

**Malnad College of Engineering**  
(An autonomous institute under VTU)  
**Department of CSE (AI&ML)**



**Report on Workshop on**  
**"Coding On Website Design"**

**Title:** "Coding on Website Design"

**Date:** 19<sup>th</sup> july, 2024

**Speaker:** Dhruva M S

**About the speaker:** The speaker is an Assistant Professor in the Computer Science and Engineering department at BGS Institute of Technology, Bellur Cross. He completed his Bachelor of Engineering at Government Engineering College, Hassan, and his M.Tech at Malnad College of Engineering, Hassan. Currently, he is pursuing a Ph.D. through VTU under the guidance of Dr. Sunitha R, Associate Professor in the Department of AI and ML at BNMIT Bangalore. He has published more than 10 international journal papers, 1 national-level paper, and 6 Scopus-indexed papers, and has reviewed over 6 national/international conference journal papers. Additionally, he has attended more than 15 workshops and over 15 FDPs in his career. He has also earned 2 NPTEL online course certificates for DBMS and FAFL subjects.

A one-day workshop on Web Development was conducted, focusing on the fundamental aspects of web technologies. The session was led by the Assistant Professor from the Computer Science and Engineering department at BGS Institute of Technology, Bellur Cross.

**Workshop Highlights:**

**1. Introduction to Web Technologies:**

- The workshop began with an introduction to the basics of web development, emphasizing the importance of HTML, CSS, JavaScript, PHP, XML, and MySQL.
- The speaker highlighted the significance of these technologies in modern web development, outlining their roles and applications in creating dynamic, responsive, and interactive websites.

**2. HTML and CSS:**

- Participants were provided with a detailed overview of HTML and CSS. The discussion covered the structure of HTML documents, the role of various tags, and the styling capabilities of CSS.
- Practical examples were demonstrated to illustrate how to create and style web pages effectively. Attendees learned about semantic HTML, the use of classes and IDs in CSS, and responsive design techniques using media queries.

### 3. JavaScript Fundamentals:

- The importance of JavaScript in web development was highlighted. Key concepts such as variables, functions, events, and DOM manipulation were discussed.
- Interactive coding sessions allowed students to write basic JavaScript code and see the immediate impact on web pages. The speaker also introduced popular JavaScript libraries and frameworks like jQuery and React, explaining their benefits and use cases.

### 4. PHP and XML Integration:

- The session on PHP focused on its role in server-side scripting. The speaker explained how PHP can be used to create dynamic web pages, handle form submissions, and interact with databases.
- XML's role in data transfer and configuration was also discussed, showcasing how PHP can parse and utilize XML data. Examples included creating and reading XML files using PHP and integrating XML with web services.

### 5. MySQL in PHP:

- A segment on MySQL demonstrated the integration of databases with PHP. The instructor explained database creation, data manipulation, and retrieval using SQL queries within PHP scripts.
- Practical examples were provided to enhance understanding, including setting up a local development environment, connecting to a MySQL database, and performing CRUD (Create, Read, Update, Delete) operations.

### 6. Interactive Quiz:

- To reinforce the concepts covered, a quiz was conducted. The quiz comprised questions on HTML, CSS, JavaScript, PHP, XML, and MySQL, testing the students' understanding and application of the topics discussed.
- The quiz encouraged active participation and provided immediate feedback, helping students identify areas where they needed further clarification.

### Conclusion:

The workshop was well-received by the participants, who gained valuable insights into the core technologies of web development. The interactive sessions and practical examples ensured that the concepts were clearly understood. The quiz at the end of the workshop further helped in assessing the students' grasp of the material covered. The session was a success in enhancing the students' knowledge and enthusiasm for web development.

