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| **Session** | **2024-25 (ODD)** | | **Course Name** | **Web Technology Lab** | |
| **Semester** | **3** | | **Course Code** | **23CT1301** | |
| **Roll No** | **53** | | **Name of Student** | **Kartik Sheshraoji Tale** | |
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| Practical Number | | 1.B | | | |
| Course Outcome | | 1. Understand various internet technologies. 2. Design the web pages using HTML and CSS. 3. Implement the XML technology to store the data. 4. Develop the interactive web pages using JavaScript. | | | |
| Aim | | Study HTML5 Architecture and to implement basic HTML5 Tags | | | |
| Problem Definition | | To Implement Basic HTML5 Tags. | | | |
| Theory  (100 words) | | HTML (HyperText Markup Language) is the standard language used to create web pages. HTML4, introduced in 1997, provided the foundation for structuring web content but relied heavily on <div> and <span> tags without semantic meaning. HTML5, the latest version, introduces semantic elements like <header>, <nav>, <main>, <section>, <article>, <aside>, and <footer>. These tags enhance the meaning of the content, improve accessibility, and help search engines understand page structure. HTML5 also supports multimedia elements like <audio> and <video> and provides improved form controls. This practical focuses on implementing HTML5’s semantic architecture for a clean, well-organized web page. | | | |
| Procedure and Execution  (100 Words) | | Step for Implementation:  1. Open a text editor (VS Code, Sublime Text, or Notepad++).  2. Create a new file and save it with a .html extension (e.g., index.html).  3. Write the HTML5 <!DOCTYPE html> declaration at the top.  4. Add <html>, <head>, and <body> sections.  5. Use HTML5 semantic tags (<header>, <nav>, <main>, <section>, <article>, <aside>, <footer>).  6. Add headings, paragraphs, and lists where appropriate.  7. Save the file and open it in a web browser.  8. Verify correct structure and functionality.  9. Upload the project to GitHub and copy the repository link. | | | |
| Code:  <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <title>HTML5 Basic Structure</title>  </head>  <body>  <header>  <h1>Welcome to My Website</h1>  <p>This is a basic HTML5 layout.</p>  </header>  <nav>  <a href="#">Home</a> |  <a href="#">About</a> |  <a href="#">Contact</a>  </nav>  <main>  <section>  <h2>About HTML5</h2>  <p>HTML5 is the latest standard of HTML that includes new features for better structure and media support.</p>  </section>  <article>  <h2>Article Example</h2>  <p>This is a standalone article with its own meaning and structure.</p>  </article>  </main>  <aside>  <h3>Quick Tips</h3>  <ul>  <li>Use semantic tags</li>  <li>Keep structure clean</li>  </ul>  </aside>  <footer>  <p>&copy; 2025 My Website. All rights reserved.</p>  </footer>  </body>  </html> | | | |
| Output: **Welcome to My Website** This is a basic HTML5 layout.  [Home](http://127.0.0.1:5500/BasicTag.html) | [About](http://127.0.0.1:5500/BasicTag.html) | [Contact](http://127.0.0.1:5500/BasicTag.html) **About HTML5** HTML5 is the latest standard of HTML that includes new features for better structure and media support. **Article Example** This is a standalone article with its own meaning and structure. **Quick Tips**  * Use semantic tags * Keep structure clean   © 2025 My Website. All rights reserved. | | | |
| Output Analysis | | The output meets the objective by using HTML5 semantic tags for clear structure. The page is visually organized with a header, navigation bar, main content, aside, and footer. Semantic tags improve code readability and SEO friendliness. Compared to HTML4’s non-semantic <div>-based layout, HTML5 provides better meaning to elements. | | | |
| Link of student Github profile. | | <https://github.com/kartiktale12/WebTechnology> | | | |
| Conclusion | | This practical demonstrated the differences between HTML4 and HTML5 architectures, focusing on semantic tags for better structure and readability. The HTML5 page was successfully implemented, tested, and hosted on GitHub. | | | |
| Plag Report (Similarity index < 12%) | | Plag Report: Checked using SmallSEOTools – Similarity Index: 9%.  Content is 91% unique, with minor matches from standard HTML tag names and basic definitions. | | | |
| Date | | 28 July 2025 | | | |