

## Special Characters

*Special characters* are those characters that have special meaning or function in HTML and cannot be used as regular text. Instead, they must be represented using character entities or character codes.

Here are some examples of special characters in HTML:

1. *< - represents the less-than symbol (<)*
2. *> - represents the greater-than symbol (>)*
3. *& - represents the ampersand symbol (&)*
4. *" - represents the double-quote symbol (")*
5. *' - represents the single-quote symbol (')*
6. *© - represents the copyright symbol (©)*
7. *® - represents the registered trademark symbol (®)*
8. *- represents a non-breaking space*

Using special characters in HTML requires using the corresponding character entity or code instead of the actual character.

## Accessibility

*Accessibility* in HTML refers to designing and developing web pages that are accessible and usable by people with disabilities. This involves creating content that can be understood by people with a range of disabilities, including visual, auditory, cognitive, and motor impairments.

Some of the best practices for ensuring accessibility in HTML include:

1. *Using proper HTML semantics:* Properly structuring the HTML markup with semantic tags can help assistive technologies like screen readers to understand the content and present it to users in a meaningful way.
2. *Providing alternative text for images:* Adding descriptive alternative text for images, such as captions or alt attributes, can help visually impaired users understand the content and context of the image.
3. *Ensuring proper contrast:* Using appropriate contrast between text and background colors can help visually impaired users read the content more easily.
4. *Providing captions or transcripts for audio and video content:* Adding captions or transcripts for audio and video content can help users with hearing impairments to understand the content.

5. *Making sure the website is keyboard accessible:* Providing keyboard shortcuts and making sure all functionality can be accessed with a keyboard can help users with motor impairments navigate the website.
6. *Avoiding flashing or blinking content:* Flashing or blinking content can trigger seizures in users with photosensitive epilepsy.

## Favicons

*Favicons* are small icons or images that are associated with a website and are typically displayed in the browser's address bar, tabs, and bookmarks. They help users to quickly identify and differentiate between multiple websites they have open in their browser.

## Microdata

Microdata is a specification created by the W3C to provide a way to annotate HTML documents with metadata. The purpose of microdata is to provide machine-readable information about the content of a web page, allowing search engines and other applications to more easily understand and interpret the content. Microdata is defined using HTML attributes that can be added to existing HTML tags. These attributes describe the meaning and structure of the content they are associated with.

### Example :

#### HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link rel="icon" href="/image.png" type="image/x-icon">
</head>

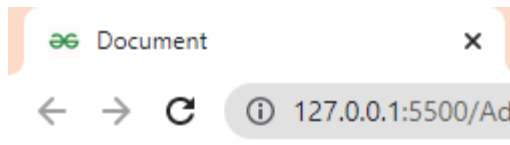
<body>
  <h1>Special Chracters</h1>
  <h2>< there ></h2>
```

```
<br>
<br>
<h2>&amp;&lt;&quot;hey there &gt;&acE;????</h2>

<h1>Accessibility</h1>
<button>Click It</button>

<h1>Favicons</h1>
<h1> Microdata </h1>
<div itemscope itemtype="https://schema.org/Product">
  
  <span itemprop="name">Product Name</span>
</div>
</body>
</html>
```

Output :



## Special Chracters

< there >


&<"hey there ">∞😊

## Accessibility

Click It

## Favicons

## Microdata

 no image Product Name

Microdata Special Characters , Accessibility , Favicons And

### Explanation :

*1. Special Characters:* The HTML code includes special characters like "<" and ">" which are reserved characters in HTML. To display these characters in HTML, we use their character entity references such as "<" for "<" and ">" for ">". The code also includes the use of other special characters like "&" for "&" and """ for double quotes. Additionally, the code also includes an emoji character which is represented using its Unicode character codepoint.

2. *Accessibility*: Accessibility is an important aspect of web development. The given code includes a button element for accessibility.

3. *Favicons*: Favicons are small icons that are displayed in the browser tab for a website. The code includes a link to a favicon image file using the "rel" and "href" attributes. The type of the image file is also specified using the "type" attribute.

4. *Microdata*: Microdata is a way of adding structured data to HTML documents. The given code includes an example of microdata for a product using the "itemscope" and "itemtype" attributes to define the type of data being added and the "itemprop" attribute to define the specific properties of the product being described. The code includes an image and the name of the product.