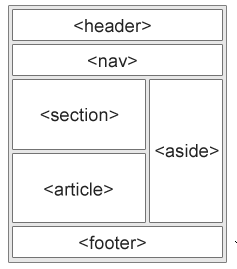
HTML

1. Home  
   HTML is the standard markup language for Web pages.With HTML you can create your own website. HTML is easy to learn.
2. Introduction to HTML
   * HTML stands for Hyper Text Markup Language
   * HTML is the standard markup language for creating Web pages
   * HTML describes the structure of a Web page
   * HTML consists of a series of elements
   * HTML elements tell the browser how to display the content
   * HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.
   * A Simple HTML Document
   * Example Explained
   * What is an HTML Element?
   * Web Browsers
   * HTML Page Structure
   * HTML History
3. HTML Editors
4. HTML Basic Examples
   * HTML Documents
   * The <!DOCTYPE> Declaration
   * HTML Headings
   * HTML Paragraphs
   * HTML Images
   * How to View HTML Source
   * View HTML Source Code:
   * Inspect an HTML Element:
5. HTML Elements  
   An HTML element is defined by a start tag, some content, and an end tag.
   * HTML Elements
   * Nested HTML Elements
   * Never Skip the End Tag
   * Empty HTML Elements  
     HTML elements with no content are called empty elements.
   * HTML is Not Case Sensitive  
     The HTML standard does not require lowercase tags, but W3C recommends lowercase in HTML, and demands lowercase for stricter document types like XHTML.
   * HTML Tag Reference
6. HTML Attributes
   * HTML Attributes
     1. All HTML elements can have attributes
     2. Attributes provide additional information about elements
     3. Attributes are always specified in the start tag
     4. Attributes usually come in name/value pairs like: name="value"
   * The href Attribute
   * The src Attribute
     1. Absolute URL
     2. Relative URL
   * The width and height Attributes
   * The style Attribute
   * The lang Attribute  
     You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers.  
     E.g.: <html lang="en">
   * The title Attribute  
     The title attribute defines some extra information about an element. The value of the title attribute will be displayed as a tooltip when you mouse over the element:  
     e.g.: <p title="I'm a tooltip">This is a paragraph.</p>
   * Always Use Lowercase Attributes
   * Always Quote Attribute Values
   * Single or Double Quotes?
     1. Double quotes around attribute values are the most common in HTML, but single quotes can also be used.
     2. In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:
7. HTML Headings  
   HTML headings are titles or subtitles that you want to display on a webpage.
   * HTML Headings
     1. <h1>Heading 1</h1>
     2. <h2>Heading 2</h2>
     3. <h3>Heading 3</h3>
     4. <h4>Heading 4</h4>
     5. <h5>Heading 5</h5>
     6. <h6>Heading 6</h6>
   * Headings Are Important  
     Search engines use the headings to index the structure and content of your web pages. Users often skim a page by its headings. It is important to use headings to show the document structure. <h1> headings should be used for main headings, followed by <h2> headings, then the less important <h3>, and so on.
   * When not to use headings  
     Use HTML headings for headings only. Don't use headings to make text BIG or bold.
   * Bigger Headings  
     Each HTML heading has a default size. However, you can specify the size for any heading with the style attribute, using the CSS font-size property:  
     e.g.: <h1 style="font-size:60px;">Heading 1</h1>
8. HTML Paragraphs  
   A paragraph always starts on a new line, and is usually a block of text.
   * HTML Paragraphs
   * HTML Display
     1. Display Size
     2. No Extra Space
     3. Spaces do not print.
   * HTML Horizontal Rules  
     The <hr> tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule.
   * HTML Line Breaks  
     <br>
   * The Poem Problem  
     his poem will display on a single line:
     1. No Next line by default, prints in single line.
   * Solution - The HTML <pre> Element  
     he HTML <pre> element defines preformatted text. The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:
9. HTML Styles  
   The HTML style attribute is used to add styles to an element, such as color, font, size, and more.
   * The HTML Style Attribute  
     Setting the style of an HTML element, can be done with the style attribute.  
     Syntax: <tagname style="property:value;">  
     e.g: <h style=”color : red;”>This is Heading in Red Color</h>  
     he property is a CSS property. The value is a CSS value. We will learn more about CSS later in this tutorial.
     1. Properties:
        1. Color
        2. Background color
        3. Fonts
        4. font-size
        5. text-align
        6. …..
10. HTML Text Formatting  
    HTML contains several elements for defining text with a special meaning. Formatting elements were designed to display special types of text:
    * HTML Formatting Elements
      1. <b> - Bold text
      2. <strong> - Important text
      3. <i> - Italic text
      4. <em> - Emphasized text
      5. <mark> - Marked text (highlighted with yellow)
      6. <small> - Smaller text
      7. <del> - Deleted text (cut lined)
      8. <ins> - Inserted text (Underlined)
      9. <sub> - Subscript text
      10. <sup> - Superscript text
    * HTML <b> and <strong> Elements
    * HTML <i> and <em> Elements
11. HTML Quotation and Citation Elements  
    In this chapter we will go through the <blockquote>,<q>, <abbr>, <address>, <cite>, and <bdo> HTML elements.
    * HTML <blockquote> for Quotations  
      The HTML <blockquote> element defines a section that is quoted from another source. Browsers usually indent <blockquote> elements.  
      E.g: <blockquote cite="http://www.worldwildlife.org/who/index.html">Quote Text</blockqoute>
    * HTML <q> for Short Quotations  
      Browsers normally insert quotation marks around the quotation.
    * HTML <abbr> for Abbreviations  
      The HTML <abbr> tag defines an abbreviation or an acronym, like "HTML", "CSS", "Mr.", "Dr.", "ASAP", "ATM". Marking abbreviations can give useful information to browsers, translation systems and search-engines.Browser will add doted underline for abbrivations.  
      Tip: Use the global title attribute to show the description for the abbreviation/acronym when you mouse over the element.  
      E.g: <p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
    * HTML <address> for Contact Information  
      The HTML <address> tag defines the contact information for the author/owner of a document or an article. The contact information can be an email address, URL, physical address, phone number, social media handle, etc. The text in the <address> element usually renders in italic, and browsers will always add a line break before and after the <address> element.
    * HTML <cite> for Work Title  
      The HTML <cite> tag defines the title of a creative work (e.g. a book, a poem, a song, a movie, a painting, a sculpture, etc.). The text in the <cite> element usually renders in italic  
      Note: A person's name is not the title of a work..
    * HTML <bdo> for Bi-Directional Override  
      BDO stands for Bi-Directional Override.The HTML <bdo> tag is used to override the current text direction:
12. HTML Comments
    * <!-- Write your comments here -->
    * Hide Content
    * Hide Inline Content
13. HTML Colors  
    HTML colors are specified with predefined color names, or with RGB, HEX, HSL, RGBA, or HSLA values.
    * Color Names
      1. Tomato
      2. Orange
      3. DodgerBlue
      4. MediumSeaGreen
      5. Gray
      6. SlateBlue
      7. Violet
      8. LightGray
      9. HTML supports 140 standard color names.
    * Background Color  
      e.g: <h1 style="background-color:DodgerBlue;">Hello World</h1>
    * Text Color  
      e.g: <h1 style="color:Tomato;">Hello World</h1>
    * Border Color  
      <h1 style="border:2px solid Tomato;">Hello World</h1>
    * Color Values
      1. rgb(255, 99, 71)
      2. #ff6347
      3. hsl(9, 100%, 64%)
      4. rgba(255, 99, 71, 0.5)
      5. hsla(9, 100%, 64%, 0.5)
14. HTML Styles – CSS  
    CSS stands for Cascading Style Sheets.CSS saves a lot of work. It can control the layout of multiple web pages all at once.
    * What is CSS?
    * Cascading  
      The word cascading means that a style applied to a parent element will also apply to all children elements within the parent. So, if you set the color of the body text to "blue", all headings, paragraphs, and other text elements within the body will also get the same color (unless you specify something else)!
    * Using CSS  
      CSS can be added to HTML documents in 3 ways:
      1. **Inline - by using the style attribute inside HTML elements**  
         An inline CSS is used to apply a unique style to a single HTML element. An inline CSS uses the style attribute of an HTML element.
      2. **Internal - by using a <style> element in the <head> section**  
         An internal CSS is used to define a style for a single HTML page.
      3. **External - by using a <link> element to link to an external CSS file**  
         An external style sheet is used to define the style for many HTML pages.
    * "styles.css":
    * CSS Colors, Fonts and Sizes
      1. The CSS color property defines the text color to be used.
      2. The CSS font-family property defines the font to be used.
      3. The CSS font-size property defines the text size to be used.
      4. The CSS border property defines a border around an HTML element.
      5. The CSS padding property defines a padding (space) between the text and the border.
      6. The CSS margin property defines a margin (space) outside the border.
    * Link to External CSS  
      External style sheets can be referenced with a full URL or with a path relative to the current web page.
      1. Web URL  
         E.g: <link rel="stylesheet" href="https://www.aqibshahzad.com/css/styles.css">
      2. In a Folder  
         <link rel="stylesheet" href="/css/styles.css">
      3. same folder  
         <link rel="stylesheet" href="styles.css">
15. HTML Links  
    HTML links are hyperlinks.
    * HTML Links – Syntax  
      The HTML <a> tag defines a hyperlink. It has the following syntax:  
      <a href="url">link text</a>
      1. HTML Links - The target Attribute  
         The target attribute specifies where to open the linked document.  
         Syntax: target=”\_blank”
         1. \_self - Default. Opens the document in the same window/tab as it was clicked
         2. \_blank - Opens the document in a new window or tab
         3. \_parent - Opens the document in the parent frame
         4. \_top - Opens the document in the full body of the window
         5. Framename –used to display within the spacified fram of current window.
      2. Absolute URLs vs. Relative URLs
    * HTML Links - Use an Image as a Link  
      To use an image as a link, just put the <img> tag inside the <a> tag:  
      <a href="https://google.com"> <img src="vu image.jpg" alt="">
    * Link to an Email Address  
      Syntax: <a href="mailto:someone@example.com">Send email</a>
    * Button as a Link  
      Syntax: <button onclick="document.location='default.asp'">HTML Tutorial</button>
    * Link Titles
16. HTML Link Colors
    * Link Appearance
      1. An unvisited link is underlined and blue
      2. A visited link is underlined and purple
      3. An active link is underlined and red
      4. We can change the link state colors, by using CSS Properties :
         1. a:active
         2. a:hover
         3. a:visited
         4. a:link
    * Link Buttons  
      A link can also be styled as a button, by using CSS:
17. HTML Links - Create Bookmarks  
    HTML links can be used to create bookmarks, so that readers can jump to specific parts of a web page
    * Create a Bookmark in HTML  
      First Create Element with an ID to which you wanna jump to   
      E.g: <h2 id="C4">Chapter 4</h2>  
      Then Create ancher to jump that Elemet using ID  
      e.g; <a href="#C4">Jump to Chapter 4</a>
    * link to a bookmark on another page  
      <a href="html\_demo.html#C4">Jump to Chapter 4</a>
18. HTML Images  
    <img src="url" alt="alternatetext">
    * Src
    * Alt
    * Image Size - Width and Height  
      <img src="url" alt="alternatetext" style="width:500px;height:600px;">  
      Note: Always specify the width and height of an image. If width and height are not specified, the web page might flicker while the image loads.
    * Width and Height, or Style?
    * Images in Another Folder  
      <img src="/images/html5.gif" alt="HTML5 Icon" style="width:128px;height:128px;">
    * Images on Another Server/Website  
      <img src="https://www.w3schools.com/images/w3schools\_green.jpg" alt="W3Schools.com">
    * Animated Images
    * Image as a Link  
      <a href="default.asp"><img src="smiley.gif" alt="HTML tutorial" style="width:42px;height:42px;"></a>
    * Image Floating
19. HTML Image Maps (Will have to Study latter)  
    The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.
20. HTML Background Images  
    Background images can be added using
    * style attribute  
      <p style="background-image: url('img\_girl.jpg');">This is Background Image</p>
    * Style Element of CSS  
      <style>p {background-image: url('img\_girl.jpg');}</style>
    * Background Image on a Page  
      <style>body {background-image: url('img\_girl.jpg');}</style>
    * Background Repeat  
      <s>b{ background-repeat: no-repeat;}><s>
    * Background Cover  
      cover the entire element.  
      background-attachment: fixed;  
      background-size: cover;
    * Background Stretch  
      background-attachment: fixed;  
      background-size: 100% 100%;
21. HTML <picture> Element  
    The HTML <picture> element allows you to display different pictures for different devices or screen sizes.  
    <picture>  
    <source media="(min-width: 650px)" srcset="pexels-photo-1279903.jpeg">  
    <source media="(min-width: 465px)" srcset="pexels-jaime-reimer-2662116.jpg">  
     <img src="aqib.png" alt="aqib.png">  
    </picture>
22. When to use the Picture Element
    * Bandwidth  
      If you have a small screen or device, it is not necessary to load a large image file. The browser will use the first <source> element with matching attribute values, and ignore any of the following elements.
    * Format Support  
      Some browsers or devices may not support all image formats. By using the <picture> element, you can add images of all formats, and the browser will use the first format it recognizes, and ignore any of the following elements.  
      <picture>  
      <source srcset="img\_avatar.png">  
      <source srcset="img\_girl.jpg">  
      <img src="img\_beatles.gif" alt="Beatles" style="width:auto;">  
      </picture>
23. HTML Favicon  
    <link title="Favicon" rel="icon" type="image/x-icon" href="favicon.png">
24. HTML Page Title  
    <title>Aqib's Resume</title>
25. HTML Tables  
    <table>  
     <tr>  
     <th></th>  
     </tr>  
     <tr>  
     <td></td>  
     </tr>  
    </table>
26. HTML Table Borders  
    table, th, td{  
    border: 2px solid black;  
    }
    * Collapsed Table Borders  
      This will make the borders collapse into a single border  
      border-collapse: collapse;
    * Style Table Borders  
      border: 1px solid white;  
      background-color: rgb(159, 212, 212);
    * Round Table Borders  
      border-radius: 10px;
    * Dotted Table Borders
      1. dotted
      2. dashed
      3. solid
      4. double
      5. groove
      6. ridge
      7. inset
      8. outset
      9. none
      10. Hidden
    * Border Color  
      border-color: #96D4D4;
    * HTML Table Sizes  
      <table style="width:100%">
      1. HTML Table Column Width  
         <th style="width:70%">Firstname</th>
      2. HTML Table Row Height  
         tr{ height: 200px}
         1. For A spacific Rov  
            <tr style=”height:200px”>Second Row</tr>
    * Align Table Headers  
      text-align: left;
      1. Right
      2. center
      3. end
      4. justify
      5. left
      6. right
      7. start
      8. calc()
      9. inherit
      10. initial
      11. Unset
    * Header for Multiple Columns  
      <th colspan="2">Name</th>
    * Header for Multiple Rows  
      <th colspan="2">Age</th>
    * Table Caption  
      <table> <caption>Monthly savings</caption></table>
    * HTML Table Padding & Spacing
      1. HTML Table - Cell Padding  
         padding: 15px;
      2. HTML Table - Cell Spacing  
         Cell spacing is the space between each cell.  
         table {border-spacing: 30px;}
    * HTML Table - Zebra Stripes  
      tr:nth-child(even) {background-color: #D6EEEE;}
    * HTML Table - Vertical Zebra Stripes  
      td:nth-child(odd), th:nth-child(odd) {background-color: #D6EEEE;}
    * Combine Vertical and Horizontal Zebra Stripes  
      td:nth-child(odd), th:nth-child(odd) {background-color: #D6EEEE;}  
      tr:nth-child(even) {background-color: #D6EEEE;}
    * Horizontal Dividers  
      tr{border-bottom: 2px solid black;}
    * HTML Table Colgroup  
      used to style specific columns of a table  
      e.g: Styling 2 colloms of table:   
      <table> <colgroup><col span="2" style="background-color: #D6EEEE"></colgroup></table>  
      Legal CSS Properties
      1. Width
      2. Visibility
      3. Backgroud
      4. Border
    * Multiple Col Elements  
      <colgroup><col span="1" style="background-color: #ffffff">  
      <colgroup><col span="1" style="background-color: #df4c4c">
    * Hide Columns  
      <colgroup><col span="1" style="visibility: collapse;">
27. HTML Lists
    * Unordered HTML List  
      <ul>  
      <li></li>  
      </ul>
      1. Choose List Item Marker  
         <ul style="list-style-type:disc;">
         1. Disck
         2. Circle
         3. Square
         4. none
    * Ordered HTML List  
      <ol>  
      <li></li>   
      </ol>  
      <ol type="1">
      1. Type=”1”
      2. Type=”A”
      3. Type=”a”
      4. Type=”I”
      5. Type=”i”
    * Control List Counting  
      <ol start="50">
    * HTML Description Lists  
      <dl>  
      <dt>Name</dt>  
      <dd>Describes</dd>  
      <dt>Milk</dt>  
      <dd>Is very essential for health</dd>
    * Nested HTML Lists  
      <ol>  
       <li></li>  
       <ul>  
       <li></li>  
       </ul>  
       <li></li>  
      </ol>
    * Horizontal List with CSS (Nav Bar)   
      <head>  
       <style>  
       ul{  
       list-style-type: none;  
       margin:0;  
       padding:0;  
       BG:some;  
       overflow: hidden;  
       }  
       li a{  
       display: block;  
       color: white;  
       text-align: center;  
       text-decoration: none;  
       padding 16px;  
      }  
       </style>  
      </head>  
      <body>  
       <ul>  
       <li><a>Home</a></li>  
       <li><a>About</a></li>  
       </ul>  
      </body>
28. HTML Block and Inline Elements
29. HTML class Attribute
    * Using The class Attribute  
      <h2 class="city">London</h2>
    * Multiple Classes
      1. One class to multiple elements  
         <h2 class="city">Paris</h2>  
         <h2 class="city">Tokyo</h2>
      2. Multiple Classes to One element  
         <li class="red white">List one</li>
30. HTML id Attribute  
    <h1 id="myHeader">My Cities</h1>
31. Difference Between Class and ID
    * HTML Bookmarks with ID and Links  
      <h2><a title="chapter4" href="#chap4" style="text-decoration: none; color: black;">Jump to chapter4</a></h2>  
      <p id="chap4">This is chapter 4</p>
    * Using The id Attribute in JavaScript  
      The id attribute can also be used by JavaScript to perform some tasks for that specific element. JavaScript can access an element with a specific id with the getElementById() method:
32. HTML Iframe Syntax (Will have to Study latter)
33. HTML JavaScript (Will have to Study latter)
34. HTML File Paths  
    describes the location of a file in a web site's folder structure.
    * <img src="picture.jpg">
    * <img src="images/picture.jpg">
    * <img src="/images/picture.jpg">
    * <img src="../picture.jpg">
    * Absolute File Paths  
      <img src="https://www.w3schools.com/images/picture.jpg" alt="Mountain">
    * Relative File Paths  
      <img src="/images/picture.jpg" alt="Mountain">
    * Best Practice  
      It is best practice to use relative file paths (if possible).
35. HTML - The Head Element  
    The HTML <head> element is a container for the below mentioned metadata (data about data) elements. Metadata is not displayed.
    * <title>  
      The title must be text-only
      1. defines a title in the browser toolbar
      2. provides a title for the page when it is added to favorites
      3. displays a title for the page in search engine-results
    * <style>  
      used to define style information for a single HTML page:
    * <meta>  
      The <meta> element is typically used to specify the character set, page description, keywords, author of the document, and viewport settings.The metadata will not be displayed on the page, but is used by browsers (how to display content or reload page), by search engines (keywords), and other web services.
      1. <meta charset="UTF-8">  
         Define the character set used:
         1. character\_set  
            Specifies the character encoding for the HTML document. The HTML5 specification encourages web developers to use the UTF-8 character set!
      2. <meta name="keywords" content="HTML, CSS, JavaScript">  
         Define keywords for search engines:
      3. <meta name="description" content="Free Web tutorials">  
         Define a description of your web page:
      4. <meta name="author" content="John Doe">  
         Define the author of a page:
      5. <meta http-equiv="refresh" content="30">  
         Refresh document every 30 seconds:
      6. <meta name="viewport" content="width=device-width, initial-scale=1.0">  
         Setting the viewport to make your website look good on all devices:
    * <link>  
      defines the relationship between the current document and an external resource.The <link> tag is most often used to link to external style sheets:
    * <script> ( Will Read more later)  
      The <script> element is used to define client-side JavaScripts.
    * <base> (Remaining)  
      The <base> element specifies the base URL and/or target for all relative URLs in a page. There can only be one single <base> element in a document!  
      <head><base href=”https://www.w3schools.com/” target=”\_blank”></head>  
      <body><img src+”images/man.png”>
36. HTML Layout Elements and Techniques
    * HTML Layout Elements  
      HTML has several semantic elements that define the different parts of a web page:
      1. <header> - Defines a header for a document or a section
      2. <nav> - Defines a set of navigation links
      3. <section> - Defines a section in a document
      4. <article> - Defines an independent, self-contained content
      5. <aside> - Defines content aside from the content (like a sidebar)
      6. <footer> - Defines a footer for a document or a section
      7. <details> - Defines additional details that the user can open and close on demand
      8. <summary> - Defines a heading for the <details> element
    * HTML Layout Techniques  
      There are four different techniques to create multicolumn layouts:
      1. CSS framework  
         If you want to create your layout fast, you can use a CSS framework, like Bootstrap.
      2. CSS float property  
         It is common to do entire web layouts using the CSS float property. Float is easy to learn - you just need to remember how the float and clear properties work. Disadvantages: Floating elements are tied to the document flow, which may harm the flexibility
      3. CSS flexbox  
         Use of flexbox ensures that elements behave predictably when the page layout must accommodate different screen sizes and different display devices.
      4. CSS grid  
         The CSS Grid Layout Module offers a grid-based layout system, with rows and columns, making it easier to design web pages without having to use floats and positioning.
37. HTML Responsive Web Design  
    Responsive web design is about creating web pages that look good on all devices!.A responsive web design will automatically adjust for different screen sizes and viewports.
    * What is Responsive Web Design?  
      Responsive Web Design is about using HTML and CSS to automatically resize, hide, shrink, or enlarge, a website, to make it look good on all devices (desktops, tablets, and phones):
    * Setting The Viewport  
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
    * Responsive Images  
      Using the width Property: <img src="img\_girl.jpg" style="width:100%;">
      1. Using the max-width Property  
         If the max-width property is set to 100%, the image will scale down if it has to, but never scale up to be larger than its original size:  
         <img src="img\_girl.jpg" style="max-width:100%;height:auto;">
      2. Show Different Images Depending on Browser Width  
         The HTML <picture> element allows you to define different images for different browser window sizes.  
         <picture>  
         <source srcset="img\_smallflower.jpg" media="(max-width: 600px)">  
          <source srcset="img\_flowers.jpg" media="(max-width: 1500px)">  
         <source srcset="flowers.jpg">  
         <img src="img\_smallflower.jpg" alt="Flowers">  
         </picture>
    * Responsive Text Size  
      The text size can be set with a "vw" unit, which means the "viewport width". That way the text size will follow the size of the browser window:  
      <h1 style="font-size:10vw">Hello World</h1>  
      Viewport is the browser window size. 1vw = 1% of viewport width. If the viewport is 50cm wide, 1vw is 0.5cm.
    * Media Queries  
      We can define completely different styles for different browser sizes,