

Cheat Sheet for comprehensive HTML

Comprehensive HTML Cheat Sheet

1. Introduction to HTML

HTML (HyperText Markup Language) is the standard markup language for creating web pages. It defines the structure and content of a webpage.

2. Basic Structure

Every HTML document starts with a basic structure:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Document Title</title>
</head>
<body>
  <!-- Content goes here -->
</body>
</html>
```

Key Elements:

- `<!DOCTYPE html>`: Declares the document type.
 - `<html>`: Root element of the HTML document.
 - `<head>`: Contains meta-information about the document.
 - `<title>`: Sets the title of the document.
 - `<body>`: Contains the content of the document.
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3. HTML Tags

Headings

HTML provides six levels of headings:

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
```

```
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Paragraphs

Use `<p>` for paragraphs:

```
<p>This is a paragraph.</p>
```

Links

Create hyperlinks using `<a>`:

```
<a href="https://www.example.com">Visit Example</a>
```

Images

Embed images using ``:

```

```

Lists

- Unordered Lists:

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
</ul>
```

- Ordered Lists:

```
<ol>
  <li>First item</li>
  <li>Second item</li>
</ol>
```

Tables

Create tables using `<table>`, `<tr>`, `<th>`, and `<td>`:

```
<table>
  <tr>
```

```
        <th>Header 1</th>
        <th>Header 2</th>
    </tr>
    <tr>
        <td>Row 1, Cell 1</td>
        <td>Row 1, Cell 2</td>
    </tr>
</table>
```

Forms

Create forms using `<form>`, `<input>`, `<textarea>`, and `<button>`:

```
<form action="/submit" method="post">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name">
    <button type="submit">Submit</button>
</form>
```

4. Attributes

Attributes provide additional information about HTML elements:

- Global Attributes:

- ``class``: Specifies one or more class names for an element.
- ``id``: Specifies a unique id for an element.
- ``style``: Specifies inline CSS styles for an element.
- ``title``: Specifies extra information about an element.

- Specific Attributes:

- ````: Specifies the URL of the link.
- ````: Specifies the source and alternative text of an image.

5. Semantic HTML

Semantic HTML elements describe their meaning to both the browser and the developer:

- ``<header>``: Represents a container for introductory content.
- ``<nav>``: Defines a set of navigation links.
- ``<main>``: Specifies the main content of a document.
- ``<article>``: Defines independent, self-contained content.

- `<section>`: Defines a section in a document.
 - `<aside>`: Defines content aside from the content (like a sidebar).
 - `<footer>`: Defines a footer for a document or section.
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6. Meta Tags

Meta tags provide metadata about the HTML document:

```
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<meta name="description" content="Description of the webpage">
<meta name="keywords" content="HTML, CSS, JavaScript">
<meta name="author" content="Author Name">
```

7. Comments

Comments are used to add notes in the code that are not displayed in the browser:

```
<!-- This is a comment -->
```

8. Character Entities

Character entities are used to display reserved characters in HTML:

- `<`: `<`
 - `>`: `>`
 - `&`: `&`
 - `"`: `"`
 - `'`: `'`
-

9. HTML5 Features

HTML5 introduced new elements and APIs:

- **New Semantic Elements:** `<article>`, `<aside>`, `<details>`, `<figcaption>`, `<figure>`, `<footer>`, `<header>`, `<main>`, `<mark>`, `<nav>`, `<section>`, `<summary>`, `<time>`
- **New Form Input Types:** `color`, `date`, `datetime`, `email`, `number`, `range`, `search`, `tel`, `time`, `url`, `week`

- **New APIs:** Canvas, Geolocation, Local Storage, Web Workers, Web Sockets
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10. Tips and Tricks

- **Indentation:** Use consistent indentation to make your code more readable.
 - **Minimize Inline CSS:** Use external stylesheets for better maintainability.
 - **Validate Your Code:** Use tools like [W3C Markup Validation Service](https://validator.w3.org/) to check for errors.
 - **Use Semantic Elements:** Improve accessibility and SEO by using semantic HTML.
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11. Common Errors and Fixes

- **Unclosed Tags:** Ensure all tags are properly closed.
 - **Incorrect Attribute Values:** Double-check attribute values for correctness.
 - **Missing Doctype:** Always include `<!DOCTYPE html>` at the top of your document.
 - **Incorrect Nesting:** Ensure elements are nested correctly.
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12. Resources

- **HTML Reference:** [MDN Web Docs](https://developer.mozilla.org/en-US/docs/Web/HTML)
 - **HTML Validator:** [W3C Markup Validation Service](https://validator.w3.org/)
 - **HTML Tutorials:** [W3Schools HTML Tutorial](https://www.w3schools.com/html/)
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This cheat sheet provides a comprehensive overview of HTML, covering essential elements, attributes, and best practices. Use it as a quick reference to build well-structured and semantic web pages.

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