



HTML - Session - 1

- HTML Basics
- Elements, Tags and Attributes
- HTML Text



Basics of HTML

- ▶ What is HTML?
- ▶ History of HTML
- ▶ HTML Page Structure
- ▶ A Simple HTML Document



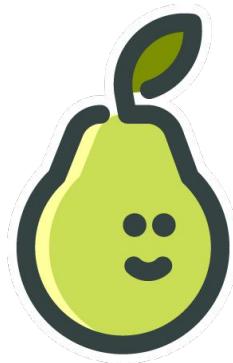
Did you finish HTML pre-class material?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

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What does "HTML" stand for?



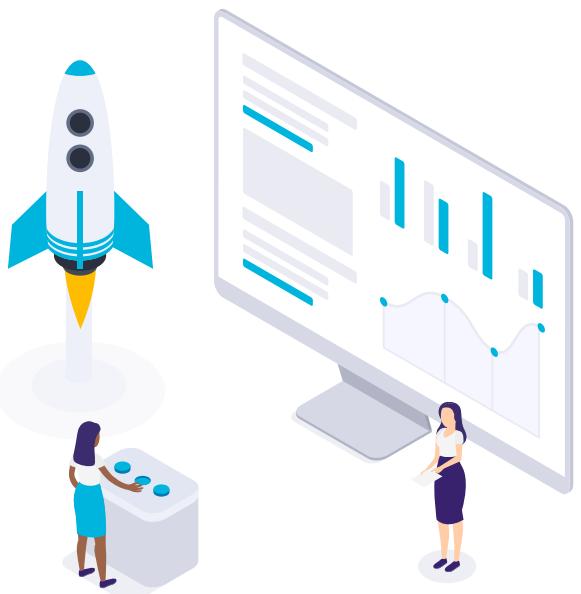
Students, write your response!

Pear Deck Interactive Slide
Do not remove this bar

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What is the HTML?



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WAY TO REINVENT YOURSELF

What is HTML?



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What is HTML?



A markup language defines the structure and presentation of raw text.



A HyperText is text displayed on a computer or device that provides access to other text through links (hyperlinks).



HTML is a markup language used to create documents on the web. It describes the structure and layout of a web page.

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List the Internet

Browsers you know by

name.



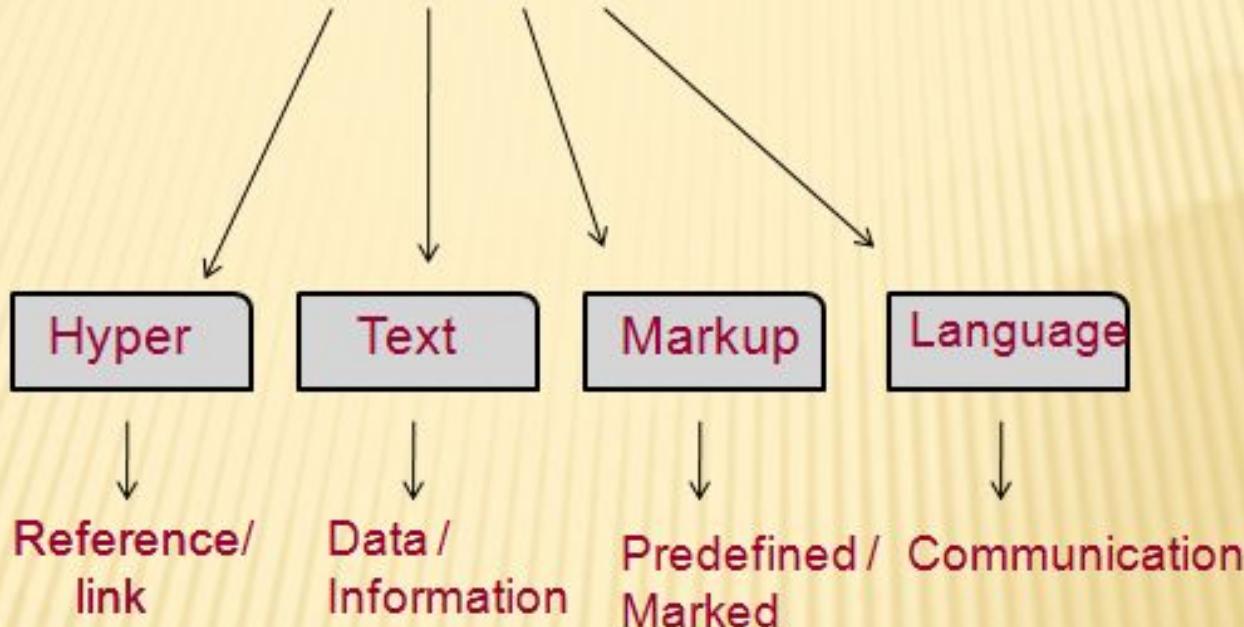
CLARUSWAY

Students, write your response!

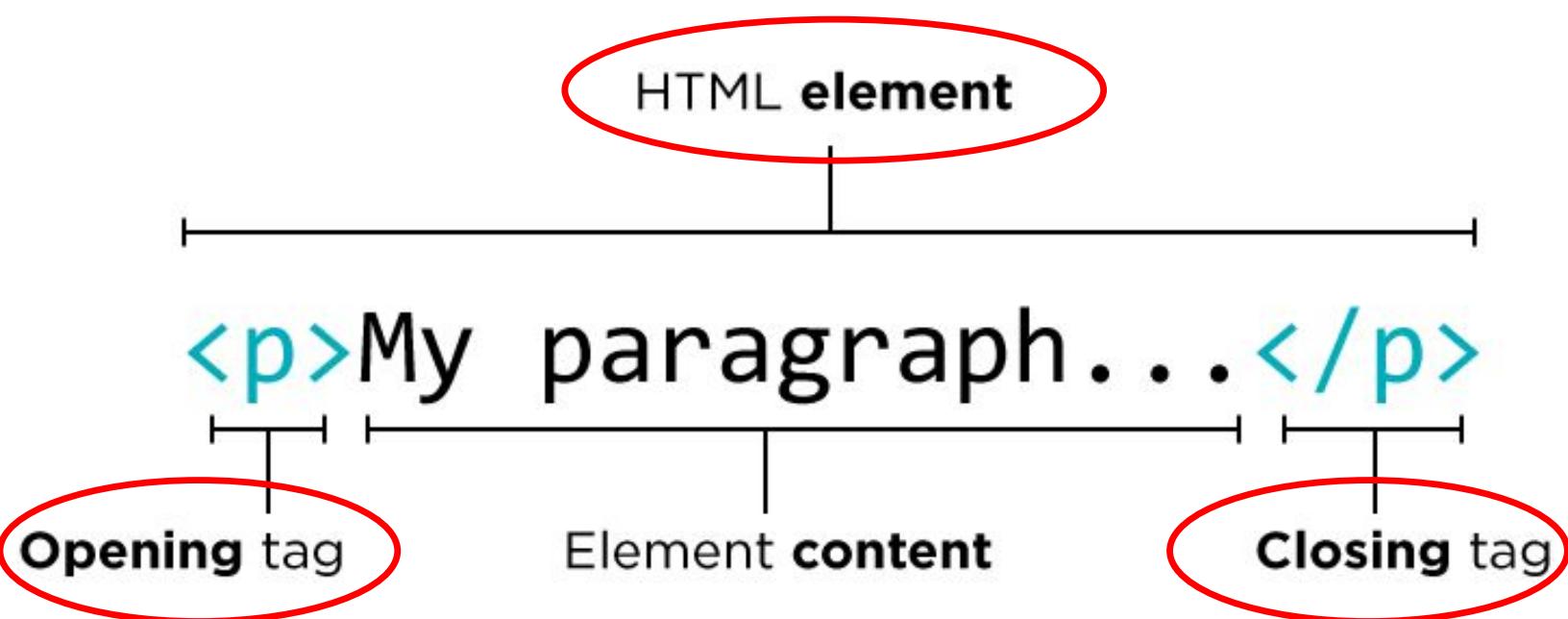
Pear Deck Interactive Slide
Do not remove this bar

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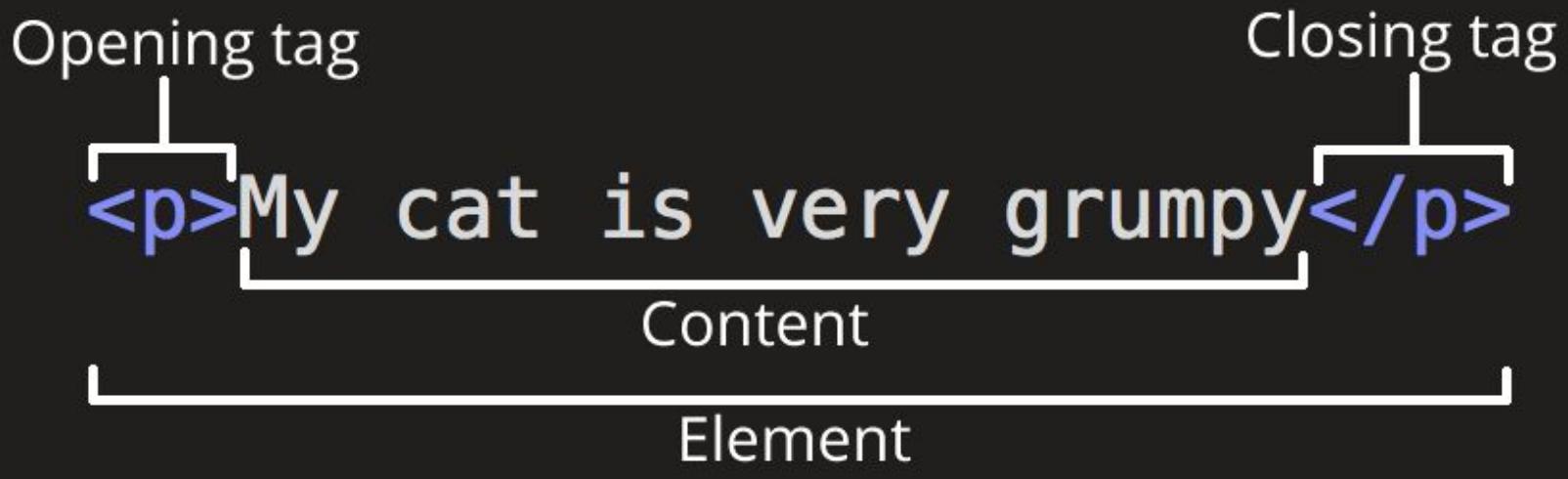
HTML



What is HTML?



► What is HTML?



► What is HTML?





What is HTML?



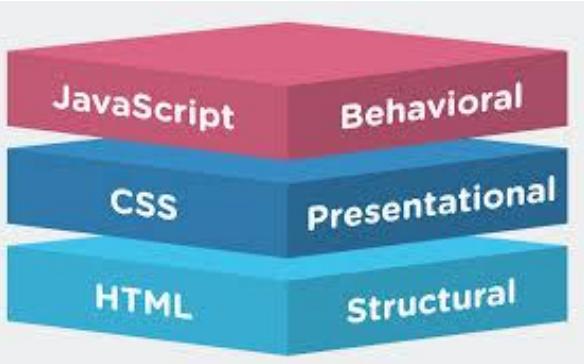
13

What is HTML?





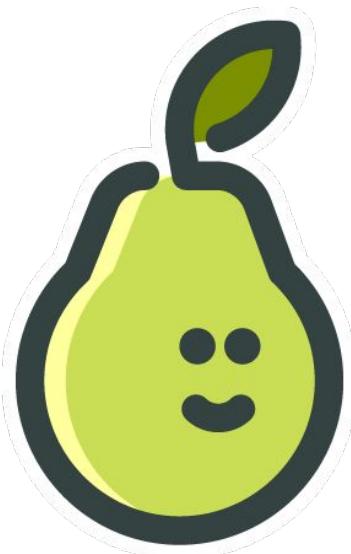
What is HTML?



History of HTML



History of HTML



What is the latest HTML version?

(Please answer the question on Pear Deck)



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

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History of HTML



HTML 5
2014

HTML 4.0.1
1999

HTML 3.2
1997

HTML
HTML2
HTML3.2
HTML4
HTML5

HTML *
1991 **

HTML 2.0
1995

Tim Berners-Lee





History of HTML

1991	HTML
1994	HTML 2
1996	CSS 1 + JavaScript
1997	HTML 4
1998	CSS 2
2000	XHTML 1
2002	Tableless Web Design
2005	AJAX
2009	HTML 5

1991	official birthday (20 elements)
1995	v2.0
1996	CSS 1
1996	JavaScript
1997	3.2 and 4.0 (W3C Recommendation)
1999/2000	XHTML
2005	World is asynchronous (AJAX)
2009	5.0

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History of HTML



Word Wide Web Consortium

- HTML * 1991 **
- HTML 2.0 1995
- HTML 3.2 1997
- HTML 4.0.1 1999
- XHTML 2000
- HTML5 2014

* Version
** Year



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History of HTML

HTML Then

Research documents

Sharing reports

Linking to related research

Displaying experimental data

Charts, graphs, and simple pictures

HTML Now

Storefronts, applications, files/photos

Interactive interfaces

Graphically rich



History of HTML



**It is still possible to visit the first web page
on Internet.**

(Please answer the question on Pear Deck)





History of HTML

HTML Then

HTML Now

World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

What's out there?

Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

Help

on the browser you are using

Software Products

A list of W3 project components and their current state. (e.g. [Line Mode](#), [X11 Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#).)

Technical

Details of protocols, formats, program internals etc

Bibliography

Paper documentation on W3 and references.

People

A list of some people involved in the project.

History

A summary of the history of the project.

How can I help ?

<http://info.cern.ch/hypertext/WWW/TheProject.html>

The screenshot shows a product page for an 'ESSENTIAL PACK' by Climbed Rock. The main image displays an orange climbing backpack with various straps and gear attached. A white helmet sits in front of it. To the left of the main image are four smaller thumbnail images of different products. On the right side, there is a price of \$259.99, a color palette, a quantity selector set to 1, a size selector set to S/M, and an 'Add to Cart' button. Below the main product image, there is a 'CUSTOMERS ALSO VIEWED' section featuring six other items with small images and names: FIREBAND KAYAK (\$499.95), HIGHLIGHTER HEAD (\$42.99), THE GOLDEN LINK (\$21.99), MEGA POKEY KIT (\$129.99), ESSENTIAL PACK (\$259.99), and MOCCASINE (\$79.95).



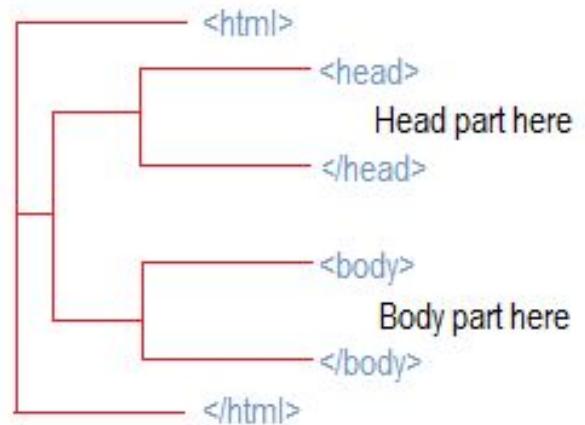
HTML Page Structure



HTML Page Structure

.HTM or .HTML

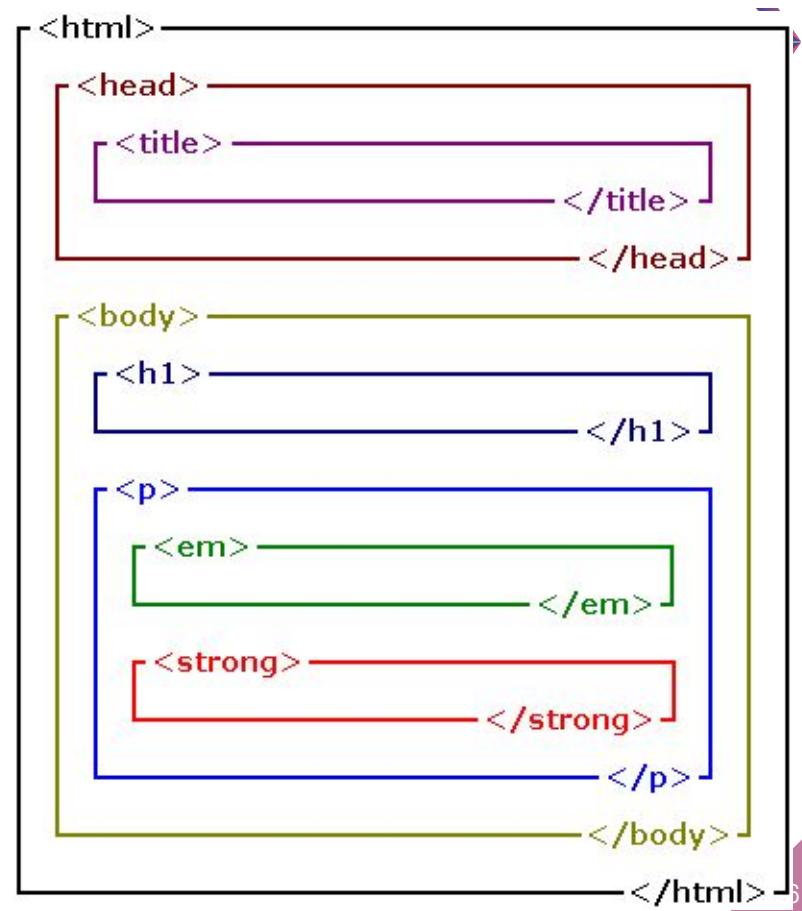
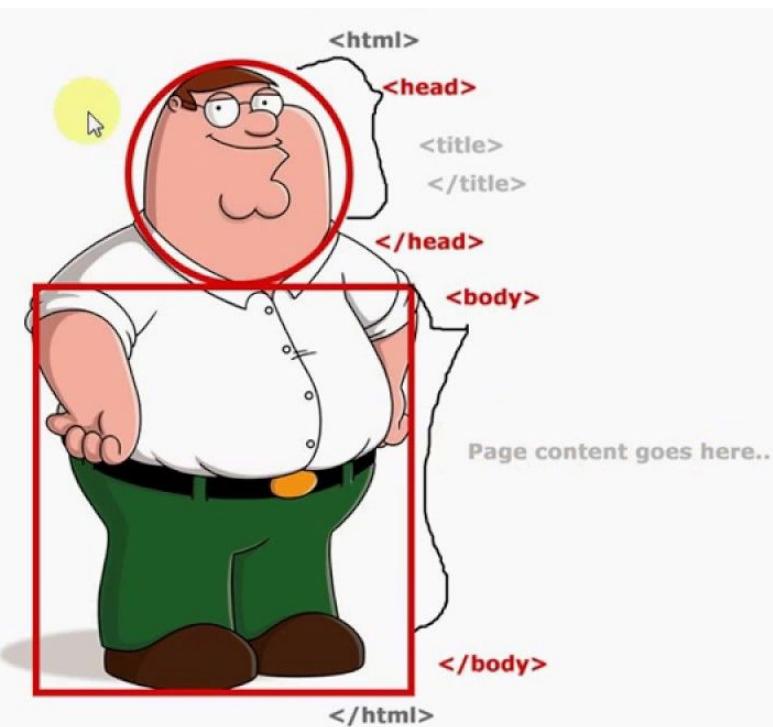
```
<!DOCTYPE html>
<html>
  <head>
    <!--meta information-->
  </head>
  <body>
    <!--the content of the page-->
  </body>
</html>
```



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HTML Page Structure





A Simple HTML Document

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A Simple HTML Document

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>My HTML page!</title>
</head>
<body>
  <div>
    <ul>
      <li>This</li>
      <li>is an</li>
      <li>unordered list</li>
    </ul>
  </div>
</body>
</html>
```

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>Page Title</title>
5    </head>
6    <body>
7      <h1>This is a Heading</h1>
8      <p>This is a paragraph.</p>
9    </body>
10   </html>
```

HTML 4.01:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
 "http://www.w3.org/TR/html4/loose.dtd">
```

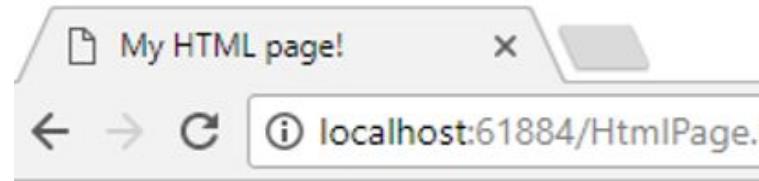
XHTML 1.1:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
```



A Simple HTML Document

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <title>My HTML page!</title>
</head>
<body>
    <div>
        <ul>
            <li>This</li>
            <li>is an</li>
            <li>unordered list</li>
        </ul>
    </div>
</body>
</html>
```



- This
- is an
- unordered list

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A Simple HTML Document

```
<!DOCTYPE html>
<html>
    <head>
        <title>Page Title</title>
    </head>
    <body>
        <h1>This is a Heading</h1>
        <p>This is a paragraph.</p>
    </body>
</html>
```



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A Simple HTML Document

```
<!DOCTYPE HTML>  
  
<!DOCTYPE HTML PUBLIC  
"-//W3C//DTD HTML 4.01//EN"  
"http://www.w3.org/TR/html4/strict.dtd">
```

The **DOCTYPE** indicates the standards compliance or version of the document

```
<!DOCTYPE html>  
<html>  
... page content here...  
</html>
```

The **HTML** element act as the root of the document

```
<head>  
  <title>HTML Fundamentals</title>  
  <meta name="viewport" content="width=device-width,  
  initial-scale=1">  
  <link rel="stylesheet" type="text/css" href="main.css" />  
</head>
```

The **HEAD** element contains document metadata

```
<html>  
  <head> </head>  
  <body>  
    ... page content ACTUALLY goes here ...  
  </body>  
</html>
```

The **BODY** element contains the content to be displayed



A Simple HTML Document



Which one is not an HTML element?

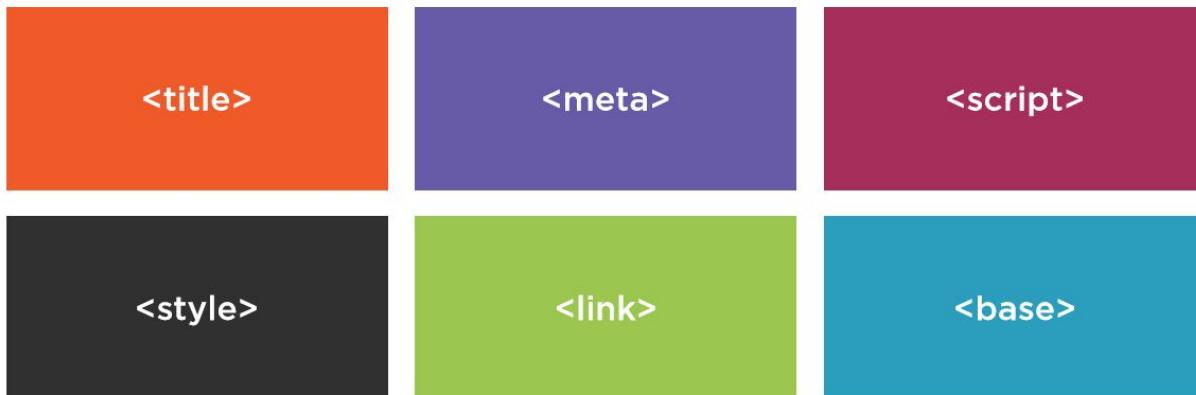
(Please answer the question on Pear Deck)





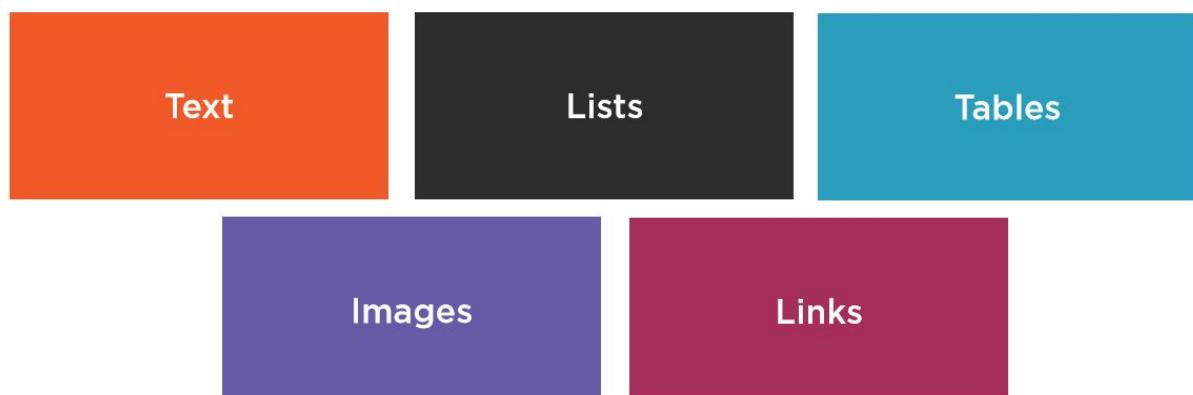
A Simple HTML Document

<head>



A Simple HTML Document

<body>





Let's Practice!

Creating our First HTML File



```
<!DOCTYPE html>
<html>
  <head>
    <title>Welcome To My Site</title>
  </head>
  <body>
    <p>Hello World!</p>
  </body>
</html>
```

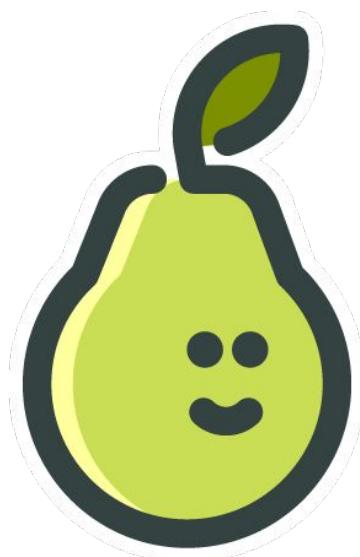
Hello World!

Blank
Text File

Add
HTML Tags

Display in
Browser

A Simple HTML Document



Everyone is on the same page?

(Please answer the question on Pear Deck)



Creating codepen accounts on codepen.io



The screenshot shows the CodePen homepage with a dark theme. On the left, there's a sidebar with sections for 'CREATE' (Pen, from template, Project, Collection), 'YOUR' (Dashboard, Activity, Assets, Pinned Items), 'EXPLORE' (Picks, Popular, Following, Topics), and 'GROW' (Jobs). The main area features a search bar at the top with the placeholder 'Search CodePen...'. Below it, a heading 'Picked Pens' is followed by a 'VIEW MORE PENS →' link. Two projects are visible: 'illumina - pure JavaScript' by Toshiya Marukubo and 'Smiling Moon' by Mara Barros. A red rectangular box highlights the URL 'https://codepen.io/' in the address bar. To the right, there's a snippet of another project titled 'Parallax sw...'.

Creating codepen accounts on codepen.io



Any problem while creating the codepen accounts?

(Please answer the question on Pear Deck)



USWAY
Students choose an option

Pear Deck Interactive Slide
Do not remove this bar



Let's Practice!

Creating "Hello World" page on codepen.io

```
<!DOCTYPE html>
<html>
<head>
<title>Welcome To My Site</title>
</head>
<body>
<p>Hello World!</p>
</body>
</html>
```

Hello World!

Installing VS Code



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Visual Studio Code Docs Updates Blog API Extensions FAQ [Search Docs](#) [Download](#)

Version 1.45 is now available! Read about the new features and fixes from April.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

[Windows](#)
Windows 7, 8, 10

User Installer 64 bit 32 bit
System Installer 64 bit 32 bit

[.deb](#)
Debian, Ubuntu

.deb 64 bit
.rpm 64 bit

[.rpm](#)
Red Hat, Fedora, SUSE

[Mac](#)
macOS 10.10+



Installing VS Code



Visual Studio Code



<https://code.visualstudio.com/Download>

Creating “Hello World” HTML File on VS Code



Visual Studio Code

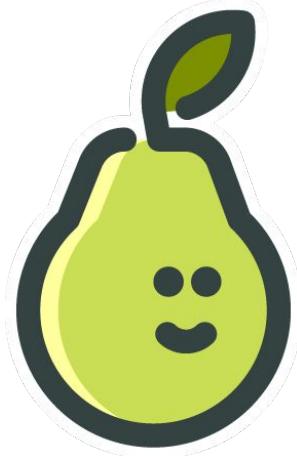
```
<!DOCTYPE html>
<html>
<head>
    <title>Welcome To My Site</title>
</head>
<body>
    <p>Hello World!</p>
</body>
</html>
```



THANKS!

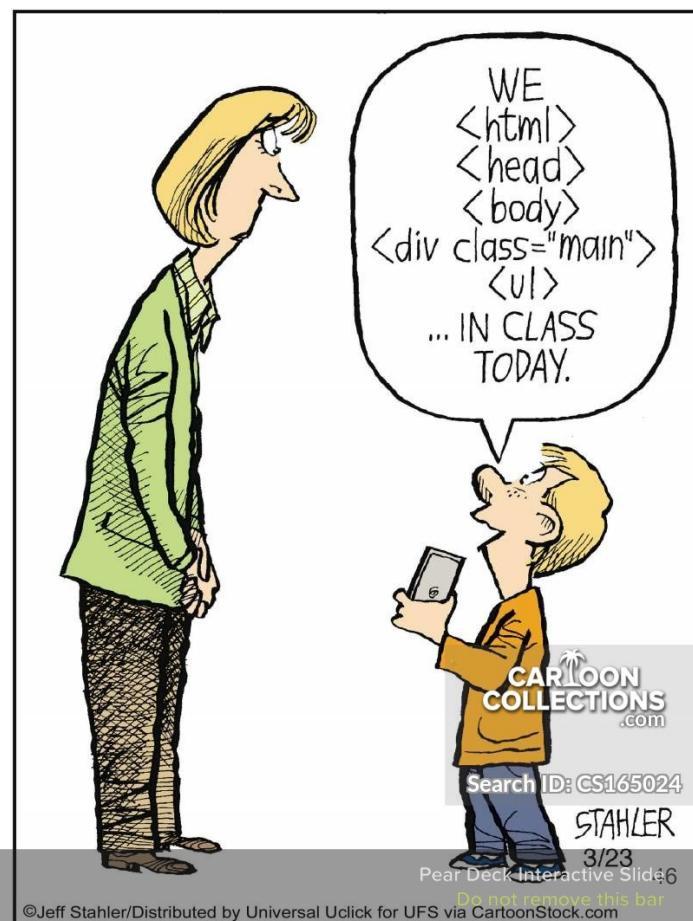
HTML Elements, Tags and Attributes

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WAY TO REINVENT YOURSELF

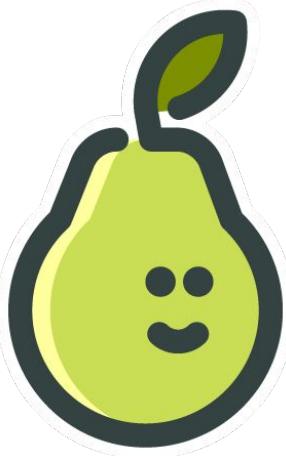


Please define
HTML element
HTML tag
HTML attribute
shortly!

Students, write your response!



©Jeff Stahler/Distributed by Universal Uclick for UFS via CartoonStock.com



HTML elements can't be nested.



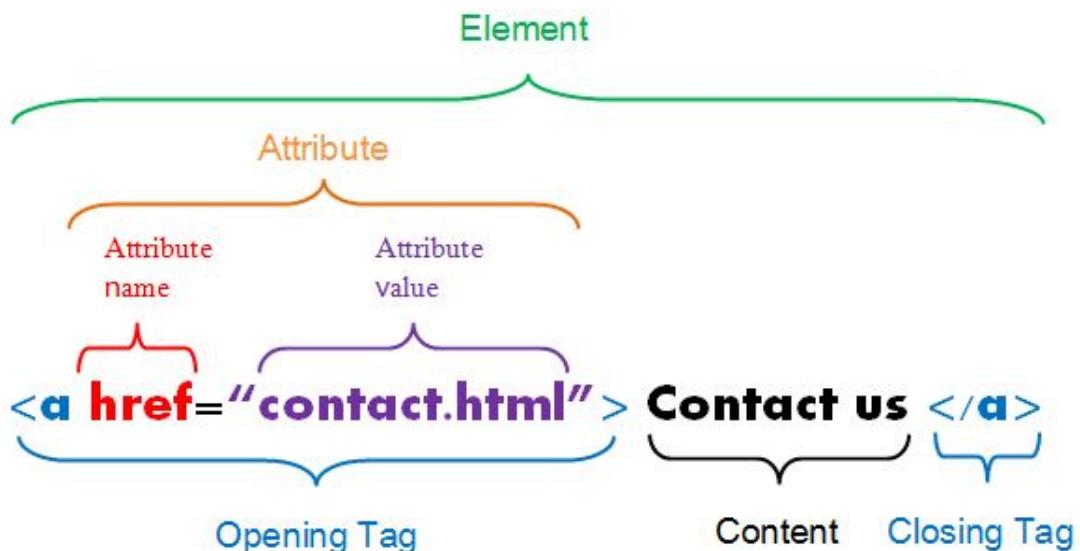
Students choose an option

Pear Deck Interactive Slide 7
Do not remove this bar

Table of Contents

- ▶ HTML Elements
- ▶ Nested HTML Elements
- ▶ Empty HTML Elements
- ▶ Tags
- ▶ Attributes

HTML Elements



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HTML Elements

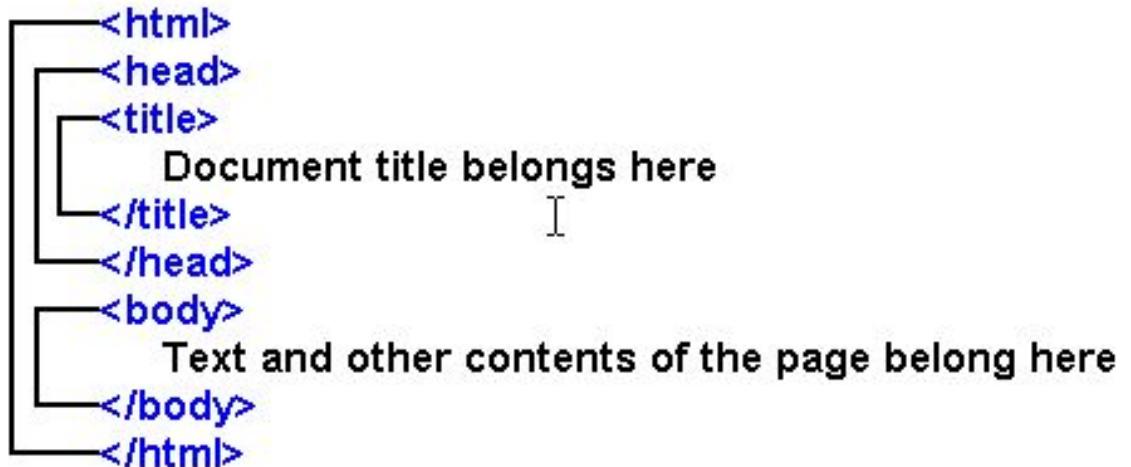


A screenshot of an HTML editor interface. The code is displayed in a white box:

```
<html>
<body>
<p>Hello world</p>
</body>
</html>
```

The line containing the text "Hello world" is highlighted with a red box and a red arrow points from the word "world" to the text "HTML Elements" located at the bottom right of the editor window.

Nested HTML Elements



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Nested HTML Elements

HTML documents consist of nested HTML elements. HTML elements can contain elements (elements can be nested). All HTML documents composed of nested HTML elements.

- ▶ HTML Document above contains four HTML elements.
- ▶ The HTML element includes the body element.
- ▶ The body element includes the `<h1>` and `<p>` elements.

A screenshot of a code editor window titled "s1_Introduction to HTML" from "Clarusway". The code editor displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     <h1>This is a Heading</h1>
5     <p>This is a paragraph.</p>
6   </body>
7 </html>
```

The code editor has a dark theme. The title bar shows the file name and the Clarusway logo. The code itself is in a light-colored font. Below the code editor is a preview area. In the preview area, the heading "This is a Heading" is displayed in large, bold, black font, and the paragraph "This is a paragraph." is displayed in a smaller, regular black font.

This is a Heading

This is a paragraph.

Empty HTML Elements

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Container or Empty Elements

Container Element

- They have starting as well as closing tags
- <HTML>.....</HTML>
- <TITLE>.....</TITLE>
-

Empty Element

- They have only starting tag
-

- <HR>
-

Empty HTML Elements

- ▶ If a HTML element does not have any content, it is called empty element.
- ▶ Empty HTML elements do not have a closing tag.





Which part is the content of body element?

```
<html>
<body>
<p>Hello world</p>
</body>
</html>
```

HTML Elements



Students, write your response!

Pear Deck Interactive Slides
Do not remove this bar

HTML Tags

BASIC HTML TAGS

TAG	DESCRIPTION
<html>	Defines an HTML document
<body>	Defines the document's body
<h1> to <h6>	Defines header 1 to header 6
<p>	Defines a paragraph
 	Inserts a single line break
<hr>	Defines a horizontal rule
<!-->	Defines a comment

4

HTML Tags

BASIC HTML TAGS

Opening Tag	Closing Tag
<html>	</html>
<head>	</head>
<body>	</body>
<h1>	</h1>
<p>	</p>

Text Formatting Tags

Tag	Description
	Defines bold text
<big>	Defines big text
	Defines emphasized text
<i>	Defines italic text
<small>	Defines small text
	Defines strong text
<sub>	Defines subscripted text
<sup>	Defines superscripted text
<u>	Deprecated. Use styles instead

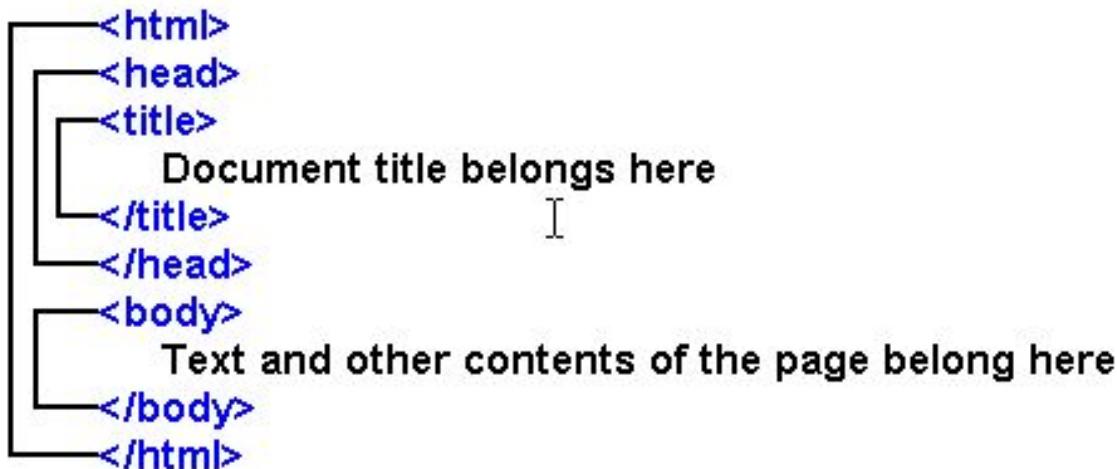


<P> means the same as <p> in HTML.



Students choose an option

What is the difference between opening tag and closing tag?



Students, write your response!

Pear Deck Interactive Slides
Do not remove this bar

HTML Tags

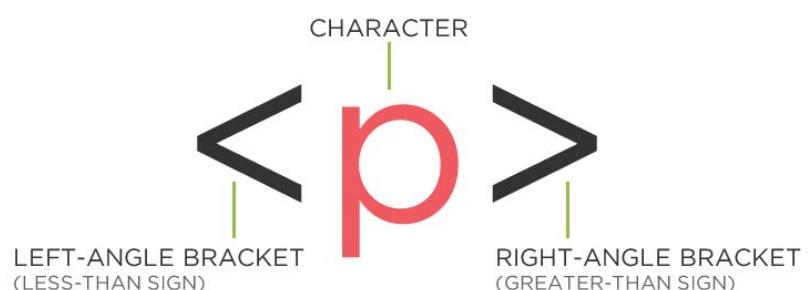
HTML Is Not Case Sensitive

<P>
means the same as
<p>.

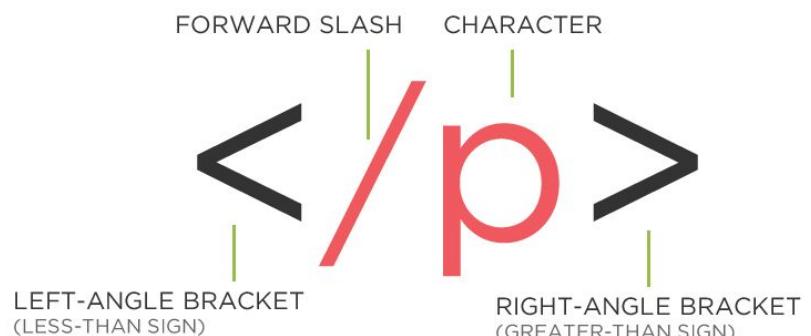


Word Wide Web Consortium

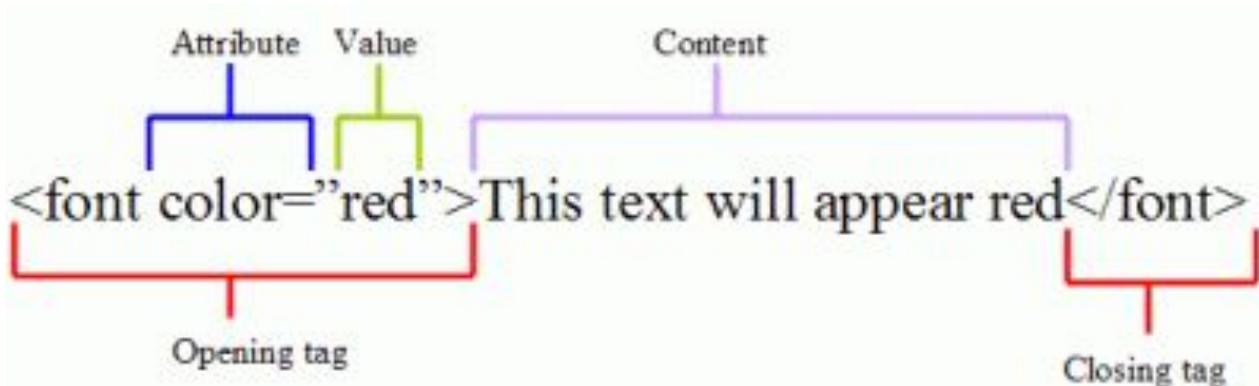
OPENING TAG



CLOSING TAG

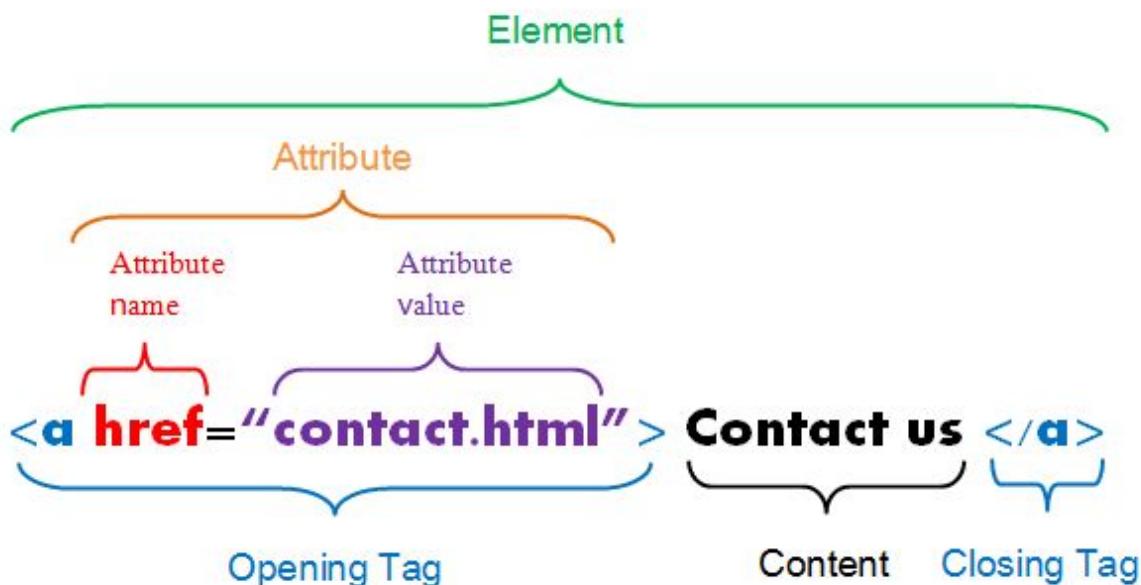


HTML Attributes



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HTML Attributes



HTML Attributes

Attribute Name



< p style="color:blue">This is a paragraph.</p>



Attribute Value

HTML Attributes

href Attribute

width and height
Attribute

dir Attribute

src Attribute

lang Attribute

id Attribute

alt Attribute

class Attribute

TYPES OF
HTML
ATTRIBUTES

style Attribute



Attributes are always specified in the content part.



Students choose an option

Pear Deck Interactive Slide 6
Do not remove this bar



Do we need a review?
if so: which part?



Students choose an option

Pear Deck Interactive Slide 6
Do not remove this bar



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THANKS!

HTML Text

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <title>HTML Elements for beginners</title>
6   </head>
7   <body>
8
9     <h1>Headings in HTML</h1>
10    <p>This is a paragraph.</p>
11    <strong>strong tag</strong>
12    <em>emphasize tag</em>
13
14    <h2>Paragraphs</h2>
```

Table of Contents

- ▶ Heading
- ▶ Paragraphs
- ▶ Horizontal Lines
- ▶ Line Breaks
- ▶ Comments

Heading

```
<!DOCTYPE html>
<html>
<body>
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>

</body>
</html>
```

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How many heading styles in HTML?



USWAY
Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

Heading

```
<!DOCTYPE html>
<html>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

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Is `<h1>` the primary heading for document true or false?

True

False



Students choose an option

Let's Practice!

Paragraphs

```
<!DOCTYPE html>
<html>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
</body>
</html>
```

This is heading 1

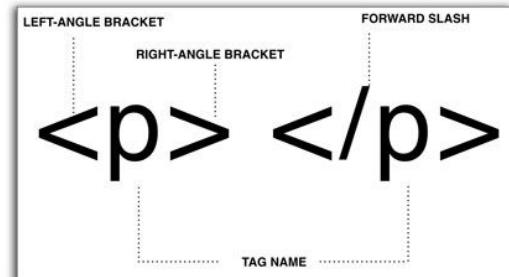
This is heading 2

This is heading 3

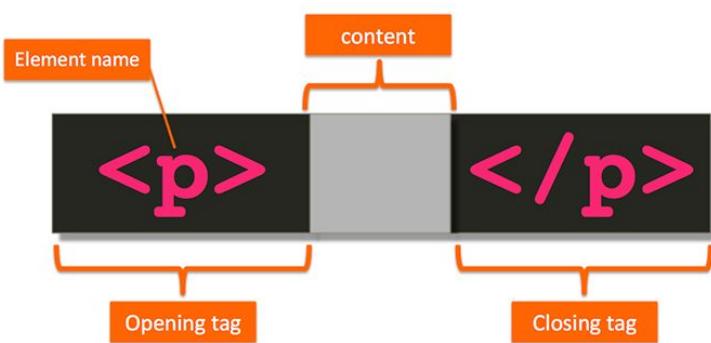
This is heading 4

This is heading 5

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Paragraphs



A screenshot of a code editor window titled "HTML". The code is:

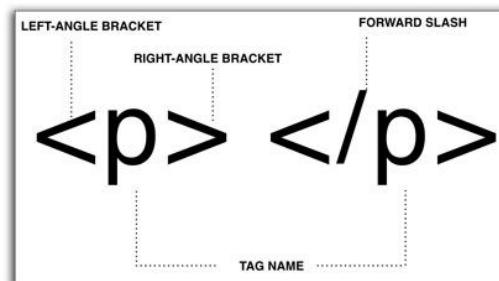
```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     <p>This is first paragraph.</p>
5     <p>This is second paragraph.</p>
6   </body>
7 </html>
```

The output pane below shows the rendered HTML:

This is first paragraph.
This is second paragraph.

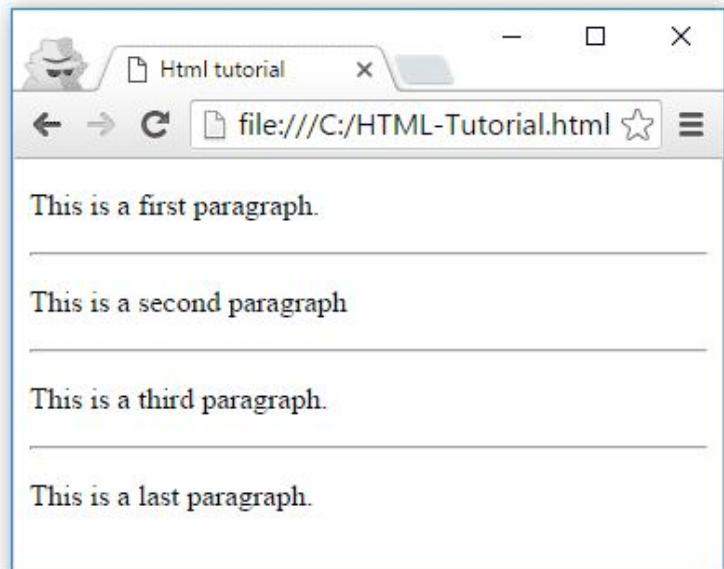
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Let's Practice!



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Horizontal Lines



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Horizontal Lines

- The `<hr>` tag creates a horizontal line in an HTML page.

```
<!DOCTYPE html>
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
</body>
</html>
```

OUTPUT

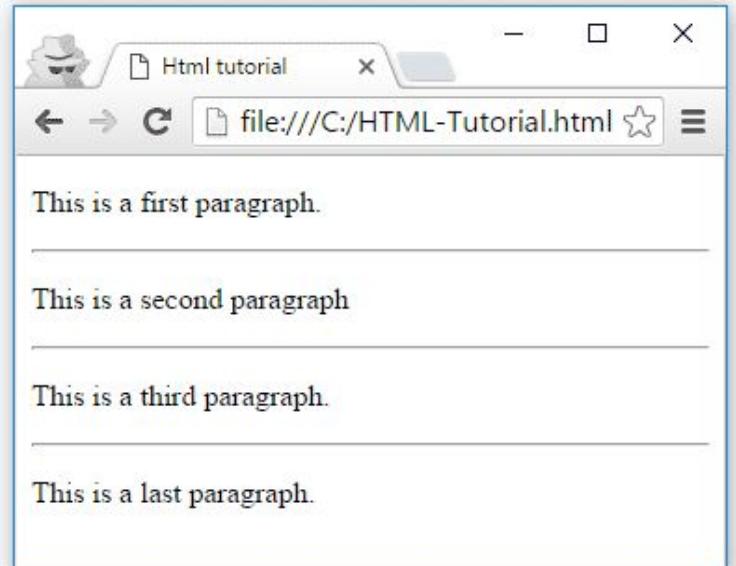
The `hr` tag defines a horizontal rule:

This is a paragraph.

This is a paragraph.

This is a paragraph.

Let's Practice!



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HTML Line Breaks



HTML Line Breaks

Adding Two Line Break In Html

Just Look Carefully We Put Two br Tags

Which Give Us Two Line Break Check The Ouput Picture

The diagram illustrates the process of displaying HTML line breaks. A red arrow points from the text "Two

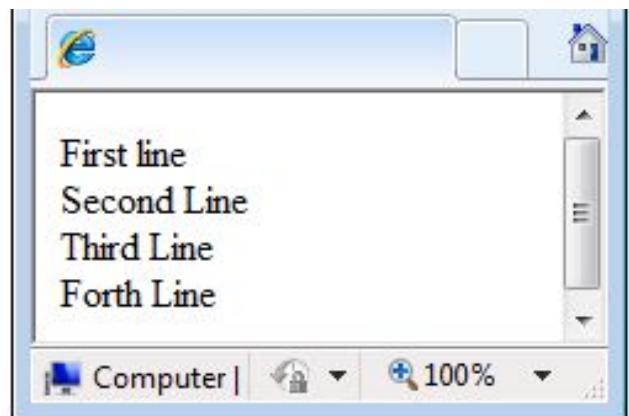
 Tag" to the two consecutive
 tags in the Notepad code. Another red arrow points from the text "Two

 Tag" to the two consecutive line breaks in the browser output. A red circle highlights the text "Just Look Carefully We Put Two br| Tags".

```
<html>
<body>
<p> Adding Two Line Break In Html <br><br> Just Look Carefully We Put Two br| Tags
<br><br> Which Give Us Two Line Break Check The Ouput Picture
</p>
</body>
</html>
```

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Let's Practice!



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Which one is not a valid HTML tag?



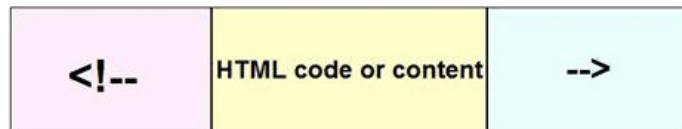
Students choose an option

Pear Deck Interactive Slides
Do not remove this bar

HTML Comments



HTML Comments



Comment Start **Code or content** Comment End

```
<head>
  <title>
    This is the Title of my Page
  </title>
</head>

<body>
  <!--This is My Comment-->
  <h1>This is the Heading</h1>
  <p>This is the Main Body of my Page</p>
</body>

</html>
```

Let's Practice!





**Do we need a review?
if so: which part?**



Students choose an option

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Do not remove this bar



**Please summarize
today's topics in your words!**



Students, write your response!

Pear Deck Interactive Slide 10
Do not remove this bar



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THANKS!