



MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

COURSE PLAN

| | | | | | |
|---------------------------|---|--|---|---|---|
| Department | : | Data Science and Computer Applications | | | |
| Course Name & code | : | Web Technologies Lab & MCA 4143 | | | |
| Semester & branch | : | I & MCA | | | |
| Name of the faculty | : | Mr. Akshay Bhat, Mr. Tojo Thomas | | | |
| No of contact hours/week: | | L | T | P | C |
| | | 0 | 0 | 3 | 1 |

Course Outcomes (COs)

| At the end of this course, the student should be able to: | | No. of Contact Hours | Marks |
|---|---|----------------------------|-------|
| CO1: | Create structured web pages using HTML | 9 | 25 |
| CO2: | Design and implement responsive front-end interfaces using CSS | 9 | 35 |
| CO3: | Develop interactive web pages using client-side scripting techniques | 6 | 10 |
| CO4: | Construct data-driven web applications using server-side technologies | 9 | 30 |
| CO5: | Click or tap here to enter text. | Hrs. | Marks |
| Total | | 33 | 100 |

Assessment Plan

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| 1. Continuous Evaluation | 60% |
| Mid-term test | : Max. Marks: 20 (6th Lab) |
| Regular Evaluation | : Evaluation for 20 marks(5th Lab) Record 6 marks Execution check 7 marks Quiz 7 marks |
| Group Project | : Report 10 marks, Individual contribution 10 marks (10th Lab) |
| 2. Lab Examination | 40% |
| <ul style="list-style-type: none"> Examination of 3 hours duration (Max. Marks: 40) | |

Lesson Plan

| L. No. | Topics | Course Outcome Addressed |
|--------|---|--------------------------|
| L1 | Introduction to HTML and Review of HTML formatting commands. | CO1 |
| L2 | Structured web page using HTML: 1. Write a HTML document to display your class Time Table using tables. 2. Write a HTML document to display your resume in a neat format. | CO1 |
| L3 | HTML hyperlinks: 3. Create a HTML document to display the details of “W3C”. The initial section of the page should brief on “About W3C”. This should be followed by the table of content as hyperlink, referring to the respective section in the same page. Also link to the “SirTimberners.html” to get in more insight about Sir. Tim Berners Lee. | CO1 |
| L4 | HTML Form: 4. Create a web form to depict the given Passport application for by Ministry of External Affairs , Govt. of India. | CO2 |
| L5 | Responsive web design: 5. Create the following web pages for your photo magazine website: a. Create a home page with header, navigation bar (horizontal and vertical), content section, aside to display contact details and a footer. b. From the home user should be able to navigate to the photo gallery page. The photo gallery page must exhibit responsive features for larger device visual (width: 992px and above), medium range devices(width ranging from 768px to 991) and for lower range device (width: 767 and below) | CO2 |
| L6 | CSS animation: 6. Create a HTML document to depict a lunar eclipse using CSS animation 7. Implement a HTML document to display a newton’s cradle using CSS animation. | CO2 |
| L7 | Basic JavaScript Interactivity: 8. Create a web page demonstrating JavaScript boxes (alert, confirm, prompt). | CO3 |

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| | 9. Implement JavaScript to create a new browser window with custom text. 10. Develop a JavaScript-driven dropdown menu linking multiple pages. | |
| L8 | Advanced JavaScript Techniques: 11. Create a web page with content on cookies which stores the name of the user, date of last access in a cookie. On load of the web page display a welcome message. 12. Design a page to store and display user information using cookies. 13. Implement a digital clock using JavaScript timeout events. 14. Create a canvas-based application for freehand drawing and displaying mouse coordinates. | CO3 |
| L9 | Form Validation: 15. Create a step-by-step wizard to get the following user details for the “Best JOBS” website: Step 1: Account Set-Up details such as User Name, Password, Confirm Password. Step 2: Personal details such as First Name, Last Name, Gender, Nationality, DoB. Step 3: Contact details such as E-mail, Phone, Address. Step 4: Social Profiles details such as Twitter, Facebook, Google. Step 5: Academic details such as UG CGPA, PG CGPA, three project title with its abstract. Step 6: Confirmation registration must display the entered details in the previous steps. Step 7: To display registration successful message. Also apply the necessary validations to the user data fields. | CO4 |
| L10 | Server-Side Scripting with PHP: 16. Develop a PHP page to upload resumes in PDF format. 17. Create a PHP page to store and display the last visit date-time using cookies. 18. Implement a session-based page views counter. 19. Read and display employee details from a JSON file using PHP. 20. Develop a PHP-based web application that allows users to search for employee details and display the results asynchronously using AJAX. | CO4 |
| L11 | CRUD application using PHP and MySQL 21. Using PHP and MySQL, develop a CRUD web application to accept book information such as accession number, title, authors, edition and publisher from a web page and create/update/delete the information in a database. | CO4 |
| L12 | Click or tap here to enter text. | CO |
| L13 | Click or tap here to enter text. | CO |
| L14 | Click or tap here to enter text. | CO |

References:

1. 1. Randy Connolly, Ricardo Hoar, Fundamentals of Web Development, 1st Edition, Pearson Education India, 2015.
2. 2. Luke Welling, Laura Thomson, PHP and MySQL Web Development, 5th Edition, Pearson Education, 2016.
3. 3. Nicholas C Zakas, "Professional JavaScript for Web Developers", 3rd Edition, Wrox/Wiley India, 2012.
4. <https://www.w3.org/standards/>
5. Click or tap here to enter text.
6. Click or tap here to enter text.
7. Click or tap here to enter text.

Submitted by: Mr. Akshay Bhat, Mr. Tojo Thomas

(Signature of the faculty)

Date: 02-07-2024

Approved by: Dr. Radhika M Pai

(Signature of HOD)

Date: 02-07-2024

FACULTY MEMBERS TEACHING THE COURSE (IF MULTIPLE SECTIONS EXIST):

| FACULTY | SECTION | FACULTY | SECTION |
|-------------------------------------|------------|---------|---------|
| Mr. Akshay Bhat and Mr. Tojo Thomas | A, B and C | | |
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