1. **Key Semantic Elements & Their Accessibility Benefits**

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| Element | Purpose | Accessibility Contribution |
| <header> | Introduces the top section of a page or section | Helps screen readers identify the beginning of content or sections |
| <nav> | Contains navigation links | Signals to screen readers that this area is for navigation |
| <main> | Represents the main content of the document | Allows screen readers to skip repeated content and jump directly to the main section |
| <article> | Represents independent content (e.g., blog post) | Can be individually read and interpreted; improves content chunking |
| <section> | Defines a thematic group of content | Helps assistive tech navigate large documents with proper headings |
| <aside> | Holds tangential or sidebar content | Signals secondary or related information to assistive tools |
| <footer> | Contains info at the bottom of a page or section | Clarifies the end of content and typically includes links, contact info, etc. |
| <h1>–<h6> | Headings for organizing content hierarchy | Creates a logical reading order for screen readers |
| <figure> + <figcaption> | Groups media and captions | Connects visual/media content with descriptive text |
| <mark> | Highlights important or relevant text | Helps screen readers emphasize key points |
| <time> | Represents time or dates | Assists screen readers and search engines in understanding temporal info |
| <label> | Labels a form element | Makes form controls accessible by linking text with inputs |
| <fieldset> + <legend> | Groups form elements and gives them a description | Improves usability and clarity for screen readers in complex forms |
| <table>, <thead>, <tbody>, <tfoot>, <th> | Structures tabular data | Allows screen readers to understand table structure and navigate rows/columns effectively |

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**<figure> + <figcaption>**

**What It Does** <figure> + <figcaption>

* <figure> groups self-contained content like images, code, charts, or media.
* <figcaption> provides a **caption** or **description** for that content.
* Screen readers associate the caption directly with the content.

### **Use Cases**

#### 1. **Image with Description**

html

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<figure>

<img src="farmer-working.jpg" alt="A farmer plowing a field with oxen">

<figcaption>Traditional farming methods still used in rural India.</figcaption>

</figure>

**Why?** Screen readers will read the image's alt text and the figcaption as a unit.

#### 2. **Chart or Graph**

html

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<figure>

<img src="rainfall-chart.png" alt="Line chart showing rainfall trends from 2010 to 2020">

<figcaption>Figure 1: Annual rainfall data across Indian states over the last decade.</figcaption>

</figure>

**Why?** Helps users understand the chart visually and contextually through text.

#### 3. **Code Snippet with Explanation**

html

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<figure>

<pre><code>const greet = name => `Hello, ${name}!`;</code></pre>

<figcaption>JavaScript arrow function to greet a user by name.</figcaption>

</figure>

**Why?** Useful for documentation or tutorials where each snippet needs context.

#### 4. **Audio/Video with Caption**

html

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<figure>

<video controls>

<source src="interview.mp4" type="video/mp4">

Interview with a local organic farmer.

</video>

<figcaption>Interview discussing the benefits of organic farming.</figcaption>

</figure>

**Why?** Caption clarifies the purpose or key idea of the media for all users.

#### 5. **Quote with Source**

html

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<figure>

<blockquote>

“The greatest threat to our planet is the belief that someone else will save it.”

</blockquote>

<figcaption>— Robert Swan, environmentalist</figcaption>

</figure>

**Why?** Makes the quote and attribution accessible and well-structured.

### **What** <time> **Does**

The <time> element:

* Represents a **specific time, date, or duration**.
* Helps **search engines**, **screen readers**, and **browsers** interpret time-based content.
* Can include a datetime attribute with a machine-readable format.

### **Common Use Cases**

#### 1. **Event Date on a Blog Post**

html

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<time datetime="2025-05-16">May 16, 2025</time>

**Why?** Screen readers and bots understand when the post was published.

#### 2. **Time in a Schedule**

html

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<p>The webinar starts at <time datetime="2025-05-20T14:00">2:00 PM</time>.</p>

**Why?** Allows parsing and conversion to local time zones or calendars.

#### 3. **Duration of an Activity**

html

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<time datetime="PT1H30M">1 hour 30 minutes</time>

**Why?** Useful for screen readers or apps that calculate total time.

#### 4. **Birthdate or Historical Date**

html

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<p>Mahatma Gandhi was born on <time datetime="1869-10-02">October 2, 1869</time>.</p>

**Why?** Machines and assistive tech can interpret it for timelines or age calculations.

#### 5. **Deadline Reminder**

html

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<p>Submit your form by <time datetime="2025-06-01T23:59">June 1st, 11:59 PM</time>.</p>

**Why?** Reminders and calendar tools can process the deadline programmatically.

#### 6. **Recurring Event**

html

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<p>Weekly meeting every <time datetime="2025-05-17T09:00">Saturday at 9:00 AM</time>.</p>

**Why?** Helps accessibility tools recognize repeated time patterns.