

Differentiate between HTML and XML

HTML is used to display data on browsers with predefined tags, not case-sensitive, and errors are tolerated. XML is used to store and transport data with user-defined tags, case-sensitive, and strict error handling.

Table Tag and Attributes

`<table>` is used for tabular data. Attributes include border, cellpadding, cellspacing, width, align.

Table Example

```
<table border="1">
<tr><th>Roll</th><th>Name</th></tr>
<tr><td>1</td><td>Aman</td></tr>
</table>
```

Student Registration Form (HTML Example)

```
<form>
Name: <input type="text">
Roll No: <input type="text">
Gender: <input type="radio">Male <input type="radio">Female
</form>
```

Anchor Tag

`<a>` tag creates hyperlinks. Attribute href specifies link, target defines how it opens.
Example: `Visit Google`

Well-formed vs Valid XML

Well-formed XML: follows syntax rules (proper closing, case-sensitive). Valid XML: Well-formed + follows DTD/XSD rules.

Web Project

A web project is a collection of web pages, scripts, stylesheets and resources used to create websites/web apps.

Image Tag Example

```

```

Ordered List Example

```
<ol>
<li>HTML</li>
<li>CSS</li>
<li>JS</li>
</ol>
```

CSS and Types

CSS styles web pages. Types: Inline, Internal, External CSS. Example: `h1 { color:blue; }`

JavaScript and Uses

JavaScript adds interactivity. Can validate forms, handle events, update HTML/CSS, create dynamic pages.

Role of DTD in XML

DTD defines structure of XML. Types: Internal, External.
Example: <!DOCTYPE student [<!ELEMENT student (name, roll)>]>

SAX vs DOM

SAX: Event-based, fast, low memory, forward only. DOM: Tree-based, slower, high memory, random access possible.

CSS Usage

Separates style from content, ensures consistency, faster loading, better design control.

Box Properties

Every element is a box: content, padding, border, margin.

id vs class in CSS

id: unique (#idname). class: reusable (.classname).

CSS Selectors

Types: Element, Class, ID, Group, Universal. Example: p{}, .note{}, #main{}

Font & Text Properties

font-family, font-size, font-weight, font-style, color, text-align, text-decoration, line-height.

Heading Tags Example

```
<h1>Main Heading</h1>
<h2>Sub Heading</h2>
<h3>Small Heading</h3>
```

Advantages of JavaScript

Easy to learn, runs in browser, interactive, validates forms, AJAX support, cross-browser compatibility.