

Kolhapur Institute of Technology's College of Engineering Kolhapur

Department of Computer Science and Engineering

Subject: Web Technology Lab

AY: 2024-25 [SEM-I]

Problem Statements

1. Design a user registration form and validate using JAVASCRIPT with following fields and validations
 1. User Name (should contain first name and last name only characters allowed)
 2. Gender radio button (Male & Female)
 3. Date of Birth
 4. List of States (any 5 states Dropdown) 5 Pin Code 6 digits only
 7. Email (Should be valid email address)
 8. Password (should be minimum 4 characters)
 9. Confirm Password (should match to Password Entered)
2. Develop EMI calculator using JavaScript
 - a. **Input:** Amount, Duration[Month] and Interest Rate [Input Type=range]
 - b. **Output:** Total Payable amount, Total Interest Amount and EMI

3. Develop JSP application for student registration and insert information into MySQL database

- a. Input: Roll number, first name and Last Name [input type=text] Academic Year:[Drop-Down list]
Birth date:- separate drop down list for Day, Month and Year using for loop
- b. Output: 1) Show successfully registered message
2) If roll number is already present in database then show error message as “this student is already registered”

4. Develop a simple Servlet application for student login

- a. Validate username and password with database
- b. If username or password is incorrect show error message on login page using request dispatcher forward
- c. If data validated successfully then show profile page

5. Develop a simple JSP application for student registration and insert information of student into MySQL database
 - a. **Input:** Roll number, first name and Last Name [input type=text] Academic Year:[Drop-Down list]
Gender:[input type: radio]
Mobile Number:[Check Box]
 - b. **Output:** 1)If roll number is already present in database then show error message as “already registered”
2) Otherwise insert data into database and show “Successfully registered “message
6. Develop a simple JSP application to update student information in MySQL database
[Student table: first name, last name, gender, mobile number, college name, Academic year]
 - a. Design form to accept roll number and retrieve information from database and show in another HTML form
 - b. Update first name , academic year and mobile number of user,
 - c. If roll number is present in database then show “Data not found message”
7. Develop a simple JSP application to delete information of particular employee from database [Employee table: first name, last name, mobile number, organization and salary]
 - a. Design HTML form to accept roll number from user
 - b. Before deleting information show alert message “do you want to delete ----[roll number]”
 - c. If roll number is not present in database then show “Data not found message”

8. Develop a JSP application to retrieve Employee information from MySQL database
[Database contain employee information: Employee ID, first name, last name, Department and Salary]
 - a. Display all student data in HTML table
 - b. Accept employee ID or First name and display employee ID, First name and Department of that employee
 - i. If Employee ID is not present in database then show “Data not found” message
9. Create servlet program for student registration and insert information into MySQL database
 - a. Input: Roll number, first name and Last Name [input type=text] Academic Year:[Drop-Down list]
Gender:[input type: radio]
Qualification: HSC, SSC, Diploma, BE, [Check Box] [store it into single column database]
 - b. Output: 1) Show successfully registered message
2) If roll number is already present in database then show error message as “this student is already registered”
10. Develop a Servlet application to delete information of particular employee from database
[Database contain employee information: Employee ID, first name, last name, Department and Salary]
 - a. Design HTML form to accept Employee ID from user
 - b. Before deleting information show alert message “do you want to delete -----[roll number]”
 - c. If employee ID is not present then show “Data not found message”

11. Develop a Servlet application to retrieve Employee information from MySQL database
[Database contain employee information: Employee ID, first name, last name, Department and Salary]

- a. Display all student data in HTML table
- b. Accept first name, If first name is present in the database then display information of that employee
- c. If first name is not present then show "Data not found message"

12. Develop simple Servlet Application to demonstrate session management

- a. Develop login, logout and Profile page
- b. Accept name and password from user; compare it with database username and password
- c. If match found then forward to Welcome page otherwise redirect to login page

13. Write a JSP application to input book information and store it in the database. Application must provide facility to search book based on title of book or author or ISBN number.

14. Convertor Application using JavaScript

Accept input from user & convert it into appropriate format and display output on same webpage

Must give all facility on same webpage

Hint:

Celsius to Fahrenheit	$^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32$
Kelvin to Fahrenheit	$^{\circ}\text{F} = 9/5 (\text{K} - 273) + 32$
Fahrenheit to Celsius	$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$
Celsius to Kelvin	$\text{K} = ^{\circ}\text{C} + 273$
Kelvin to Celsius	$^{\circ}\text{C} = \text{K} - 273$
Fahrenheit to Kelvin	$\text{K} = 5/9 (^{\circ}\text{F} - 32) + 273$

15. Develop simple web application to accept book information from user and store in the database. Application must provide facility to

- To add new Book
- To Display all book information

Use MySQL Database

Use JPA Repository operations

- a. Book information: id, name, author, price, publication year

16. Develop simple web application using Spring Boot technology thymeleaf to retrieve book information in HTML table. . Application must provide facility to

- To add new Book
- To update information of particular book

Use MySQL Database

Use JPA Repository operations

- a. Book information: id, name, author, price, publication year

17. Develop simple web application using Spring Boot technology thymeleaf to retrieve book information in HTML table. . Application must provide facility to

- To add new Book
- To Delete information of particular book

Use MySQL Database

Use JPA Repository operations

- a. Book information: id, name, author, price, publication year

18. Develop simple web application using Spring Boot, technology to retrieve all, particular book information; add new book information in List. Use List to store static [Hard coded values]
 - a. Book information: id, name, author, price, publication year