



HTML





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



What does "HTML" stand for?



JSWAY
REINVENT YOURSELF

Students, write your response!

Pear Deck Interactive Slide
Do not remove this bar

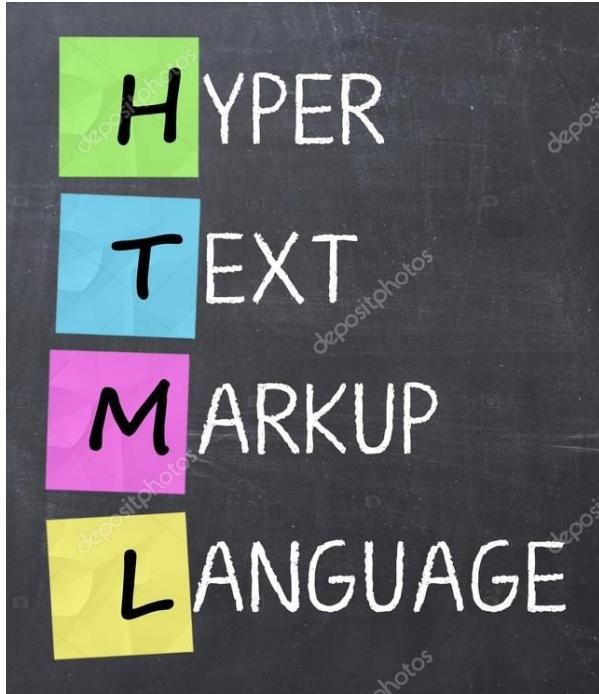


What is the HTML?



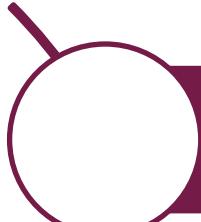


What is HTML?

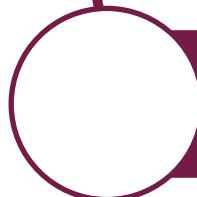




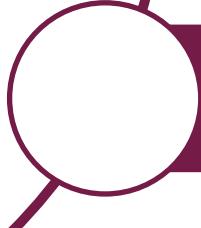
What is HTML?



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.



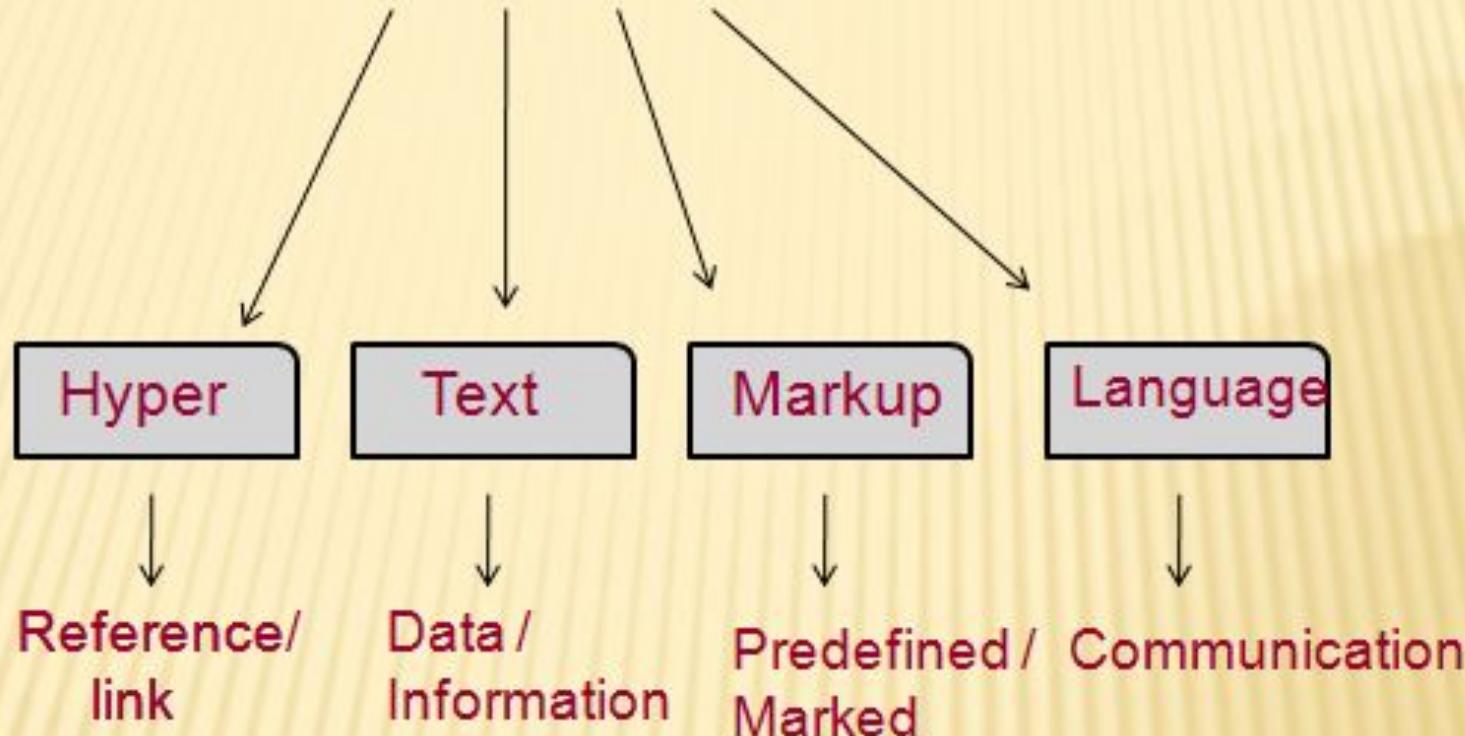
List the Internet
Browsers you know by
name.



USWAY
REINVENT YOURSELF

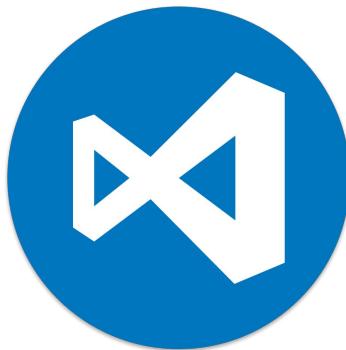
Students, write your response!

HTML





What is HTML?



VS code



BlueGriffon



Microsoft Visual Studio



Sublime Text Editor



Komodo Edit



CODEPEN



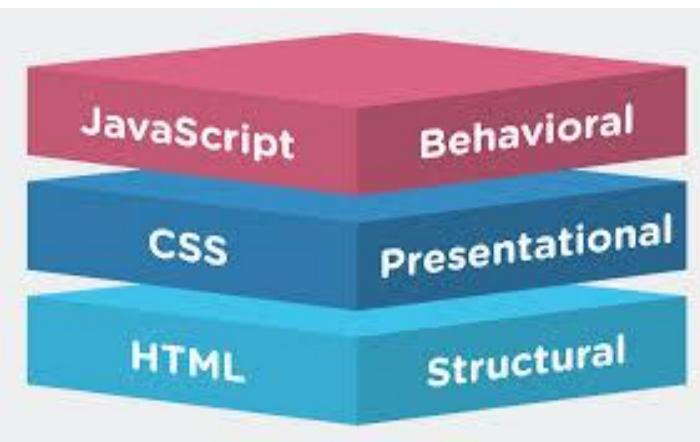
Bluefish



Atom Editor



What is HTML?



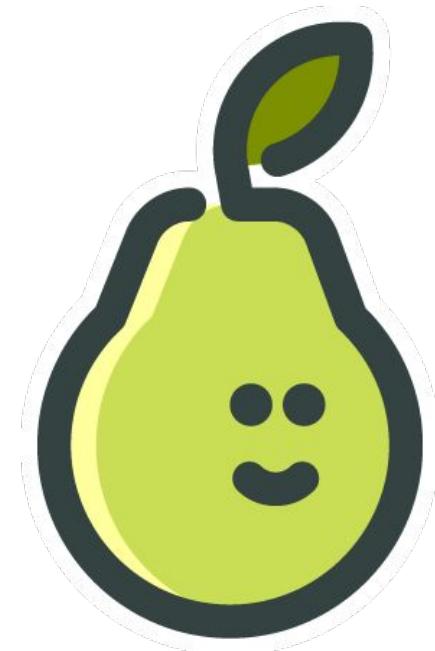


History of HTML





History of HTML



What is the latest HTML version?

(Please answer the question on Pear Deck)



Students choose an option



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

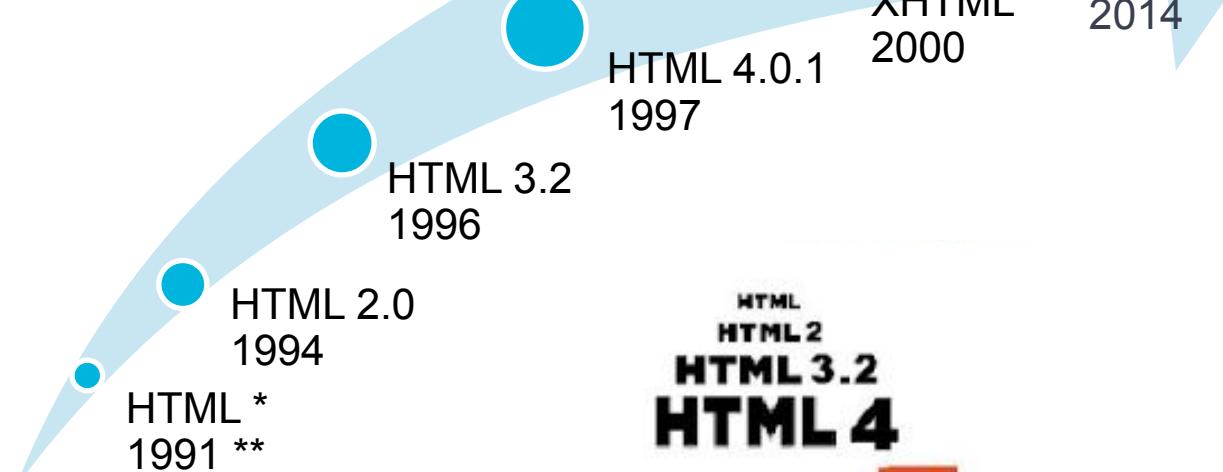
1991	official birthday (20 elements)
1995	v2.0
1996	CSS 1
1996	JavaScript
1997	3.2 and 4.0 (W3C Recommendation)
1999/2000	XHTML
2005	World is asynchronous (AJAX)
2009	5.0



History of HTML



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* Version
** Year





History of HTML

HTML Then

Research documents

Sharing reports

Linking to related research

Displaying experimental data

Charts, graphs, and simple pictures

HTML Now

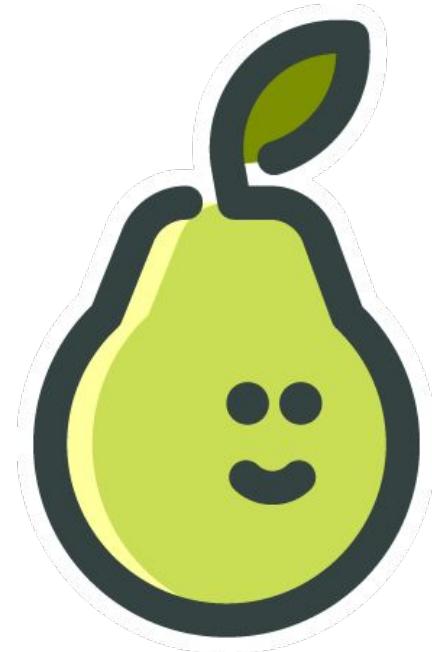
Storefronts, applications, files/photos

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

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 ?

HTML Now

The screenshot shows a product page for an 'ESSENTIAL PACK' backpack. The price is \$259.99. The page includes filters for color (orange), quantity (< 1), and size (S/M). There is also an 'Add to Cart' button. Below the main product, there is a section titled 'CUSTOMERS ALSO VIEWED' featuring icons for a kayak, a helmet, a carabiner, ice axes, a pack, and a pair of shoes.



HTML Page Structure

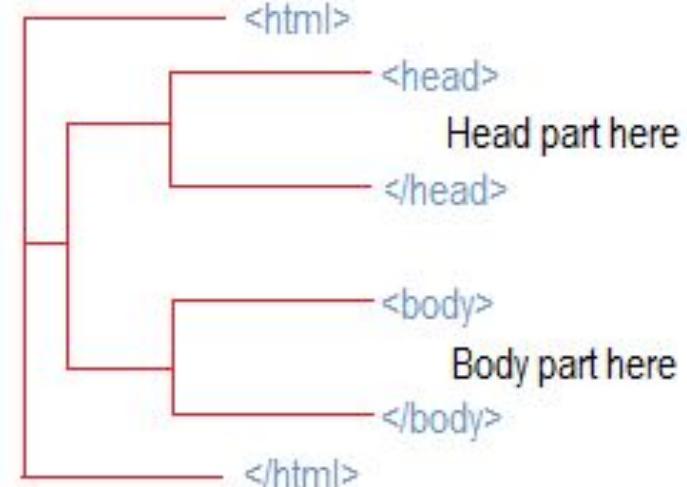




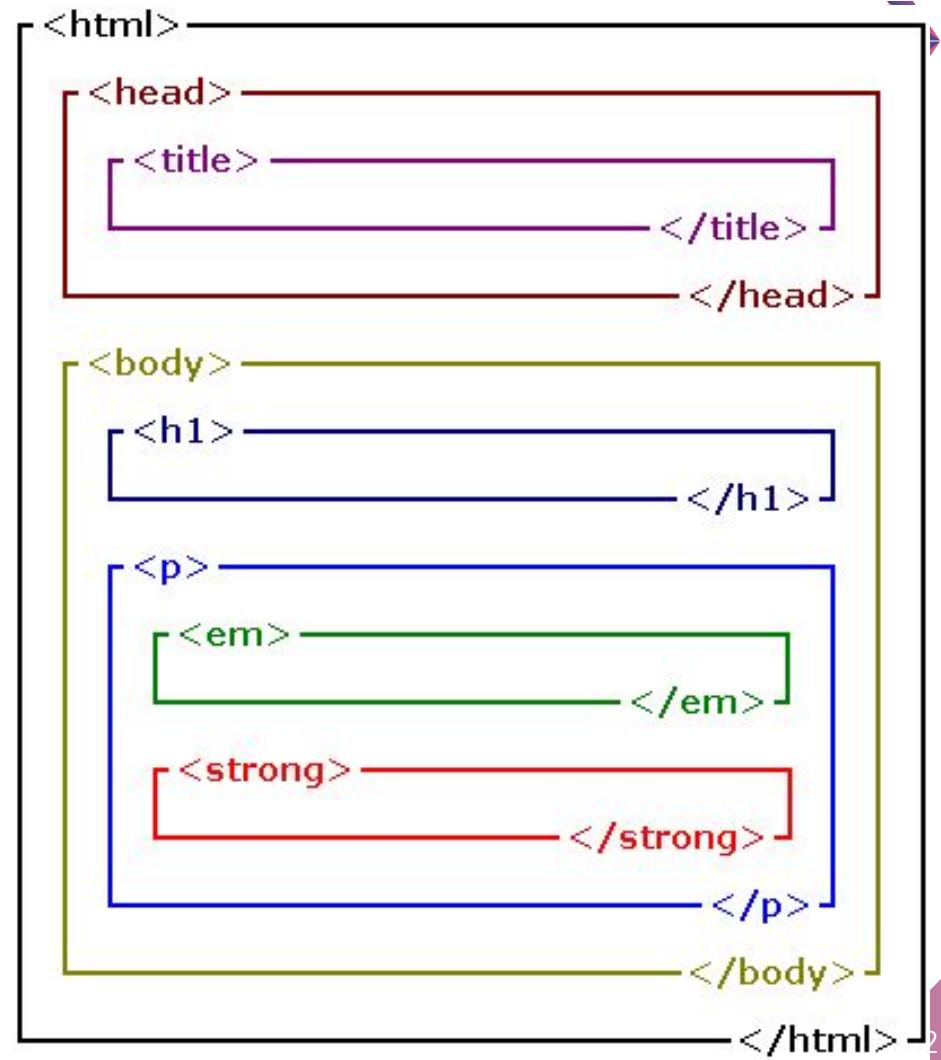
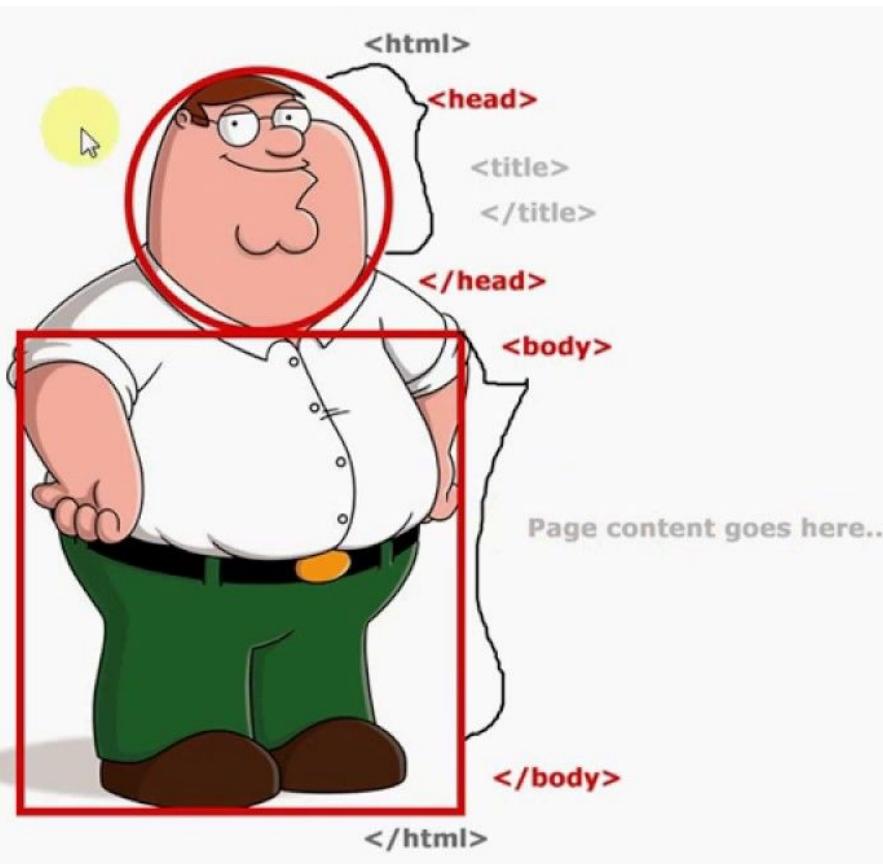
HTML Page Structure

.HTM or .HTML

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



HTML Page Structure





A Simple HTML Document



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:

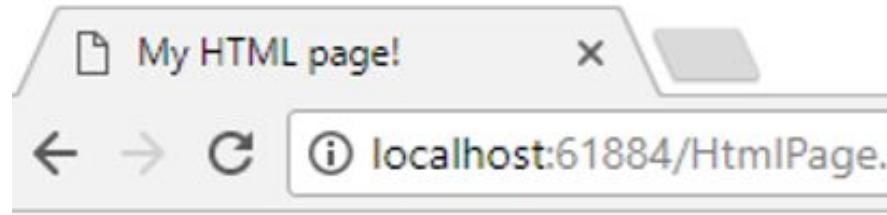
```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

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

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>
```





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

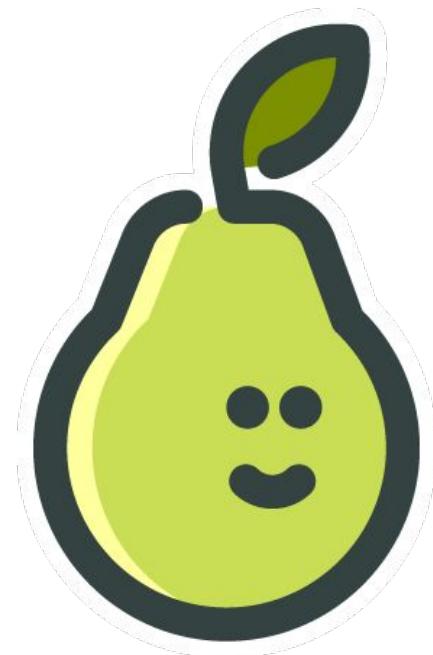
```
<head>  
  <title>HTML Fundamentals</title>  
  <meta name="viewport" content="width=device-width,  
        initial-scale=1">  
  <link rel="stylesheet" type="text/css" href="main.css" />  
</head>
```

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>

<title>

<meta>

<script>

<style>

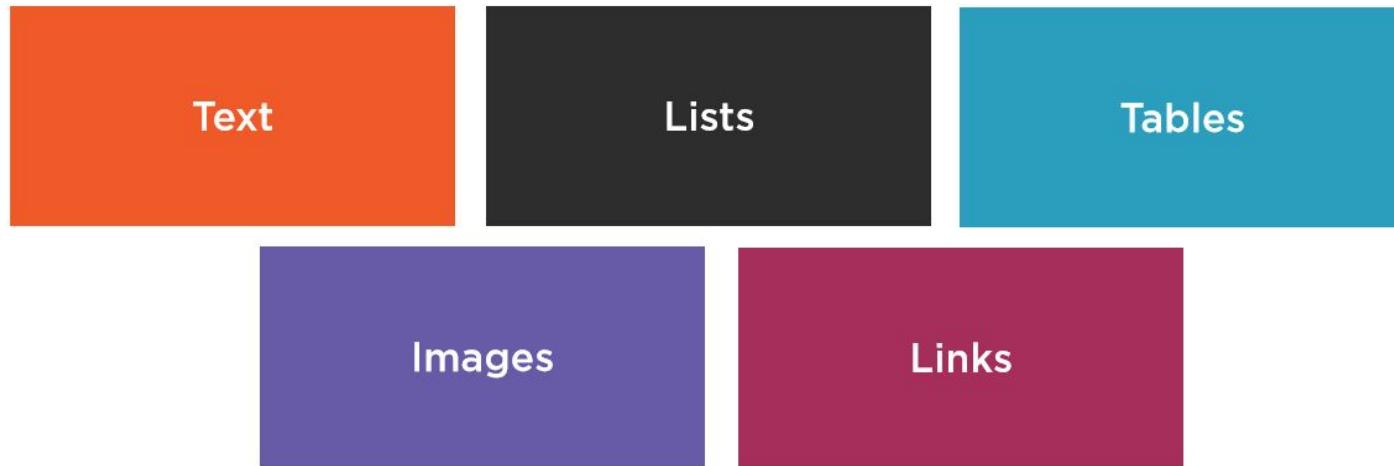
<link>

<base>



A Simple HTML Document

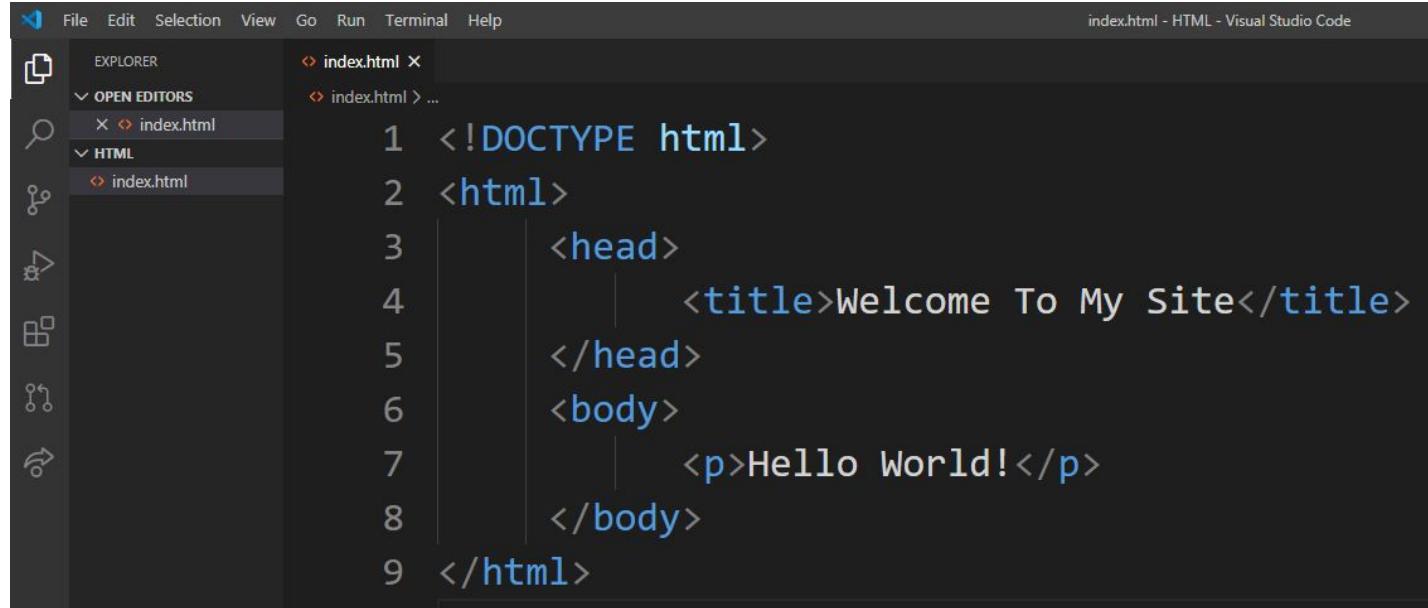
<body>



Creating “Hello World” HTML File on VS Code



Visual Studio Code



The screenshot shows the Visual Studio Code interface with the following details:

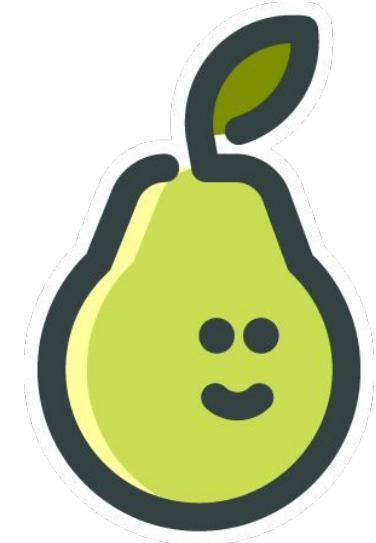
- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help
- Title Bar:** index.html - HTML - Visual Studio Code
- Explorer Panel:** Shows "OPEN EDITORS" with "index.html" and "HTML" sections, both containing "index.html".
- Code Editor:** Displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Welcome To My Site</title>
5   </head>
6   <body>
7     <p>Hello World!</p>
8   </body>
9 </html>
```



HTML Elements, Tags and Attributes





Please define
HTML element
HTML tag
HTML attribute
shortly!

Students, write your response!





HTML elements can't be nested.

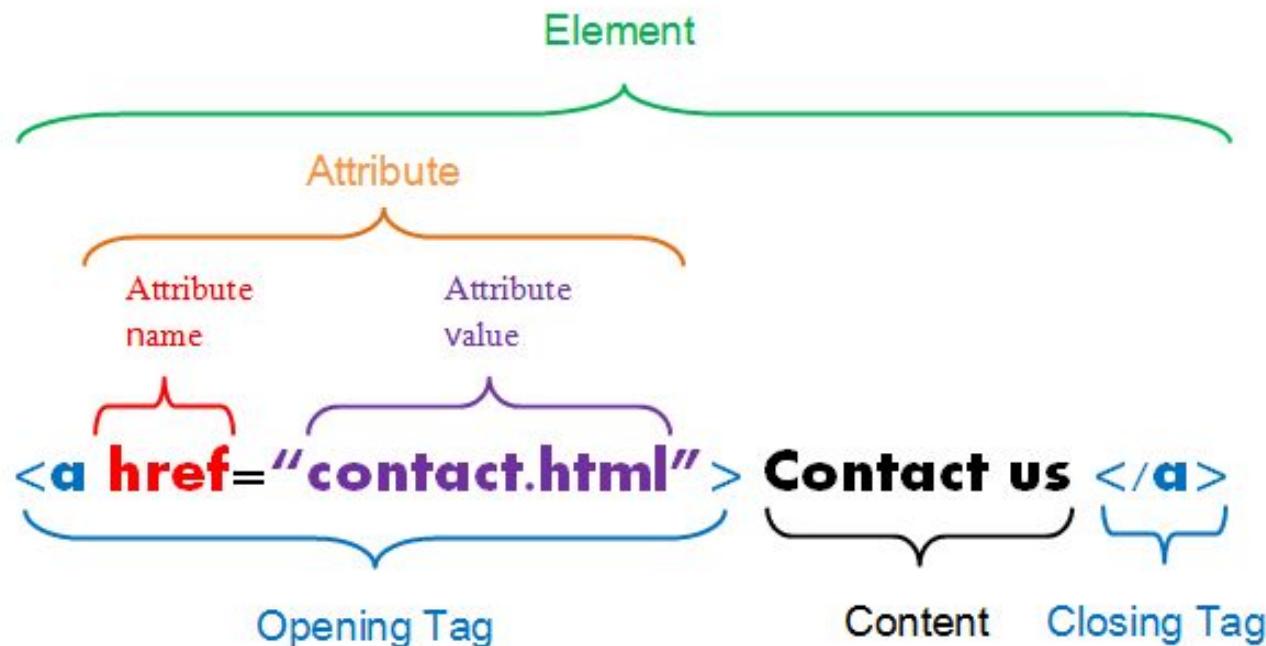


Students choose an option

Table of Contents

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

HTML Elements



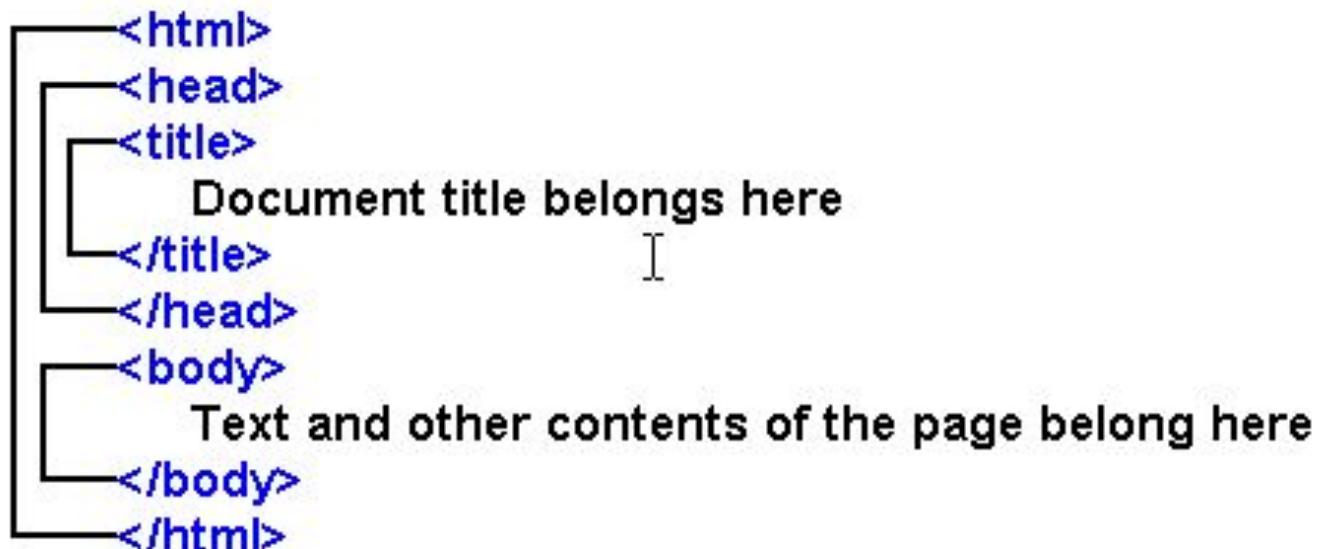
HTML Elements



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

HTML Elements

Nested HTML Elements



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.

s1_Introduction to HTML
Clarusway

HTML

```
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>
```

This is a Heading

This is a paragraph.



Which part is the content of body element?

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

HTML Elements



Students, write your response!

Empty HTML Elements

Container or Empty Elements

3

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.

```
<html>          ──────────► HTML tag
  <head>
    <title>
      Hello World!
    </title>
  </head>
  <body>
    Learning about Elements
    <br>          ──────────► Empty Element
    It is fun to write HTML.
  </body>
</html>
```

The diagram illustrates the structure of an HTML document. It shows the following elements:

- HTML tag:** The root element is `<html>`, which is labeled as an "HTML tag".
- Markup Element:** A group of elements enclosed in curly braces (`{ }`) is labeled as a "Markup Element". This group includes:
 - `<head>`
 - `<title>`: Contains the text "Hello World!"
 - `</title>`
 - `</head>`
- Empty Element:** The element `
` is labeled as an "Empty Element".

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 |

HTML Tags

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

BASIC HTML TAGS

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

HTML Tags

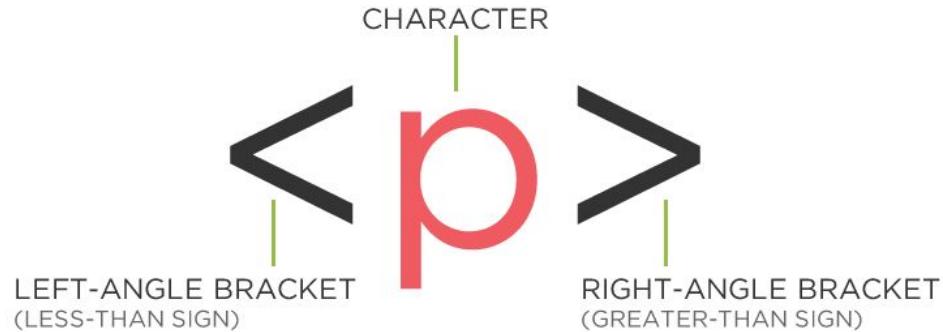
HTML Is Not Case Sensitive

<P>
means the same as
<p>.

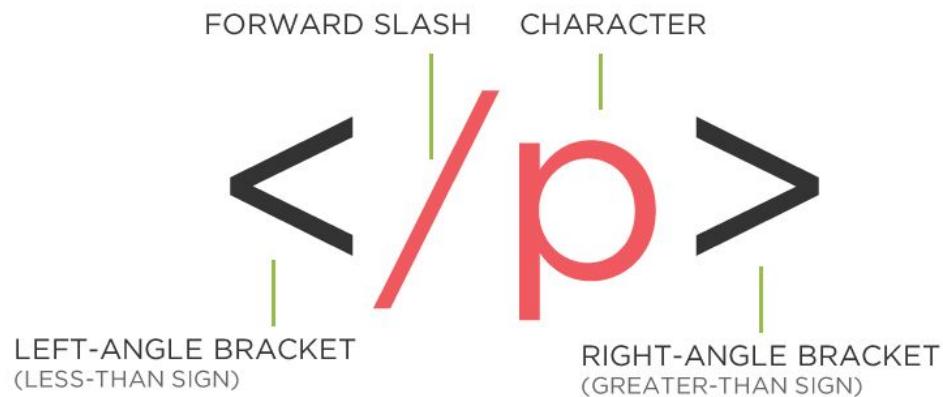


Word Wide Web Consortium

OPENING TAG



CLOSING TAG



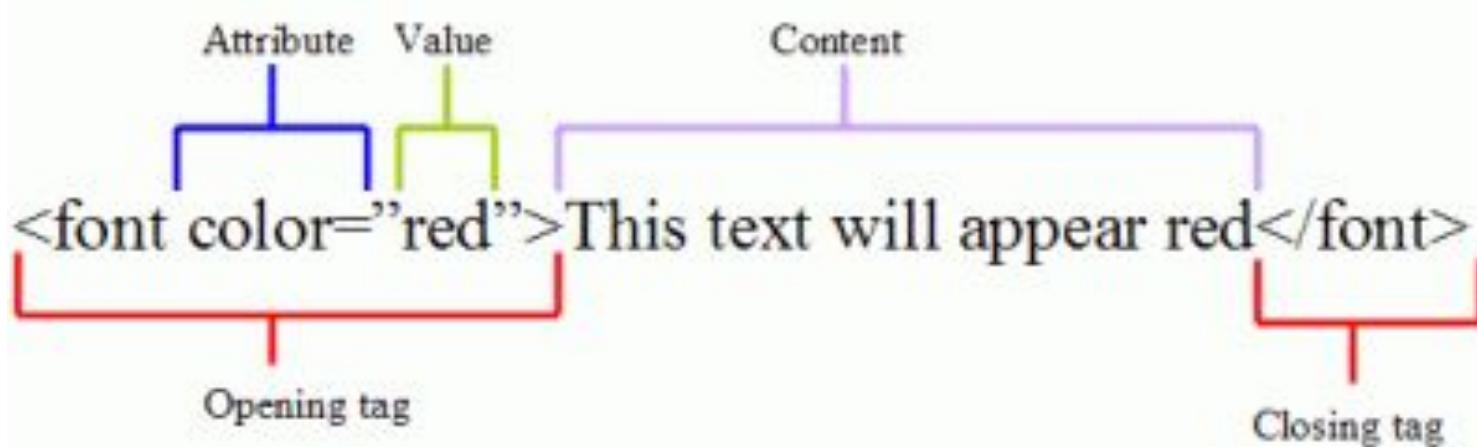
What is the difference between opening tag and closing tag?

```
<html>
  <head>
    <title>
      Document title belongs here
    </title>
  </head>
  <body>
    Text and other contents of the page belong here
  </body>
</html>
```

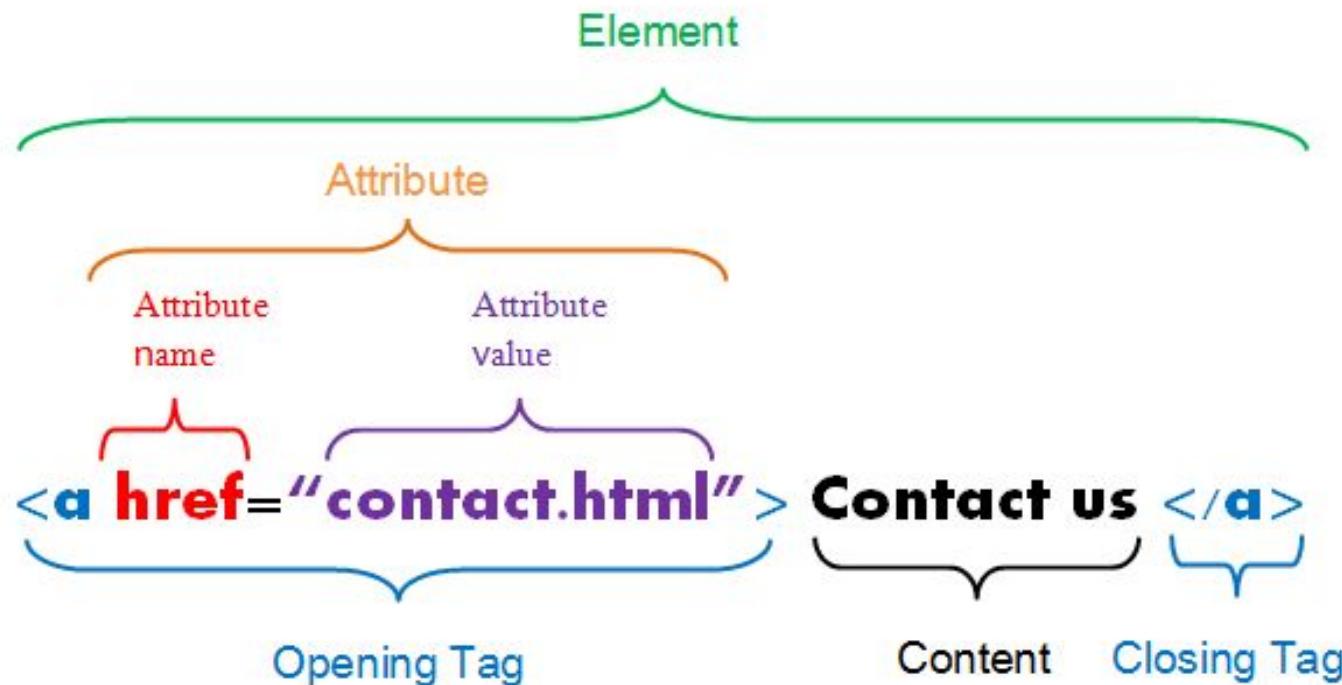


Students, write your response!

HTML Attributes



HTML Attributes



HTML Attributes

Attribute Name



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



Attribute Value

HTML Attributes

TYPES OF HTML ATTRIBUTES

href Attribute

width and height
Attribute

dir Attribute

src Attribute

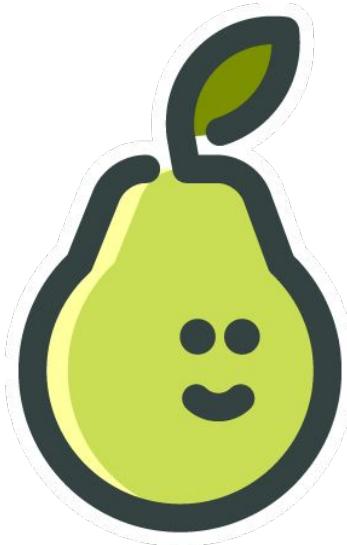
lang Attribute

id Attribute

alt Attribute

class Attribute

style Attribute



Attributes are always specified in the content part.



Students choose an option



HTML Text

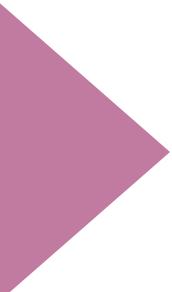
```
1 <html>
2   lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>HTML Elements for beginners</title>
6 </head>
7 <body>
8
9   <h1>Headings in HTML</h1>
10  <p>This is a paragraph.</p>
11  <strong>strong tag</strong>
12  <em>emphasize tag</em>
13
14  <h2>Paragraphs</h2>
```

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>
```



How many heading styles in HTML?



Students choose an option

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

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

True

False



Pear Deck



Students choose an option

Let's Practice!

```
<!DOCTYPE html>
<html>
<body>


# 


```

This is heading 1

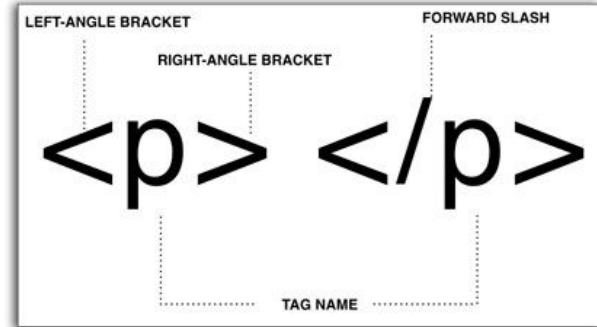
This is heading 2

This is heading 3

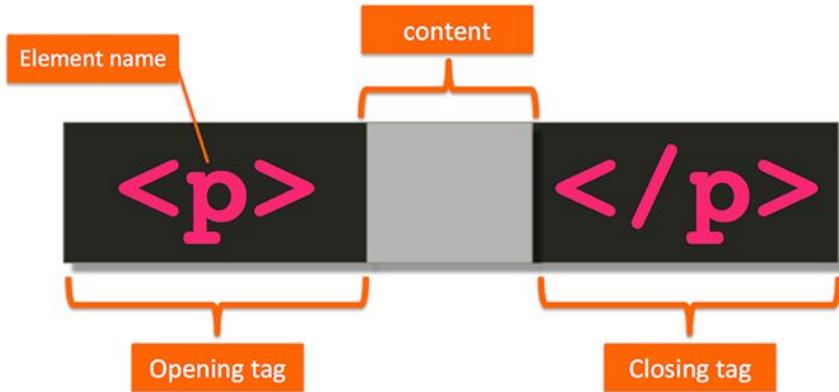
This is heading 4

This is heading 5

Paragraphs



Paragraphs

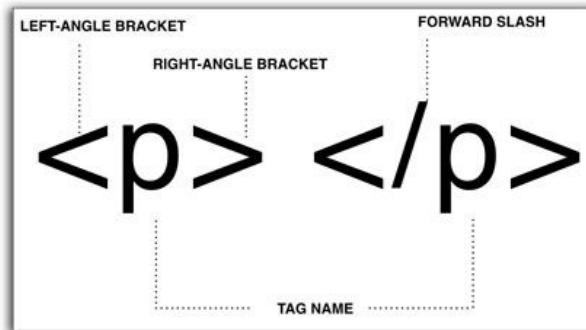


HTML

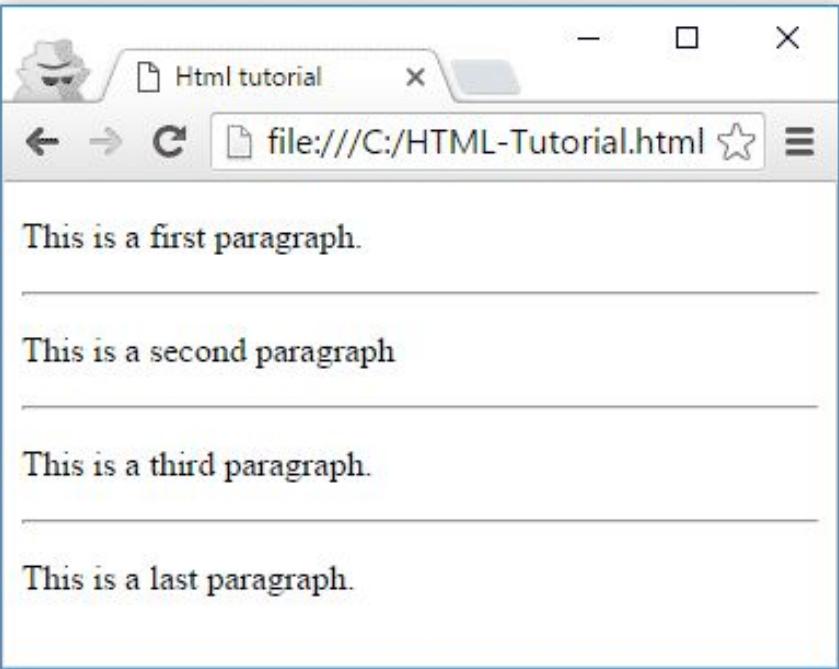
```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     <p>This is first paragraph.</p>
5     <p>This is second paragraph.</p>
6   </body>
7 </html>
```

This is first paragraph.
This is second paragraph.

Let's Practice!



Horizontal Lines



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

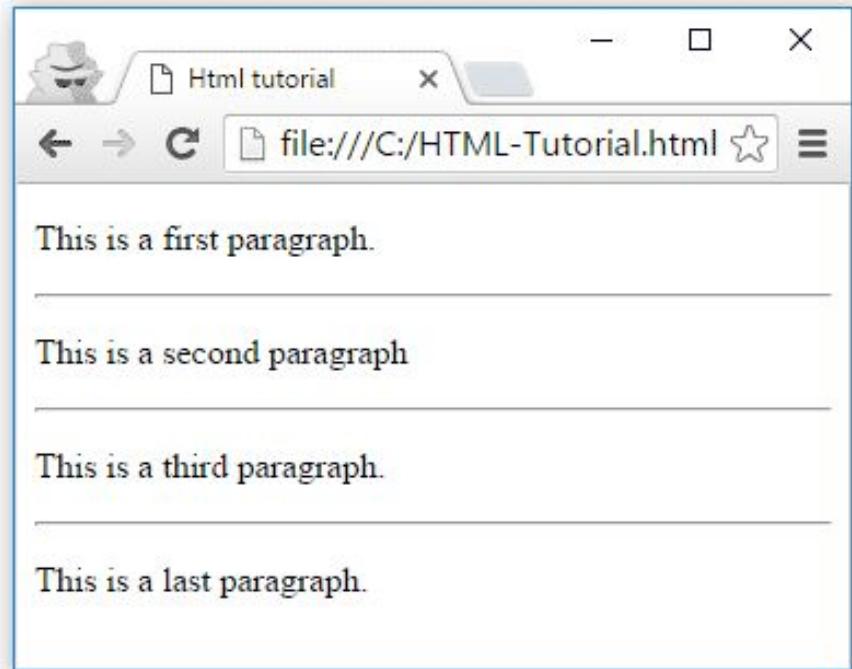
The hr tag defines a horizontal rule:

This is a paragraph.

This is a paragraph.

This is a paragraph.

Let's Practice!





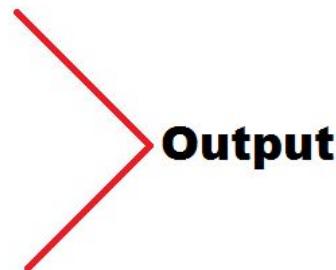
HTML Line Breaks

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 screenshot shows a Windows Notepad window titled "p - Notepad". The code is as follows:

```
<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>
```

Annotations in the image:

- A red circle highlights the text "Two

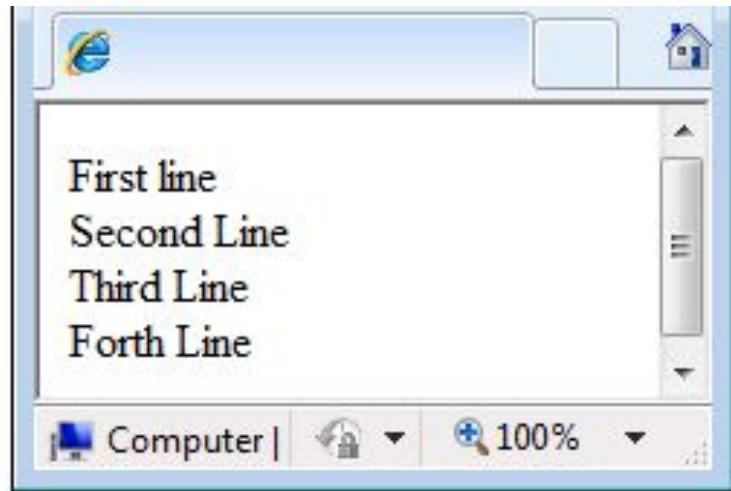
 Tag" in blue.
- A red arrow points from the text "Two

 Tag" to the two consecutive
 tags in the Notepad code.
- A red circle highlights the text "Two

 Tag" in blue.
- A red arrow points from the text "Two

 Tag" to the two consecutive
 tags in the Notepad code.

Let's Practice!



Which one is not a valid HTML tag?

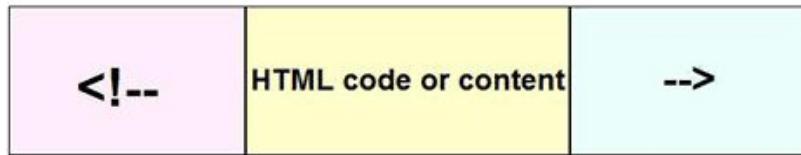


Students choose an option



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!



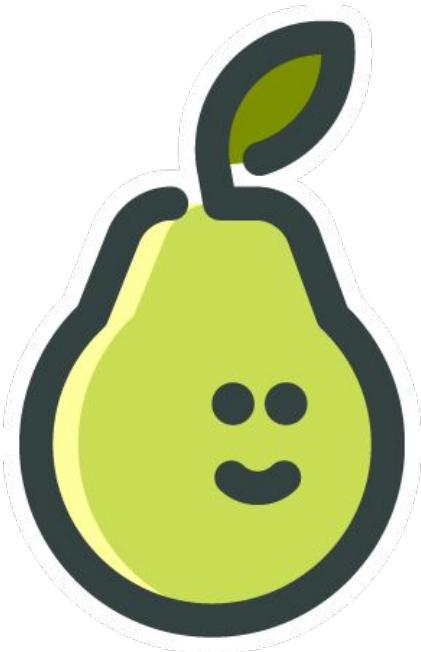
<!-- HTML Comments -->



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



Students choose an option



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



Students, write your response!



THANKS!



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

codepen.io

CODEPEN

CREATE

- Pen from template
- Project
- Collection

YOUR

- Dashboard
- Activity
- Assets
- Pinned Items

EXPLORE

- Picks
- Popular
- Following
- Topics

GROW

- Jobs

Search CodePen...

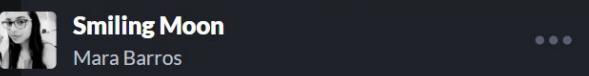
Picked Pens

[VIEW MORE PENS →](#)

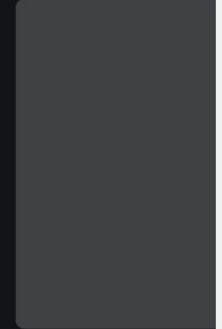




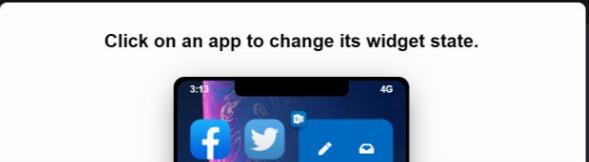
illumina - pure JavaScript
Toshiya Marukubo



Smiling Moon
Mara Barros



Parallax sw...
Y



Click on an app to change its widget state.

<https://codepen.io/>

Flutter Study Group
• Mariano Zorrilla

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Creating codepen accounts on codepen.io



Any problem while creating the codepen accounts?

(Please answer the question on Pear Deck)



Let's Practice!

Creating "Hello World" page on codepen.io

The screenshot shows a browser window with the URL `codepen.io/pen/`. The title bar says "Creating 'Hello World' page on codepen.io". The main area is a dark-themed code editor with three tabs: "HTML", "CSS", and "JS". The "HTML" tab is selected and contains the following code:

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

The "CSS" and "JS" tabs are empty. Below the editor is a preview window showing the text "Hello World!". A red exclamation mark icon is visible at the bottom center of the editor area.

Hello World!

Installing VS Code

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| | | | |
|------------------------------------|--------------------------------|--------------|------------------|
| User Installer
System Installer | 64 bit 32 bit
64 bit 32 bit | .deb
.rpm | 64 bit
64 bit |
|------------------------------------|--------------------------------|--------------|------------------|

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