

# FULL STACK DEVELOPMENT LAB

(Professional Elective-III Lab)

IV Year B. Tech CSE (AI & ML) I Sem.

Course Code: A2275C8

## Course Outcomes:

At the end of this course, students will be able to:

1. To gain the knowledge of various Front-End technologies.
2. To Design Front-End of the full stack applications.
3. To understand and develop Back-End applications to connect to database.

## WEEK-1

1. a) Create a Web Page using HTML which contains a Heading, Image and 2 hyperlinks. Each hyperlink opens a new page in the same web browser. New page contains "Go Back" link that takes you to the mainpage.

a) Write a HTML program to create a Registration form, which contains User Name, Password,

Date of Birth, Gender, Mail-id, Contact number, Address and submit button.

## WEEK-2

2. a) Create a web page to demonstrate Position Property in CSS.

b) Create a Newspaper Style Design to print minimum 2 articles using HTML and CSS.

## WEEK-3

3. a) Write a JavaScript program to change the background color after clicking "change color" button.

b) Write a JavaScript program to validate registration page using regular expression.

## WEEK-4

4. a) Write a code to hide and show an element in a periodic interval without any action from

the user using JQuery.

b) Write a program to create and Build a star rating system using JQuery.

## **WEEK-5**

5. a) Write a program to demonstrate ReactJS Class and Instance.
- b) Write a program to create a basic calculator to perform arithmetic operations using ReactJS.

## **WEEK-6**

6. a) Demonstrate simple event handling example using ReactJS.
- b) Write a program to create a simple voting application system using ReactJS.

## **WEEK-7**

7. a) Create a webpage to display "Hello World" using SERVLET.
- b) Implement a web application using SERVLET, which takes a name as input and on submitting it, shows a hello <name> page. It shows start time at the right top corner of the page and provides a logout button. On clicking logout button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).

## **WEEK-8**

8. a) Write a JSP program to find a factorial of the given number.
- b) Create a user validation web application using JSP, where the user submits the login name and password to the server. The name and password are checked against the data already available in database and if the data matches, a successful login page is returned. Otherwise show a failure message to the user.

## **WEEK-9**

9. a) Demonstrate a simple example of Spring web MVC framework.
- b) Illustrate how database is connected in Spring Framework by using simple CRUD application.

## **WEEK-10**

10. a) create a simple example of hibernate application using eclipse IDE.
- b) Create an application to demonstrate Hibernate Query Language.

## **WEEK-11 and 12**

CASE STUDY-1: Create a Chat module/Interface using HTML CSS and JavaScript. The chat interface primarily consists of two segments: the message header and the chat box.

Message-Header- The message header resides at the top of the chat box. It includes the user's name, avatar or profile image, and the user's last seen. Last seen is the last time the user

was active.

The Chat-Box- The chat box consists of the message page and the message bottom sections.

- Message page-The message page consists of incoming and outgoing messages, as well as the avatars of the senders. It also displays the time at which each message is sent.
- The Message-Bottom-This section contains an input field where the user can type in the messages and a send button to send them.