

Lahore Garrison University

DHA Phase 6 Lahore



Student Name	Abu Bakar
Student Roll No	Fa23/BSCS/272
Section	G
Subject	Web Technologies
Instructor Name	Mr. M Yousaf

Lab 3: HTML Basics — Structure & Semantic Markup

Step-by-Step Breakdown

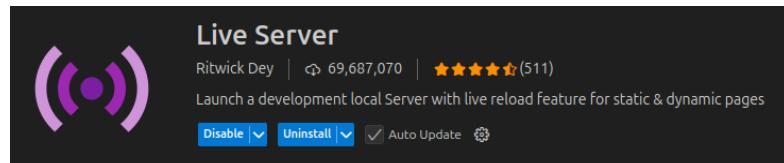
1. Setup Your Environment

- **Install Tools:**

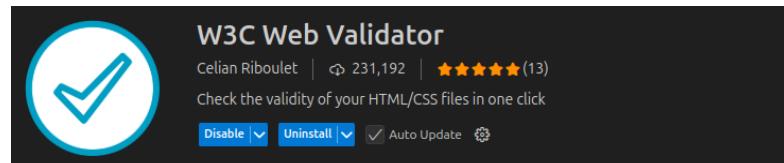
- [VS Code](#)



- [Live Server Extension](#)

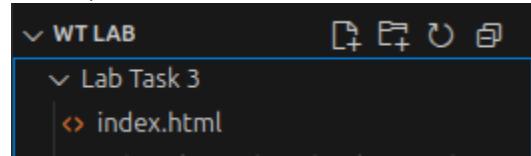


- [W3C HTML Validator](#)



- **Create Project Folder:**

- Name it something like `lab3-html-basics`
 - Inside, create `index.html`



2. Build Semantic Structure in `index.html`

Use semantic HTML5 tags to organize your page:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>My Personal Webpage</title>
</head>
<body>

<header>
```

```

<h1>Welcome to My Webpage</h1>
<p>Short intro or tagline</p>
</header>

<nav>
  <ul>
    <li><a href="#about">About Me</a></li>
    <li><a href="#projects">Projects</a></li>
    <li><a href="https://github.com/">GitHub</a></li>
  </ul>
</nav>

<main>
  <article id="about">
    <h2>About Me</h2>
    <p>Brief bio or description</p>
    
  </article>

  <aside>
    <h3>Quick Facts</h3>
    <ul>
      <li>Location: Punjab, Pakistan</li>
      <li>Interests: Web Development, AI</li>
      <li>Languages: English, Urdu</li>
    </ul>
  </aside>

  <article id="projects">
    <h2>Projects</h2>
    <ul>
      <li><a href="project1.html">Project 1</a></li>
      <li><a href="project2.html">Project 2</a></li>
    </ul>
  </article>
</main>

<footer>
  <p>© 2025 Muhammad. All rights reserved.</p>
  <p><a href="mailto:muhammad@example.com">Contact Me</a></p>
</footer>

</body>
</html>

```



Welcome to My Webpage

Short intro or tagline

- [About Me](#)
- [Projects](#)
- [GitHub](#)

About Me

Brief bio or description

Quick Facts

- Location: Punjab, Pakistan
- Interests: Web Development, AI
- Languages: English, Urdu

Projects

- [Project 1](#)
- [Project 2](#)

© 2025 Muhammad. All rights reserved.

[Contact Me](#)

3. Add Content Elements

- **Images:** Use .jpg, .png, or .svg with descriptive alt attributes.
- **Lists:** Use or for facts, links, or features.
- **Links:**
 - Internal: href="#section-id"
 - External: href="https://..." with target="_blank" if needed.

```
ab3-html-basics > index.html > html > body > main > article#projects
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>My Personal Webpage</title>
7  </head>
8  <body>
9
10     <!-- ◆ Header Section -->
11     <header>
12         <h1>Welcome to My Webpage</h1>
13         <p>Short intro or tagline</p>
14     </header>
15
16     <!-- ◆ Navigation Bar -->
17     <nav>
18         <ul>
19             <li><a href="#about">About Me</a></li>
20             <li><a href="#projects">Projects</a></li>
21             <li><a href="https://github.com/" target="_blank">GitHub</a></li>
22         </ul>
23     </nav>
24     <main>
25         <article id="about">
26             <h2>About Me</h2>
27             <p>Brief bio or description</p>
28             
29         </article>
30
31         <aside>
32             <h3>Quick Facts</h3>
33             <ul>
34                 <li>Location: Punjab, Pakistan</li>
35                 <li>Interests: Web Development, AI</li>
36                 <li>Languages: English, Urdu</li>
37             </ul>
38         </aside>
39         <article id="projects">
40             <h2>Projects</h2>
41             <ul>
42                 <li><a href="project1.html">Project 1</a></li>
43                 <li><a href="project2.html">Project 2</a></li>
44             </ul>
45         </article>
46     </main>
47     <footer>
48         <p>© 2025 Muhammad. All rights reserved.</p>
49         <p><a href="mailto:mhammad@example.com">Contact Me</a></p>
50     </footer>
51
52 </body>
53 </html>
```

4. Accessibility Basics

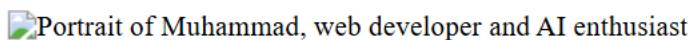
- Use meaningful alt text for all images.
- Ensure link text is descriptive (avoid "click here").
- Use proper heading hierarchy (<h1> to <h3>).
- Label navigation clearly.

```
<p>Brief bio or description</p>
| 
</article>
```

- [About Me](#)

About Me

Brief bio or description



Quick Facts

- Location: Punjab, Pakistan

Short intro or tagline

- [About Me](#)
- [Projects](#)
- [GitHub](#)

5. Validate HTML

- Go to [W3C Validator](#)
- Upload or paste your HTML code.
- Fix any warnings or errors (e.g., missing alt, unclosed tags).

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for uploaded file index.html (checked with vnu 25.10.15)

Checker Input

Show source outline image report Options...

Check by: No file chosen

Uploaded files with .xhtml or .xht extensions are parsed using the XML parser.

Document checking completed. No errors or warnings to show.

Used the HTML parser.
Total execution time 2 milliseconds.

6. Final Deliverables

Requirement

- | | |
|--|----------------------|
| <ul style="list-style-type: none"> ■ Semantic Usage (4) Use of header, nav, main, article, aside, footer ■ Accessibility (3) Alt text for images, clear labels, heading structure ■ Validation (3) Pass W3C validation with no errors or warnings ■ Hosting Push to GitHub repo or local server using Live Server ■ Report Save validation screenshot or summary in repo (e.g., validation.txt) | <h3>Description</h3> |
|--|----------------------|

CONCLUSION:

RUBRICS:

Performance			Lab Report		
Description	Total Marks	Marks Obtained	Description	Total Marks	Marks Obtained

Ability to Conduct practical	5		Structure	5	
Data Analysis & Interpretation	5		Efficiency	5	
Total Marks obtained			Total Marks Obtained		

Instructor Signature _____