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Vocab: HTML stands for HyperText Markup Language

Vocab: HTML is composed of elements. Elements are formed by tags and contents. Tags signify the form that the contents will take. Content is the information placed between an opening tag and a closing tag.

Info: the default font for HTML is Times New Roman

Relate: HTML adheres to similar nesting principals as C++ and Java, but the entire thing is nested

Vocab: There are Parent Elements and Child Elements. A Child Element is an element nested inside a Parent Elemented. This Parent-Child relation can be extended to Grandchildren, Great Grandchildren, etc. This is called Hierarchy. Elements on the same level are called Siblings.

Tags: <body> tag hosts all elements. There can only be one <body> tag in each HTML doc

Tags: <h> tag is used to format a header [there are 6 headers <h1>, <h2>, etc.]

h1 > h2 > h3 > h4 > h5 > h6 [based on size]

Tags: <p> tag is used to format a paragraph. There will be a blank line before and after each paragraph

Tags: <div> is used to group elements. It doesn't do anything by itself.

Info: There are a lot of HTML tags

Vocab: Attributes can be added to the opening tag of an element and can be used in many different ways. Attributes contain the Name of the Attribute and the Value of the Attribute. [id = intro] for your intro.

Tags: <span> tag is used for text without line breaks (similar function as <div>)

Tags: <em> tag will apply an italic, <strong> will apply a bold

Tags: <br> tag will apply a line break (does not require </br>)

Tags: <ul> will create an unordered list (bullet points)

Tags: <ol> will create an ordered list (numbered)

Tags: <li> will format elements in a list

Tags: Images can be uploaded using the <img> tag. It requires a src Attribute and is self-closing [<img src="bongo.jpg">] jpg can also be the weblink [<img src="website.com/bongo.jpg">]

Info: Adding an alt Attribute to add a description helps people with screen readers

Tags: <video> tags will display videos. They function similarly to <img> tags, but they need to have an error message nested after and the closed with a </video> tag

Info: width and height Attributes are used to adjust media proportions. Adding a simple controls Attribute will allow users to control audio/video displayed.

Info: HTML files require Document Type Declarations [<!DOCTYPE html>] This should be the very first line

Info: The next line should establish HTML structure and content using <html>. Remember to add </html> at the end of the code.

Info: Add <head> </head> following your html establishment to contain metadata

Tags: <title> tag will establish the page's title. This is placed in <head>. This will appear on the title bar.

Tags: You can add links to other websites using the <a> (anchor) element and define the website link with a href Attribute. You can change the link's text by entering the custom text before closing with

Info: target Attribute specifies how the link should open. "_blank" will open the link in a new window.

Info: Store HTML files in the root directory so that they can easily access each other

Info: Relative paths are links that lead to local files

Info: When linking to html within the same folder, use ./ before the attribute name.

Info: nest an <img> inside an <a> to turn an image into a link

Info: elements can be given IDs using the id Attribute, and these IDs can be called by placing a # in front of the ID while using href Attribute while nested in an <a>

Relate: IDs are similar to variable names in Java and C++

Info: Comments can be added using <!-- TEXT →

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Tags: use <table> to create a table to hold data

Info: rows and cells must be added to the table manually. Use <tr> to add rows

Tags: use <td> tag to add cell data to rows. Each <td> will create a cell in the row it is nested in.

Tags: use <th> to add titles to tables. <th> behaves like a cell. Indicate whether the header is for a Col or a Row using the Scope Attribute.

Info: Table Borders can technically be added using html with the border Attribute, but this is outdated and should be avoided. Use CSS to add borders.

Info: Using the colspan Attribute, information can be made to span across multiple columns

Info: The same thing for rows can be accomplished using the rowspan Attribute

Info: Long tables can be sectioned off using the <tbody> element. It should contain all the table's data except the headings. The headings can be sectioned off using the <thead> element.

Info: If your table has a footing, it can be sectioned off using the <tfoot> element.

Info: You can control and customize all stylisation is a CSS file located in the same root directory as the HTML file

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Info: Computers communicate via HTTP Requests
Info: HTTP stands for HyperText Transfer Protocol. HTTPS, the modern version, stands for HyperText Transfer Protocol Secure and is more secure.
Info: HTTP Requests allow data transfers between computers and servers
Tags: <form> can be used to collect data. The Action attribute determines where the data is sent. The Method attribute assigns the HTTP verb (ie. method="POST")
Convention: Capitalize HTTP verbs.
Tags: you can create an input in a form using <input>. Inputs do not need to be closed.
Info: Assign input type using the Type Attribute (ie. input="text"). Assign the input name using the Name Attribute. Inputs have a Value Attribute that displays in the input field.
Tags: <label> tags help users identify inputs. Relate a label to an input by using the input's id in a For Attribute. You can assign an id to an input by using the id Attribute.
Info: Set the input type to Password to blot out the input.
Info: For numbers, set the type to Number
Info: Add a Step Attribute set to an integer to add arrows with which the user can increase or decrease the value of the input by the integer amount.
Info: Set the type to Range to make it a slider. Make Min and Max Attributes.
Info: Set the type to Checkbox to make a checkbox. Set the value of a checkbox to something resembling the input id.
Info: ids are unique, but names can be used to group inputs together.
Info: Set the type to Radio to make choice bubbles. Radios are related by name, only one radio of the name group can be chosen.
Tags: Use the <select> tag to create a dropdown menu. Use <option> tags nested in the <select> to create options. <option> tags have to be closed. The <select> carries the id and name attributes while the <option> carry the value attribute.
Info: When sent, information looks like [name]=[value] (ie. cheese=yes).
Tags: Using the <datalist> element, you can create a dropdown menu with a search feature. Assign an id Attribute to the datalist and assign a List Attribute with the id to the input. Datalists will display their values. The search is not case sensitive.
Tags: To create a text area, use the <textarea> tag. Set Rows and Cols Attributes to integers.
Tags: To finally submit a form, set the type of an input element to Submit. The Value of the input will show up as text on the submit button.

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Info: Add a simple Required Attribute to force the user to fill out the input before submitting
Info: Use Minlength and Maxlength attributes to set character limits
Info: Pattern Matching uses Regular Expressions or Regex to check whether an input conforms with a pattern. Use the Required Pattern Attribute. Square brackets contain input requirements and wiggly brackets contain length requirements. (ie. required pattern="[0-9]{14,16}" will ensure the input contains only digits between 0 and 9 (numbers) and has between 14 and 16 digits. ([a-zA-Z0-9]+ will ensure the input contains lowercase letters between a and z, uppercase letters between A and Z, and digits between 0 and 9)
Vocab: HTML code can be categorized as either Semantic or Non-Semantic
In Semantic HTML, code is put into elements based on its meaning. For example, headers go into header elements and footers into footer elements. In Non-Semantic HTML, code is put into <div> and <span> elements. Semantic is better because it is more accessible and fits convention.
Convention: Using specific tags is better because they tell you what is inside. A <div> can contain anything, but a <h1> will always contain a header.
Info: Certain Tags are purely for Semantics. The <header> tag doesn't actually do anything, but it is used to store headers like <h1>.
Info: A <header> tag is automatically assigned an id which can then be used to navigate to it. For a <div> to accomplish the same thing, it would need to be assigned a "header" id.
Tags: <nav> is used to categorize navigation links.
Tags: <main> is used to encapsulate the meat of the webpage
Tags: <footer> is used to encapsulate footers.
Info: By using semantic tags, screen readers and browsers are more easily able to identify how to read a webpage.
Info: Semantic tags can be nested within one another.
Tags: <section> is used to encapsulate related code that can be grouped together
Tags: <article> is used for standalone information
Tags: <aside> is used to encapsulate extra information
Tags: <figure> is used for images, <figcaption> is used for image captions. This is especially important for accessibility. <figcaption> is nested within <figure>.
Tags: <audio> is used for audio. Use the <source> tag with src attribute to insert audio files.
Tags: <embed> can be used to embed media. It doesn't need to be closed.
Info: Use Loop attribute to make a video/audio loop. Use Autoplay attribute to make it autoplay.