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Research assignment Week 1

**1. What are semantic tags in HTML, and why are they important?**

Semantic means relating to meaning in language. In HTML, semantic tags are used to show the purposes of the tags. Semantic tags or elements clarify the roles of them (from their names) for both users and developers. Because of that, using semantic tags provides several advantages listing below:

* Making the page easier to follow since it has clearer structure.
* Looking for certain codes or content faster
* Influencing how search engines decide the significance of the content on web pages.
* Ease of access for users, especially the visually impaired.
* Giving developers information regarding what type of data to expect.

[Semantics - MDN Web Docs Glossary: Definitions of Web-related terms | MDN (mozilla.org)](https://developer.mozilla.org/en-US/docs/Glossary/Semantics)

[What is an HTML Semantic Tag [With Examples] (simplilearn.com)](https://www.simplilearn.com/tutorials/html-tutorial/html-semantics#:~:text=The%20semantic%20HTML%20tags%20help,offers%20a%20better%20user%20experience.)

**2.HTML Validation: Explore the importance of HTML validation and how it can help ensure well-formed and error-free web pages. Provide a small contextual example.**

HTML validation is essential for many reasons. First, it ensures that the written websites are compatible with various web browsers and following industry standards. Second, since HTML validation helps confirming well-formed and error-free web pages, it improves users experience by lessening rendering problems and inaccurate display and increasing accessibility. Third, maintaining and updating legitimate code is easier. Lastly, when search engines can catalogue the content more efficiently, the websites may be ranked higher in a search.

There are software and browser extensions that can help you validate HTML code. It will scan your code to ensure accurate syntax, structure and following standards and specifications from the World Wide Web Consortium.

Example: Missing closing tags or elements creates errors when the HTML code is read. We don’t know whether we have two level 3 headers or one without ending. Same with p elements, we don’t know the end of the element.

<h3>Introduction

<h3>

<p>Hi, how are you?

<p>Possible answers:

<ul>

<li>Good</li>

<li>Not too bad</li>

<li>Could be better</li> </ul>

[Validating your HTML - W3C Wiki](https://www.w3.org/wiki/Validating_your_HTML?TB_iframe=true)

[What is HTML validation and Why is it important for SEO - GeeksforGeeks](https://www.geeksforgeeks.org/what-is-html-validation-and-why-is-it-important-for-seo/)