

Lesson : Media and Forms

Introduction to HTML Media

- Learn to embed images, audio, video, and external content like YouTube videos and Google Maps in HTML.
- Explore Canvas for graphics and SVG for scalable vector graphics.

img and its Attributes

- Displays images using tag.
- alt attribute crucial for accessibility and SEO.
- Attributes include src, alt, width, height, loading.

canvas and its Attributes

- <canvas> draws graphics via JavaScript.
- Attributes: width, height, id, class.

svg and its Attributes

- SVG defines scalable vector graphics.
- Attributes: width, height, viewBox, preserveAspectRatio, xmlns.

canvas vs svg

- SVG: Scalable vector graphics, CSS/JS manipulable, part of DOM.
- Canvas: Raster graphics, JavaScript manipulable, suitable for games.

audio and its Attributes

- <audio> embeds audio files.
- Attributes: src, controls, autoplay, loop, preload, muted, controlsList.

video and its Attributes

- <video> embeds video files.
- Attributes: src, controls, autoplay, loop, preload, width, height, poster, controlsList.

iFrame and its Attributes and Usage

- Embeds external HTML documents like YouTube, Google Maps.
- Attributes: src, width, height, sandbox, allow, loading, scrolling, name.
- Use for embedding social media and solving security, performance, accessibility issues.

Introduction to HTML Form

- Collects user input for web applications.
- Includes input fields, checkboxes, radio buttons, submit buttons.
- Attributes: action, method, enctype, target.

HTML Form Elements

- <input>: Types include text, password, email.
- <textarea>: Multi-line text input.
- <select>: Dropdown list.
- <button>: Clickable button for form submission.

HTML Form Submission

- Triggers form submission to specified action URL.
- Validates input before server-side processing.

Input and its Attributes

- <input> for interactive form controls.
- Attributes include type, name, value, placeholder, required, disabled.
- HTML5 validation options like pattern, min, max.

Label

- <label> associates text description with form controls.

- Improves accessibility and usability.

Select, Option

- `<select>` creates dropdown list, `<option>` defines list options.

Textarea

- `<textarea>` for multi-line text input.

Button

- `<button>` clickable for form submission or JS events.

Fieldset, Legend

- `<fieldset>` groups form controls, `<legend>` captions `<fieldset>`.

Datalist

- `<datalist>` pre-defines options for `<input>`.

Lesson : Core HTML

Emmet

- Web development tool for quick HTML and CSS coding.
- Initially known as Zen Coding by Sergey Chikuyonok.
- Converts shorthand syntax into full code.
- Enhances productivity and code quality.

HTML Attributes

- Provide additional information or modify element behavior.
- Specified within opening tags as name-value pairs.
- Global attributes: `class`, `id`, `style`, `title`, `data-*`.
- Specific attributes: `href`, `src`, `value`, `disabled`.

Formatting Tags

- Enhance visual presentation and structure of content.
- ``: Non-semantic, bolds text.
- ``: Semantic, indicates strong importance.
- `<i>`: Non-semantic, italicizes text.
- ``: Semantic, indicates emphasis.
- `<mark>`: Non-semantic, highlights text.
- `<small>`: Non-semantic, decreases font size.
- ``: Non-semantic, indicates deleted text.
- `<ins>`: Non-semantic, indicates inserted text.
- `<sub>`: Non-semantic, renders subscript.
- `<sup>`: Non-semantic, renders superscript.
- `<s>`: Non-semantic, renders with strikethrough.
- `<big>`: Deprecated, use CSS for font size.

Block-level Elements

- Start on new lines, full width.
- Include `<p>` and `<div>`.

Inline Elements

- Do not start on new lines.
- Include ``.

Lists

- ``: Ordered list with ``.
- ``: Unordered list with ``.
- `<dl>`: Definition list with `<dt>` and `<dd>`.
- ``: List item in `` and ``.

Anchor Tag Usage

- Create hyperlinks and bookmarks.
- Navigate between pages or sections.

Table

- Structure data in rows and columns with `<table>`.
- Use `<tbody>`, `<thead>`, `<tfoot>` for sections.
- Define cells with `<th>` (header) and `<td>` (data).
- Create rows with `<tr>`.
- Span cells with `colspan` and `rowspan`.

Classes and IDs

- Class: Define styles for multiple elements.
- ID: Specify unique identifier within HTML.