

Assignment 1

HTML

HTML (Hypertext Markup Language), is the standard language used to create and design webpages. It provides the basic structure of a webpage, which is then enhanced and modified by other technologies like CSS and JavaScript.

HTML Structure and Basic Tags

1. DOCTYPE Declaration

`<!DOCTYPE html>` : Specifies the document type and HTML version.

2. HTML Document Structure

`<html>` : Root element of an HTML page.

`<head>` : Contains meta-information like title, character set, and links to CSS.

`<body>` : Contains the content of the HTML document.

Meta and Head Elements

1. Meta Tags

`<meta charset="UTF-8">` : Defines the character encoding

`<meta name="viewport" content="width=device-width, initial-scale=1.0">` Responsive design settings

2. Title and Links

`<title>` : Sets the title of the document

`<link rel="stylesheet" href="style.css">` : Links external CSS files

Content Sectioning

1. Headings

`<h1>` to `<h6>` : Defines headings, `<h1>` being the highest, `<h6>` the lowest

2. Paragraphs

`<p>` : Defines a paragraph

3. Lists

- `` : unordered list
- `` : ordered list
- `` : List item

4. Div and Span

- `<div>` : Block level container for grouping content
- `` : Inline container for styling a part of the text

Text Formatting

1. Bold and Italics

- `` : Important text
- `` : Emphasized text

2. Other Formatting

- `` : Bold text
- `<i>` : Italic text
- `<u>` : Underlined text

Links and Media

1. Hyperlinks

- `` : Creates a hyperlink

2. Images

- `` : Embeds an image

Tables

1. Table Structure

- `<table>` : Defines a table
- `<tr>` : Table row
- `<td>` : Table cell
- `<th>` : Table header cell

2. Additional Table Tags

- `<thead>` : Table header
- `<tbody>` : Table body
- `<tfoot>` : Table footer

Forms and Inputs

1. Form Element

`<form>` : Defines a form for user input

2. Input Types

`<input type="text">` : Text input

`<input type="password">` : Password input

`<input type="submit">` : Submit button

`<input type="radio">` : Radio button

`<input type="checkbox">` : Checkbox

3. Labels and Buttons

`<label>` : Defines a label for an input element

`<button>` : Clickable button

Semantic Elements

1. Main Content

`<main>` : Specifies the main content of the document

`<section>` : Section of content

`<article>` : Independent content item

2. Navigation and Footer

`<nav>` : Navigation links

`<footer>` : Footer section

Multimedia

1. Audio and Video

`<audio src="audio.mp3" controls>` : Embeds audio

`<video src="video.mp4" controls>` : Embeds video