```

```
chmod +x /usr/local/bin/composer
```

Type composer in terminal.

To create a Project, navigate to `/var/www/html/` folder or `C:/xampp/htdocs` and type the following command:

Via Composer

```
composer create-project --prefer-dist laravel/laravel <appname>
```

Via Laravel Installer

```
cd /var/www/html
```



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composer global require laravel/installer
laravel new myfirstlaravel

To open project folder in VS code, run the following code:
code myfirstlaravel

Run php artisan server in terminal to load the laravel application on <http://localhost:8000>

REFERENCES:

<https://laravel.com/>

<https://laravel.com/docs/6.x>

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MINI PROJECT

ON

[TOPIC]

BY

NAME [ROLLNO]

NAME [ROLLNO]

NAME [ROLLNO]

CLASS - TECO

BATCH - [1]