**Useful Extensions in vscode**

Prettier, live server, vscode-icons

**The head element <head></head>**

The head element in HTML is used to contain metadata about the HTML document. Metadata is data about data, and it is not displayed on the page. The head element is placed between the html element and the body element.

The following elements can be used in the head element:

* title: This element defines the title of the HTML document. The title is displayed in the browser's title bar and in search engine results pages (SERPs).
* meta: This element can be used to specify various pieces of metadata about the HTML document, such as the character set, keywords, and author.
* link: This element can be used to link to external resources, such as style sheets and JavaScript files.
* script: This element can be used to embed JavaScript code in the HTML document.

Meta Data

Metadata in the head element of HTML is used to provide information about the HTML document. This information is not displayed on the page, but is used by browsers, search engines, and other web services.

Some of the most common uses of metadata in the head element include:

* Defining the document title: The title tag is used to specify the title of the HTML document. This title is displayed in the browser's title bar and in search engine results pages (SERPs).
* Specifying the character set: The charset meta tag is used to specify the character set used in the HTML document. This is important for ensuring that the text on the page is displayed correctly in different browsers and devices.
* Adding keywords: The keywords meta tag is used to specify keywords that describe the HTML document. This information is used by search engines to index the document and make it more likely to be found in search results.
* Adding author information: The author meta tag is used to specify the author of the HTML document. This information is displayed in the browser's developer tools and can be used to credit the author of the document.
* Adding viewport settings: The viewport meta tag is used to specify the initial size and scale of the HTML document in the browser's viewport. This can be used to improve the user experience on mobile devices.
* Metadata in the head element of HTML can be used to provide a variety of information about an HTML document. This information can be used by browsers, search engines, and other web services to improve the user experience and make the document more accessible.

Here are some examples of how metadata can be used:

* A website owner might use the title tag to make their website more visible in search results.
* A blog author might use the keywords meta tag to help people find their blog posts.
* A mobile app developer might use the viewport meta tag to ensure that their app looks good on all devices.
* Metadata can be a powerful tool for improving the user experience of your website or app. By using metadata effectively, you can make your content more accessible and discoverable.

Title tag

The title element is a required element in HTML documents. It defines the title of the document, which is displayed in the browser's title bar and in search engine results pages (SERPs). The title element must be placed in the head element of the document.

The title element has no attributes. The title text must be text-only and cannot contain any HTML markup. The title text should be descriptive and accurate, and it should be no more than 60 characters long.

The title element is an important part of any HTML document. It helps users to identify the document and to find it in search results. The title element is also used by browsers to display the document in the title bar.

Here are some tips for writing good title elements:

* Make the title text descriptive and accurate.
* Keep the title text short, no more than 60 characters long.
* Use keywords that are relevant to the content of the document.
* Avoid using special characters or HTML markup in the title text.

Favicon

<link rel="icon" href="./html5-logo.JPG" type="image/x-icon">

rel stands for relationship

A favicon (/ˈfæv.ɪˌkɒn/; short for favorite icon), also known as a shortcut icon, website icon, tab icon, URL icon, or bookmark icon, is a file containing one or more small icons associated with a particular website or web page. A web designer can create such an icon and upload it to a website (or web page) by several means, and graphical web browsers will then make use of it.

Favicons are often used to identify websites in bookmarks, browser tabs, and address bars. They can also be used to identify websites in search engine results pages (SERPs).

Favicons are typically 16x16 pixels in size, but they can be any size. They are usually saved in the ICO file format, but they can also be saved in other file formats, such as PNG, GIF, and JPEG.

To add a favicon to your website, you can use a favicon generator or create your own favicon using a graphics editor. Once you have created your favicon, you need to upload it to your website's root directory.

Code snippet to view the website in dark mode

 <style>

  html{

   font-size: 22px;

  }

  body{

   background-color: #333;

   color: whitesmoke;

  }

 </style>

Or else we can put css in an external file and link it to our html document

<link rel="stylesheet" href="" type="text/css">

It is recommended to validate your files using w3c validator.

Link: <https://validator.w3.org/>

**Text Basics**

One page should have only one h1

To copy lines shift + alt + down arrow

We can use <hr> to apply horizontal rule which adds a horizontal line

Html is white space collapsed. Even we add spaces it will not be displayed in web page.

We can add line breaks within elments(<p>)

H and P elements are block level elements. They always start with a new line

**Some inline elements**

* em – emphasis
* strong – to make text bold

**Entities**

When we need to add some white space, when we need to put < or >

&nbsp; is an HTML entity that represents a non-breaking space. A non-breaking space is a space that will not break into a new line, even if the text is wrapped. This is useful for keeping certain words or phrases together, such as initials, units, dates, and amounts of money.

To use &nbsp; in HTML, you simply insert it into your text where you want the non-breaking space to appear. For example:

<p>This is a sentence with an &nbsp; non-breaking space.</p>

Note that &nbsp; is not the same as a regular space. A regular space can be inserted by pressing the spacebar on your keyboard. However, a regular space can be broken into a new line, while a non-breaking space cannot.

Here are some examples of how &nbsp; can be used:

* To keep initials together:

Some other entities

&lt; – less than <

&copy; – copy right symbol

&gt; - greater than symbol >

Some other

&amp; Represents the ampersand (&) character.

&lt; Represents the less-than sign (<) character.

&gt; Represents the greater-than sign (>) character.

&quot; Represents the double quote (") character.

&apos; Represents the single quote (') character.

&nbsp; Represents a non-breaking space.

&euro; Represents the euro symbol (€).

&pound; Represents the pound sterling symbol (£).

&yen; Represents the Japanese yen symbol (¥).

&dollar; Represents the US dollar symbol ($).

&cent; Represents the cent symbol (¢).

&copy; Represents the copyright symbol (©).

&reg; Represents the registered trademark symbol (®).

&trade; Represents the trademark symbol (™).

&deg; Represents the degree symbol (°).

&plusmn; Represents the plus or minus sign (±).

&micro; Represents the micro symbol (µ).

&deg; Represents the degree symbol (°).

&times; Represents the multiplication sign (\*).

&divide; Represents the division sign (/).

&frac12; Represents the fraction 1/2.

&frac14; Represents the fraction 1/4.

&frac34; Represents the fraction 3/4.

&raquo; Represents the right angle quotation mark (»).

&laquo; Represents the left angle quotation mark («).

&middot; Represents the middle dot (·).

&bull; Represents the bullet (•).

&hellip; Represents an ellipsis (…).

&mdash; Represents an em dash (—).

&ndash; Represents an en dash (–).

&sect; Represents the section symbol (§).

&copy; Represents the copyright symbol (©).

&reg; Represents the registered trademark symbol (®).

&trade; Represents the trademark symbol (™).

&deg; Represents the degree symbol (°).

&plusmn; Represents the plus or minus sign (±).

&micro; Represents the micro symbol (µ).

&deg; Represents the degree symbol (°).

&times; Represents the multiplication sign (\*).

&divide; Represents the division sign (/).

&frac12; Represents the fraction 1/2.

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&mdash; Represents an em dash (—).

&ndash; Represents an en dash (–).

&sect; Represents the section symbol (§).

**Abbreviations**

When we hover mouse it will show what it means, simply we get a tooltip

<p> <abbr title="Mozilla Developer Network">MDN</abbr> is a great resource for web development</p>

Abbreviation will not be read in assistive technology (screen readers).

**Address Element**

Says the browser that the content is an address

<p>some places I would like to visit</p>

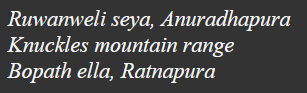
<address>

 Ruwanweli seya, Anuradhapura <br>

 Knuckles mountain range <br>

 Bopath ella, Ratnapura

</address>

Output

Screen readers support address element.

**HTML Comments**

<!-- this is a comment -->

Make sure to delete all the comments before you upload your site to server because comments are visible in inspect tools

**Lists**

3 Types

* Ordered list
* Unordered list
* Description list

CTRL + D selects similar elements one by one

<p>Ordered List Example</p>

<ol>

 <li>Ordered list </li>

 <li>Unordered list</li>

 <li>Description list</li>

</ol>

<p>Unordered List Example</p>

<ul>

 <li>Unordered item 1</li>

 <li>Unordered item 2</li>

 <li>Unordered item 3</li>

</ul>

<p>Description List Example</p>

<dl>

 <!--dt stands for description term -->

 <dt>Description item 1</dt>

 <!-- dd stands for description details -->

 <dd>Description item 1 details</dd>

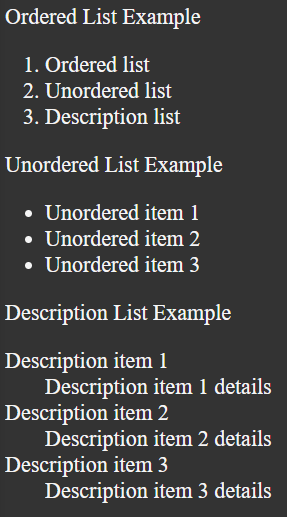
 <dt>Description item 2</dt>

  <dd>Description item 2 details</dd>

 <dt>Description item 3</dt>

  <dd>Description item 3 details</dd>

</dl>



**Links**

We use anchor tag to create links href attribute is required to provide the link

Absolute reference example (full path for a website)

<p> <abbr title="Mozilla Developer Network"> <a href="https://developer.mozilla.org/">MDN</a> </abbr> is a great resource for web development</p>

Relative reference example

<a href="./about.html"> Amitha Shehan </a>

Internal reference example

On top of the page

    <section id="top">

      <h1>Hello World!</h1>

    </section>

At the end of the page

<a href="#top">Go to Top</a>

If we want to go back to the top we could use following snipped at the bottom as well

<a href="#">Go to Top</a>

Link naming conventions

* Do not put the URL
* Keep it short as possible
* Give a small description what is in the next page

To set a downloadable link

  <li>Download<a href="./html5-logo.JPG" download> html 5 logo</a></li>

Link to email

  <li>Contact me at <a href="mailto:random@email.com">My Email Address</a></li>

Make a call

<li>Dial <a href="tel:+94714886895">me at</a></li>

Open a link in new tab

<li><a href="https://google.com/" target="\_blank"> Google</a></li>

To go back home from anywhere

<p><a href="/">back to home</a></p>

**Images**

Img elment does not have an ending tag

Src attribute says where to grab the image

Alt says alternative text, helps assistive technology (screen readers) to read description. If image cannot be grabbed alt text will be shown with a broken image

Title attribute will not be read by screen readers. Not necessary. This will give a tool tip.

Width and height can be provided. If we provide only one other one will automatically adjusted. It is necessary to give both height and width to avoid cumulative layout shift.

<img src="./Images/hero-img.png" alt="A picture of Amitha Shehan" title="Amitha Shehan" width="624" height="811">

Loading attribute

Eager is the default value. Any image below the fold set loading attribute to lazy to improve the loading time of web page.

To check go to inspect>network > disable cache> img then check