

**Pune Institute of Computer Technology,  
Dhankawadi, Pune - 411043  
Department of Computer Engineering**

**Subject:** Web Technology Lab (310257)

**Academic Year:** 2025-26

**Class:** TE

**Semester:** II

## List of Lab Experiments

Sr No.	Name of assignment																	
1	<p>Case study: Visit various websites available online for different client projects, identify and note down the evaluation results in following format and note down and learn and conclude different website design issues that should be considered while designing a web site.</p> <table><tr><td>Sr No.</td><td>Website URL</td><td>Purpose of website</td><td>Things liked in the website</td><td>Things disliked in the website</td><td>overall evaluation (Good/Bad)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						Sr No.	Website URL	Purpose of website	Things liked in the website	Things disliked in the website	overall evaluation (Good/Bad)						
Sr No.	Website URL	Purpose of website	Things liked in the website	Things disliked in the website	overall evaluation (Good/Bad)													
2	<p>Implement a web page index.htm for any client website (e.g., a restaurant website project) using following:</p> <ul style="list-style-type: none"><li>a. HTML syntax: heading tags, basic tags and attributes, frames, tables, images, lists, links for text and images, forms etc.</li><li>b. Use of Internal CSS, Inline CSS, External CSS</li></ul>																	
3	<p>Implement an application in Java Script using following:</p> <ul style="list-style-type: none"><li>a) Design UI of application using HTML, CSS etc.</li><li>b) Include Java script validation</li><li>c) Use of prompt and alert window using Java Script</li></ul> <p>e.g., Design and implement a simple calculator using Java Script for operations like addition, multiplication, subtraction, division, square of number etc.</p> <ul style="list-style-type: none"><li>a) Design calculator interface like text field for input and output, buttons for numbers and operators etc.</li><li>b) Validate input values</li></ul> <p>Prompt/alerts for invalid values etc.</p>																	
4	<p>Design the XML document to store the information of the employees of any business organization and demonstrate the use of:</p> <ul style="list-style-type: none"><li>a) DTD</li></ul> <p>XML Schema and display the content in (e.g., tabular format) by using CSS/XSL.</p>																	
5	<p>Implement the sample program demonstrating the use of Servlet. e.g., Create a database table ebookshop (book_id, book_title, book_author, book_price, quantity) using database like Oracle/MySQL etc. and display (use SQL select query) the table content using servlet.</p>																	

6	Implement the program demonstrating the use of JSP. e.g., Create a database table students_info (stud_id, stud_name, class, division, city) using database like Oracle/MySQL etc. and display (use SQL select query) the table content using JSP.
7	Build a dynamic web application using PHP and MySQL. a. Create database tables in MySQL and create connection with PHP. b. Create the add, update, delete and retrieve functions in the PHP web app interacting with MySQL database
8	Design a login page with entries for name, mobile number email id and login button. Use struts and perform following validations a. Validation for correct names b. Validation for mobile numbers c. Validation for email id d. Validation if no entered any value e. Re-display for wrongly entered values with message f. Congratulations and welcome page upon successful entries
9	Design an application using Angular JS. e.g., Design registration (first name, last name, username, password) and login page using Angular JS.
10	Design and implement a business interface with necessary business logic for any web application using EJB. e.g., Design and implement the web application logic for deposit and withdraw amount transactions using EJB.
11	<b>Mini Project:</b> Design and implement a dynamic web application for any business functionality by using web development technologies that you have learn in the above given assignments.

**Prof. Parag J. Jambhulkar**  
Subject Coordinator

**Dr. B. A. Sonkamble**  
Head, Dept. of Comp. Engg.

**Savitribai Phule Pune University**  
**Third Year of Computer Engineering (2019 Course)**  
**310257:Web Technology Laboratory**

<b>Teaching Scheme</b> <b>Practical: 02 Hours/Week</b>	<b>Credit: 01</b>	<b>Examination Scheme and Marks</b> <b>Term Work: 25 Marks</b> <b>Oral: 25 Marks</b>
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**Companion Course :** Web Technology (310252)

**Course Objectives:**

- To learn the web based development environment
- To use client side and server side web technologies
- To design and develop web applications using front end technologies and backend databases

**Course Outcomes:**

On completion of the course, learners will be able to

- CO1:** Understand the importance of website planning and website design issues  
**CO2:** Apply the client side and server side technologies for web application development  
**CO3:** Analyze the web technology languages, frameworks and services  
**CO4:** Create three tier web based applications

Sr No.	Name of assignment	CO Mapping												
1	<p>Case study: Visit various websites available online for different client projects, identify and note down the evaluation results in following format and note down and learn and conclude different website design issues that should be considered while designing a web site..</p> <table><tr><th>Sr No.</th><th>Website URL</th><th>Purpose of website</th><th>Things liked in the website</th><th>Things dis liked in the website</th><th>overall evaluation (Good/Bad)</th></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	Sr No.	Website URL	Purpose of website	Things liked in the website	Things dis liked in the website	overall evaluation (Good/Bad)							CO1
Sr No.	Website URL	Purpose of website	Things liked in the website	Things dis liked in the website	overall evaluation (Good/Bad)									
2	<p>Implement a web page index.htm for any client website (e.g., a restaurant website project) using following:</p> <p>c. HTML syntax: heading tags, basic tags and attributes, frames, tables, images, lists, links for text and images, forms etc.</p> <p>d. Use of Internal CSS, Inline CSS, External CSS</p>	CO2												
3	<p>Design the XML document to store the information of the employees of any business organization and demonstrate the use of:</p> <p>b) DTD</p> <p>c) XML Schema</p> <p>And display the content in (e.g., tabular format) by using CSS/XSL.</p>	CO2												
4	<p>Implement an application in Java Script using following:</p> <p>d) Design UI of application using HTML, CSS etc.</p>	CO2												

	e) Include Java script validation f) Use of prompt and alert window using Java Script  e.g., Design and implement a simple calculator using Java Script for operations like addition, multiplication, subtraction, division, square of number etc. c) Design calculator interface like text field for input and output, buttons for numbers and operators etc. d) Validate input values e) Prompt/alerts for invalid values etc.	
5	Implement the sample program demonstrating the use of Servlet.  e.g., Create a database table ebookshop (book_id, book_title, book_author, book_price, quantity) using database like Oracle/MySQL etc. and display (use SQL select query) the table content using servlet.	CO2
6	Implement the program demonstrating the use of JSP.  e.g., Create a database table students_info (stud_id, stud_name, class, division, city) using database like Oracle/MySQL etc. and display (use SQL select query) the table content using JSP.	CO2
7	Build a dynamic web application using PHP and MySQL.  c. Create database tables in MySQL and create connection with PHP. d. Create the add, update, delete and retrieve functions in the PHP web app interacting with MySQL database	CO2
8	Design a login page with entries for name, mobile number email id and login button. Use struts and perform following validations g. Validation for correct names h. Validation for mobile numbers i. Validation for email id j. Validation if no entered any value k. Re-display for wrongly entered values with message l. Congratulations and welcome page upon successful entries	CO4
9	Design an application using Angular JS.  e.g., Design registration (first name, last name, username, password) and login page using Angular JS.	CO2
10	Design and implement a business interface with necessary business logic for any web application using EJB.  e.g., Design and implement the web application logic for deposit and withdraw amount transactions using EJB.	CO3
11	<b>Mini Project:</b> Design and implement a dynamic web application for any business functionality by using web development technologies that you have learn in the above given assignments.	CO1,2,3,4