<u>Tags:</u>
<!-- -->:
- This is a comment in HTML.
- Syntax: **<!-- … -->**

<!DOCTYPE HTML>:
- The <!DOCTYPE HTML> declaration must be the very first thing in your HTML document, before the <html> tag.
- It is an instruction to the web browser about what version of HTML the page is written in.

<A>:
- The <A> tag defines a hyperlink, which is used to link from one page to another.
- A link has three parts: a destination, a label, and a target. The destination specifies the address of the web page or file the user will access when he/she clicks on the link. The label is the text that will appear underlined or highlighted on the page.
- The href attribute specifies the URL of the page the link goes to.
  I.e. The href attribute specifies the destination.
- Syntax: **<A href=destination> label </A>**
- The LINK, VLINK, and ALINK attributes can be inserted in the <BODY> tag to define the color of a link.
- LINK defines the color of links that have not been visited.
  Syntax: **<body link="color">**
- VLINK defines the color of links that have already been visited.
  Syntax: **<body vlink="color">**
- ALINK specifies the color of an active link in a document (a link is activated when it is clicked).
  Syntax: **<body alink="color">**
- **Note:** By default, links will appear as follows in all browsers:
  - An unvisited link is underlined and blue.
  - A visited link is underlined and purple.
  - An active link is underlined and red.
- To create a link to an email address, do the following:
  <A href="mailto:email_address"> Label </A>
- Anchors enable a user to jump to a specific place on a website. Two steps are necessary to create an anchor. First you must create the anchor itself. Then you must create a link to the anchor from another point in the document.
- To create the anchor, do the following at the point in the webpage where you want the user to jump to:
  <A name="anchor name"> Label </A>
  The name attribute specifies the name of an anchor.
  To create the link, do the following at the point in the text where you want the link to appear:
  <A href="#anchor name"> Label </A>

<ABBR>:
- The <abbr> tag defines an abbreviation or an acronym.
- An abbreviation and an acronym are both shortened versions of something else.
- Syntax: **<abbr title="Full Name"> Abbreviation </abbr>**

<ARTICLE>:
- The <article> tag specifies independent, self-contained content.
- An article should make sense on its own and it should be possible to distribute it independently from the rest of the site.
- Potential sources for the <article> element include:
    - Forum post
    - Blog post
    - News story
    - Comment
- Syntax:
    <ARTICLE>

    …
    </ARTICLE>

<ASIDE>:
- The <aside> tag defines some content aside from the content it is placed in.
- The aside content should be related to the surrounding content.
- Syntax:
    <ASIDE>

    …
    </ASIDE>

<B>:
- Makes the text bold.
- Syntax: **<B> … </B>**

<BASEFONT>:
- Specifies a default text-color, font-size, or font-family for all the text in a document.
- **Note:** There is no closing tag.
- The color attribute specifies the color of the text inside a <basefont> element.
- The face attribute specifies the font of the text inside a <basefont> element.
- The size attribute specifies the size of the text inside a <basefont> element.
- Syntax with color attribute: **<BASEFONT COLOR = 'color'>**
- Syntax with face attribute: **<BASEFONT FACE = "font name">**
- Syntax with size attribute: **<BASEFONT SIZE = n>**
    Note that n is a number from 1 to 7.
- These attributes can be combined to change the font, size, and color of the text all at once by doing: **<BASEFONT SIZE=n COLOR= 'color' FACE='font name'>**

<BLOCKQUOTE>:
- The <blockquote> tag specifies a section that is quoted from another source.
- Browsers usually indent <blockquote> elements.
- Syntax:
    <BLOCKQUOTE cite="url">

    ….
    </BLOCKQUOTE>

<BODY>:
- The <body> tag defines the document's body.
- The <body> element contains all the contents of an HTML document, such as text, hyperlinks, images, tables, lists, etc.
- Syntax:
  <body>

  …

  </body>

**
:**
- Inserts a single line break.
- **Note:** There is no closing tag.
- Syntax: **
**

<DETAILS>:
- The <details> tag specifies additional details that the user can view or hide on demand.
- The <details> tag can be used to create an interactive widget that the user can open and close. Any sort of content can be put inside the <details> tag.
- The content of a <details> element should not be visible unless the open attribute is set or the <summary> tag is used.
- The <summary> tag defines a visible heading for the <details> element. The heading can be clicked to view/hide the details.
- Syntax:
  <details>
  <summary> … </summary>

  …
  </details>

<DIV>:
- The <div> tag defines a division or a section in an HTML document.
- The <div> element is often used as a container for other HTML elements to style them with CSS or to perform certain tasks with JavaScript.
- Syntax: **<div> … </div>**

<FIGURE>:
- The <figure> tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
- While the content of the <figure> element is related to the main flow, its position is independent of the main flow, and if removed it should not affect the flow of the document.
- The <figcaption> tag defines a caption for a <figure> element.
- The <figcaption> element can be placed as the first or last child of the <figure> element.
- Syntax:
  <figure>
  <figcaption> … </figcaption>

  …
  </figure>

<FONT>:
- Specifies the font size, font face and color of text.
- The color attribute specifies the color of the text inside a <font> element.
- The face attribute specifies the font of the text inside a <font> element.
- The size attribute specifies the size of the text inside a <font> element.

- Syntax with color attribute: **<FONT COLOR = 'color'> … </FONT>**
- Syntax with face attribute: **<FONT FACE = "font name"> … </FONT>**
- Syntax with size attribute: **<FONT SIZE = n> … </FONT>**
  Note that n is a number from 1 to 7.
- These attributes can be combined to change the font, size, and color of the text all at once by doing: **<FONT SIZE=n COLOR= 'color' FACE='font name'> … </FONT>**

<FOOTER>:
- The <footer> tag defines a footer for a document or section.
- A <footer> element should contain information about its containing element.
- A <footer> element typically contains:
  - authorship information
  - copyright information
  - contact information
  - sitemap
  - back to top links
  - related documents
- You can have several <footer> elements in one document.
- Syntax:
  <footer>

  …
  </footer>

<FORM>:
- An HTML form is an area of the document that allows users to enter information into fields.
- A form may be used to collect personal information, opinions in polls, user preferences and other kinds of information.
- There are two basic components of a web form: **the shell** which is the part that the user fills out and **the script** which processes the information.
- The shell has three important parts:
  1. The <FORM> tag, which includes the address of the script which will process the form.
  2. The form elements, like text boxes and radio buttons.
  3. The submit button which triggers the script to send the entered information to the server
- **Creating a form shell:**
  - Type **<FORM> METHOD=POST ACTION=url>**
  - Create the form elements.
  - End with a closing </FORM> tag.
  The url specifies where to send the form-data when the form is submitted.
  The POST request method requests that a web server accepts the data enclosed in the body of the request message, most likely for storing it.
- **Creating text boxes:**
  - To create a text box, type **<INPUT TYPE="text" NAME="name" VALUE="value" SIZE="n" MAXLENGTH="n">**
  - The <input> tag specifies an input field where the user can enter data.
  - The NAME, VALUE, SIZE, and MAXLENGTH attributes are optional.
  - The NAME attribute is used to identify the text box to the processing script.

- The VALUE attribute is used to specify the text that will initially appear in the text box.
- The SIZE attribute is used to define the size of the box in characters.
- The MAXLENGTH attribute is used to define the maximum number of characters that can be typed in the box.

- **Creating larger text areas:**
  - To create larger text areas, type **<TEXTAREA NAME="name" ROWS=n1 COLS=n2 WRAP> Default Text </TEXTAREA>**
  - n1 is the height of the text box in rows and n2 is the width of the text box in characters.
  - The WRAP attribute causes the cursor to move automatically to the next line as the user types.

- **Creating radio buttons:**
  - To create a radio button, type **<INPUT TYPE="radio" NAME="name" VALUE="Data">Label**
  - The <input> tag specifies an input field where the user can enter data.
  - "Data" is the text that will be sent to the server if the button is checked.
  - "Label" is the text that identifies the button to the user.

- **Creating checkboxes:**
  - To create a checkbox, type **<INPUT TYPE="checkbox" NAME="name" VALUE="value">Label**
  - **Note:** If you give a group of radio buttons or checkboxes the same name, the user will only be able to select one button or box at a time.
  - The <input> tag specifies an input field where the user can enter data.

- **Creating drop-down menus:**
  - To create a drop-down menu, type
    <SELECT NAME="name" SIZE=n MULTIPLE>
    <OPTION VALUE= "value1">Label1
    <OPTION VALUE= "value2">Label2

    ...
    </SELECT>
  - The SIZE attribute specifies the height of the menu in lines. This is optional.
  - MULTIPLE allows users to select more than one menu option. This is optional.
  - The <select> element is used to create a drop-down list.
  - The <option> tags inside the <select> element define the available options in the list.

- **Creating a Submit Button:**
  - To create a submit button, type **<INPUT TYPE="submit" VALUE="NAME">**
  - The <input> tag specifies an input field where the user can enter data.

- **Creating a Reset Button:**
  - To create a reset button, type **<INPUT TYPE="reset" VALUE="name">**
  - The <input> tag specifies an input field where the user can enter data.

<H1> - <H6>:
- Defines a heading.
- <H1> is the biggest size while <H6> is the smallest size.
- Syntax: **<Hi> … </Hi>** where i is an integer between 1 to 6, inclusive.

<HEAD>:
- The <head> element is a container for all the head elements.
- The <head> element can include a title for the document, scripts, styles, meta information, and more.
- Syntax:
  <head>

  …

  </head>

<HEADER>:
- The <header> element represents a container for introductory content or a set of navigational links.
- A <header> element typically contains:
  - one or more heading elements (<h1> - <h6>).
  - Logo or icon.
  - Authorship information
- You can have several <header> elements in one document.
- **Note:** A <header> tag cannot be placed within a <footer>, <address> or another <header> element.
- **Note:** A <header> tag is not the same as a <head> tag.
- Syntax:
  <header>

  …

  </header>

<HTML>:
- The <html> tag tells the browser that this is an HTML document.
- The <html> tag represents the root of an HTML document.
- The <html> tag is the container for all other HTML elements (except for the <!DOCTYPE> tag).
- Syntax:
  <HTML>

  …

  </HTML>

<I>:
- Italicize the text.
- Syntax: **<I> … </I>**

<IMG>:
- The <img> tag defines an image in an HTML page.
- The <img> tag has two required attributes: src and alt.
- **Note:** The <img> tag has no closing tag.
- **Note:** To link an image to another document, simply nest the <img> tag inside <a> tags.
- The SRC attribute specifies the URL of an image.
- The ALT attribute specifies an alternate text for an image. Some browsers don't support images. In this case, the ALT attribute can be used to create text that appears instead of the image.
- The height attribute specifies the height of an image.
- The width attribute specifies the width of an image.
- The border attribute specifies the width of the border around an image.
- Syntax: **<img src="url" alt="name" height="n" width="m">**

<LI>
- The <LI> tag defines a list.
- There are 2 types of lists:
    1. Ordered:
        a. Ordered lists are a list of numbered items. An ordered list starts with the <OL> tag. Each list item starts with the <LI> tag. The list items will be marked with numbers by default.
        b. Syntax:
        <OL>
          <LI> … </LI>
          <LI> … </LI>
          <LI> … </LI>
        </OL>
        c. The TYPE attribute allows you to change the kind of symbol that appears in the list.
            i. "A" is for capital letters.
            ii. "a" is for lowercase letters.
            iii. "I" is for capital roman numerals.
            iv. "i" is for lowercase roman numerals.
            v. "1" is for numbers. This is the default value.
    2. Unordered:
        a. An unordered list is a list of bulleted items.
        b. It is denoted with the <UL> tag. Each list item starts with the <LI> tag.
        c. The list items will be marked with bullets by default.
        d. Syntax:
        <UL>
          <LI> … </LI>
          <LI> … </LI>
          <LI> … </LI>
        </UL>
        e. The TYPE attribute allows you to change the type of bullet that appears.
            i. circle corresponds to an empty round bullet.
            ii. square corresponds to a square bullet.
            iii. disc corresponds to a solid round bullet. This is the default value.

<MAIN>:
- The <main> tag specifies the main content of a document.
- The content inside the <main> element should be unique to the document. It should not contain any content that is repeated across documents such as sidebars, navigation links, copyright information, site logos, and search forms.
- **Note:** There must not be more than one <main> element in a document.
- **Note:** The <main> element must NOT be a descendant of an <article>, <aside>, <footer>, <header>, or <nav> element.
- Syntax:
<main>

…
</main>

<MARK>:
- The <mark> tag defines marked text.
- Use the <mark> tag if you want to highlight parts of your text.
- Syntax: **<mark> … </mark>**

<NAV>:
- The <nav> tag defines a set of navigation links.
- Note that not all links of a document should be inside a <nav> element.
- The <nav> element is intended only for major blocks of navigation links.
- Syntax:
  <nav>
  <a href=...>
  <a href=...>
  …
  </nav>

<P>:
- Defines a paragraph.
- Syntax: **<P> … </P>**

<SECTION>:
- The <section> tag defines sections in a document, such as chapters, headers, footers, or any other sections of the document.
- Syntax:
  <section>
  …
  </section>

<TABLE>:
- The <TABLE> tag is used to create a table.
- The <TR> tag defines the beginning of a row.
- The <TD> tag defines the beginning of a cell that contains data. These cells are called **standard cells**.
- The <TH> tag defines the beginning of a cell that contains the headers. These cells are called **header cells**.
- **Adding a Border:**
- The BORDER=n attribute allows you to add a border n pixels thick around the table.
- To make a solid border color, use the BORDERCOLOR="color" attribute.
- To make a shaded colored border, use BODERCOLORDARK="color" and BORDERCOLORLIGHT="color".
- **Adjusting the Width:**
- When a web browser displays a table, it often adds extra space. To eliminate this space use the WIDTH = n attribute in the <TABLE> and <TD> tags. Note that a cell cannot be smaller than its contents, and if you make a table wider than the browser window, users will not be able to see parts of it.
- **Centering a Table:**
- There are two ways to center a table:
  1. **<TABLE ALIGN=CENTER>**
  2. Enclose the <TABLE> tags between the opening and closing <CENTER> tags.
- **Wrapping Text around a Table:**
- It is possible to wrap text around a table. This technique is often used to keep images and captions together within an article.

- To wrap text around a table, type **<TABLE ALIGN = LEFT>** to align the table to the left while the text flows to the right.
- **Adding Space around a Table:**
- To add space around a table, use the HSPACE=n and VSPACE=n attributes in the <TABLE> tag.
- The hspace attribute specifies the amount of whitespace on the left and right side of an object.
- The vspace attribute specifies the amount of whitespace above and below an object.
- **Spanning Cells Across Columns and Rows:**
- To span a cell across many columns, type **<TD COLSPAN=n>**, where n is the number of columns to be spanned.
- To span a cell across many rows, type **<TD ROWSPAN=n>**, where n is the number of rows to be spanned.
- **Aligning Cell Content:**
- By default, a cell's content is aligned horizontally to the left and vertically in the middle.
- Use VALIGN=direction to change the vertical alignment, where "direction" is top, middle, bottom, or baseline.
- Use ALIGN=direction to change the horizontal alignment where "direction" is left, center, or right.
- **Controlling Cell Spacing:**
- **Cell spacing** is the space between cells while **cell padding** is the space around the contents of a cell.
- To control both types of spacing, use the CELLSPACING=n and CELLPADDING=n attributes in the <TABLE> tag.
- **Changing a Cell's Color:**
- To change a cell's color, add the BGCOLOR="color" attribute to the <TD> tag.
- **Dividing Your Table into Column Groups:**
- You can divide your table into two kinds of column groups: structural and nonstructural.
- **Structural column groups** control where dividing lines are drawn while **non-structural groups** do not.
- To create structural column groups, type **<COLGROUP SPAN=n>** after the <TABLE> tag, where n is the number of columns in the group.
- To create non-structural column groups, type **<COL SPAN=n>**, where n is the number of columns in the group.
- **Dividing Table into Horizontal Sections:**
- You can also create a horizontal section consisting of one or more rows. This allows you to format the rows all at once.
- To create a horizontal section, type <THEAD>, <TBODY>, or <TFOOT> before the first <TR> tag of the section.
- The <thead> tag is used to group header content in an HTML table.
- The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer).
- Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.

- The <thead> tag must be used in the following context: As a child of a <table> element, after any <caption>, and <colgroup> elements, and before any <tbody>, <tfoot>, and <tr> elements.
- The <tbody> tag is used to group the body content in an HTML table.
- The <tbody> tag must be used in the following context: As a child of a <table> element, after any <caption>, <colgroup>, and <thead> elements.
- The <tfoot> tag is used to group footer content in an HTML table.
- The <tfoot> tag must be used in the following context: As a child of a <table> element, after any <caption>, <colgroup>, <thead>, and <tbody> elements.
- **Controlling Line Breaks:**
- Unless you specify otherwise a browser will divide the lines in a cell as it sees fit.
- The NOWRAP attribute placed within the <TD> tag forces the browser to keep all the text in a cell on one line.

<TIME>:
- The <time> tag defines a human-readable date/time.
- This element can also be used to encode dates and times in a machine-readable way so that user agents can offer to add birthday reminders or scheduled events to the user's calendar, and search engines can produce smarter search results.
- The time element does not render as anything special in any of the major browsers.
- Syntax: **<time datetime="year-month-day hour:minute"> … </time>**

<TITLE>:
- The <TITLE> tag is required in all HTML documents and it defines the title of the document.
- It defines a title in the browser toolbar, provides a title for the page when it is added to favorites and displays a title for the page in search-engine results.
- Syntax: **<TITLE> … </TITLE>**

<U>:
- Underlines the text.
- Syntax: **<U> … </U>**

Attributes:

Align:
- The align attribute specifies the alignment of the text within a paragraph.
- There are 4 values for the align attribute:
    1. Left: Left aligns the text.
    2. Right: Right aligns the text.
    3. Center: Centers the text.
    4. Justify: Stretches the lines so that each line has equal width.
- The ALIGN attribute can be inserted in the <P> and header tags.
- Syntax: **<P align='left|right|center|justify'> … </P>**
- For example, **<H1 align=CENTER> The New York Times </H1>** would create a centered heading of the largest size.

BGCOLOR:
- Used to define the background color.
- Is in the <BODY> tag.
- Syntax: **<BODY BGCOLOR="color">**

Class:
- Used to define equal styles for elements with the same class name. This way, all HTML elements with the same class attribute will get the same style.
- The class attribute can be used on any HTML element.
- The class name is case sensitive. Different tags can have the same class name. A class cannot start with a number.

ID:
- Specifies a unique id for an HTML element (the value must be unique within the HTML document).
- The id attribute can be used on any HTML element.
- The id value is case-sensitive. The id value must contain at least one character, and must not contain spaces. Furthermore, an id cannot start with a number.
- The difference between the id attribute and the class attribute is that an HTML element can only have one unique id that belongs to that single element, while a class name can be used by multiple elements.
  I.e. There can not be multiple of the same ids while there can be multiple of the same classes.

TEXT:
- Used to define the text color.
- Is in the <BODY> tag.
- Syntax: **<BODY TEXT="color">**