## CS2208       `       WEB TECHONOLOGIES

**Course objectives**

- To facilitate the graduates with the ability to visualize, gather information, articulate, analyze, solve complex problems, and make decisions. These are essential to address the challenges of complex and computation intensive problems increasing their productivity.
- To facilitate the graduates with the technical skills that prepare them for immediate employment and pursue certification providing a deeper understanding of the technology in advanced areas of computer science and related fields, thus encouraging to pursue higher education and research based on their interest.
- To facilitate the graduates with the soft skills that include fulfilling the mission, setting goals, showing self-confidence by communicating effectively, having a positive attitude, get involved in team-work, being a leader, managing their career and their life.


**Course outcomes**

- Able to understand the working principles of the computer system and its components, apply the knowledge to build, asses, and analyze the software and hardware aspects of it.
- Develops comprehensive skills of Programming Languages, Software process models, methodologies, and able to plan, develop, test, analyze, and manage the software and hardware intensive systems in heterogeneous platforms individually or working in teams.
- Able to use the professional, managerial, interdisciplinary skill set, and domain specific tools in development processes, identify the research gaps, and provide innovative solutions to them.


# Syllabus

1. Design the following static web pages required for an online book store web site.
   a) HOME PAGE: The static home page must contain three frames.
   b) LOGIN PAGE
   c) CATOLOGUE PAGE: The catalogue page should contain the details of all the books available in the web site in a table.
   d) REGISTRATION PAGE
2. Write JavaScript to validate the following fields of the Registration page.
   a) First Name (Name should contains alphabets and the length should not be less than 6 characters).
   b) Password (Password should not be less than 6 characters length).
   c) E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)

     d)   Mobile Number (Phone number should contain 10 digits only).

     e)   Last Name and Address (should not be Empty).

3. Develop and demonstrate the usage of inline, internal and external style sheet using CSS

4. Develop and demonstrate JavaScript with POP-UP boxes and functions for the following problems:

a) Input: Click on Display Date button using onclick( ) function

 Output: Display date in the textbox

b) Input: A number n obtained using prompt

 Output: Factorial of n number using alert

c) Input: A number n obtained using prompt

 Output: A multiplication table of numbers from 1 to 10 of n using alert

d) Input: A number n obtained using prompt and add another number using confirm

 Output: Sum of the entire n numbers using alert

5. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next in the list. Add CSS to customize the properties of the font of the capital (colour, bold and font size).

6. Write an HTML page including any required JavaScript that takes a number from text field in the range of 0 to 999 and shows it in words. It should not accept four and above digits, alphabets and special characters.

7. Develop and demonstrate PHP Script for the following problems:
   a) Write a PHP Script to find out the Sum of the Individual Digits.
   b) Write a PHP Script to check whether the given number is Palindrome or not

8. Create an XML document that contains 10 users information. Write a Java Program, which takes User Id as input and returns the user details by taking the user information from XML document using DOM parser or SAX parser.

9. Implement the following web applications using (a) PHP (b) Servlets (c) JSP
   a) A web application that takes a name as input and on submit it shows a hello page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage (hint: Use session to store name and time).
   b) Write a PHP Program to display current Date, Time and Day.
   c) A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with "Hello, you are not authorized to visit the site" message, where should be replaced with the entered name. Otherwise, it should send "Welcome to this site" message.
   d) A web application that lists all cookies stored in the browser on clicking "List Cookies" button. Add cookies if necessary.

10. Implement the web applications with Database using (a) PHP, (b) Servlets and (c) JSP.

11. Modify the above PHP program to use an xml instead of database

12. Write a program to design a simple calculator using
     (a) JavaScript
     (b) PHP
     (c) Servlet and
     (d) JSP.

References:

1. Internet and Web Technologies by Raj Kamal, Tata McGraw-Hill.

2. Programming the World Wide Web by Robert W. Sebesta, Pearson Education.