



HTML

Everything you need to know
to make a webpage !

What is HTML?

- HTML stands for Hypertext Markup Language
- It is a language that lets you make web pages
- HTML includes instructions that make your text and pictures appear on the page in whatever way you want



Web Pages

Here's an example of a web page that was created entirely with HTML:

Who knew you could do all that with HTML?

The screenshot shows the MSN.com homepage in Microsoft Internet Explorer. The browser's address bar displays "http://www.msn.com/". The page features a navigation bar with "msn" logo, "MSN Home", "My MSN", and "Sign In" buttons. Below the navigation bar, there are several sections: "Hate your roommate? 5 ways to bury the hatchet", "Vote only online.", "Today on MSN" with news items like "Internet blackmail tale" and "How school bullies hurt", "Strictly Business" with "VCR era winds down", "MSNBC News" with "Court: Only juries can decide death", "CNBC on MSN Money" with "Stock Quotes", "ESPN Sports" with "Initial autopsy finding: artery hardening likely killed Cards' Kile", "MSN Shopping" with "TV Photoviewer \$79", "MSN Specials" with "How to live in Paris for cheap", and "Today's Sales & Deals" with "Incredible New Deals! Up to 76% Off". The page also includes a search bar, a "Free cell phone" offer, and a "Spotlight" section featuring "eHarlequin.com".



Tags

Instructions in HTML are called **TAGS**. This is the format for writing a **TAG**:

- When you want your instruction to start to take effect

<INSTRUCTION>

- When you want to discontinue this instruction you use an **END TAG**

</INSTRUCTION>



NOTE: This is the preferred format. In reality, not every TAG needs an **END TAG!**

What every page looks like:

```
<HTML>
```

```
<BODY>
```

```
</BODY>
```

```
</HTML>
```



What every page looks like:

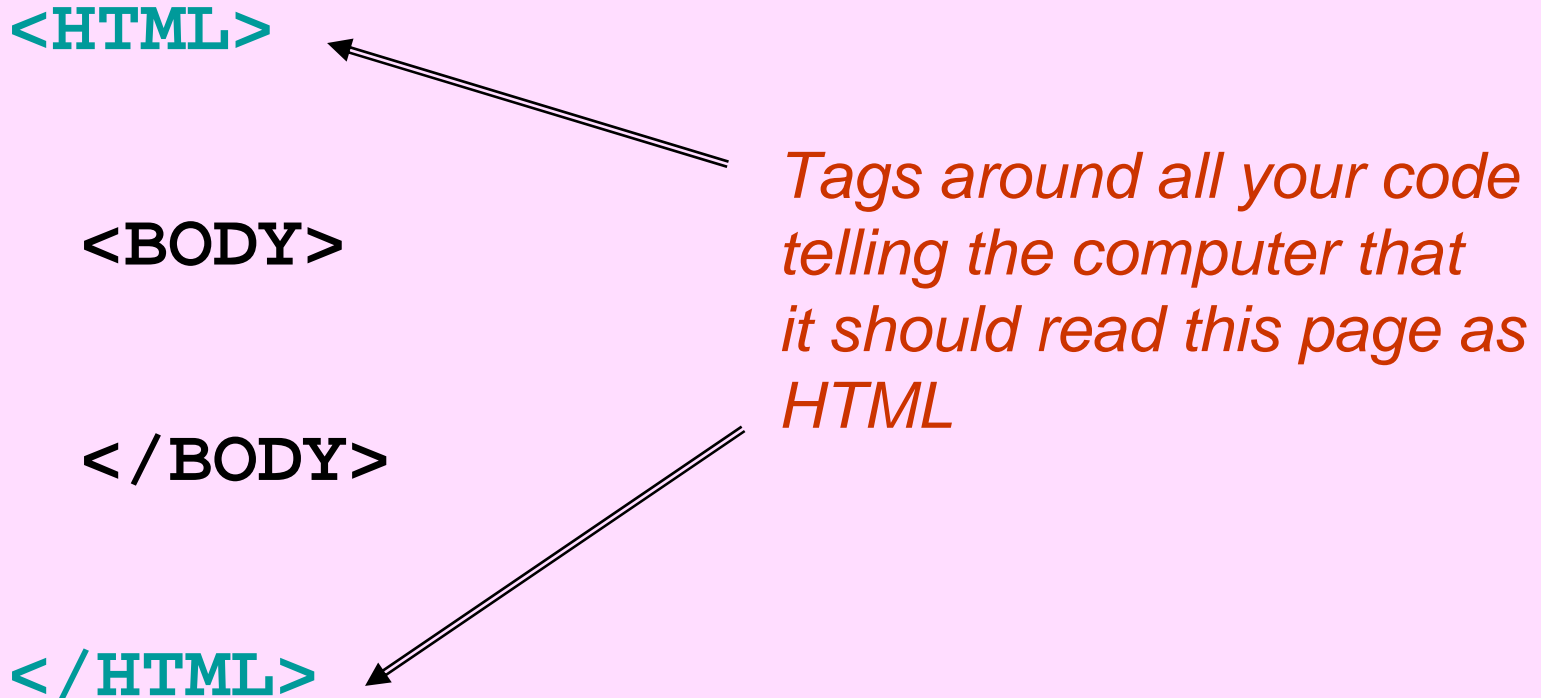
<HTML>

<BODY>

</BODY>

</HTML>

*Tags around all your code
telling the computer that
it should read this page as
HTML*

The diagram illustrates the structure of an HTML document. On the left, four HTML tags are listed vertically: <HTML> (in teal), <BODY> (in black), </BODY> (in black), and </HTML> (in teal). On the right, a block of orange text explains that these tags are used to tell the computer to read the page as HTML. Two double-lined arrows originate from this text block: one points to the opening <HTML> tag, and the other points to the closing </HTML> tag.

What every page looks like:

<HTML>

<BODY>

</BODY>

</HTML>

All your code that will show up on the page goes between the BODY tags

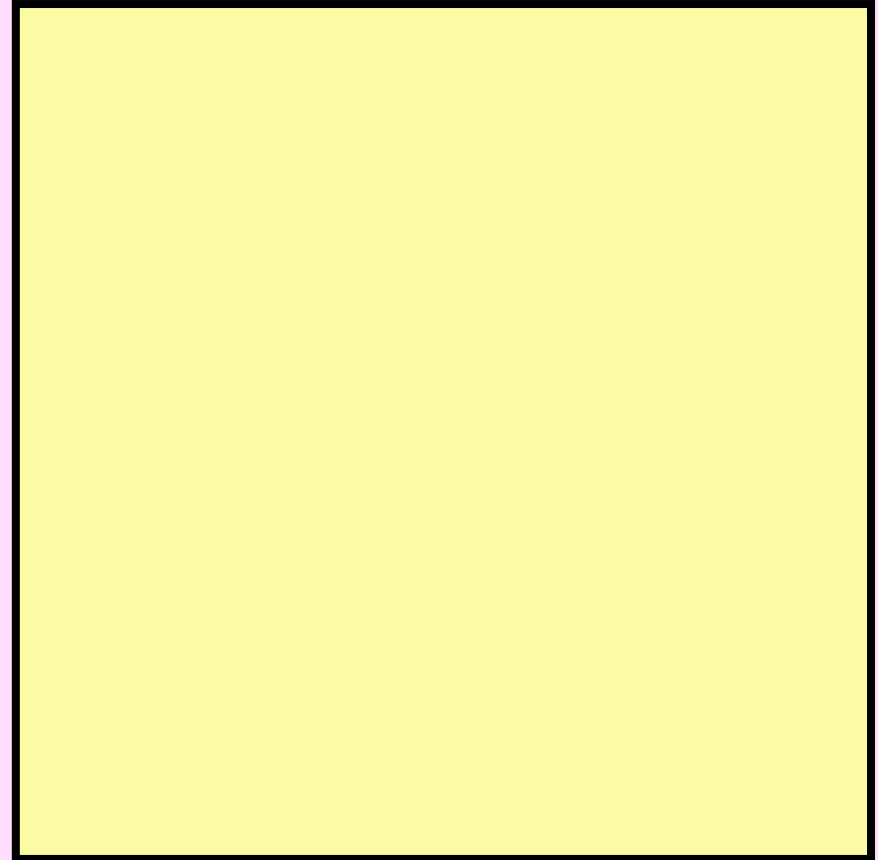


Attributes and Values

Some tags can have more than just their names in them.

Tags can also have attributes!

Every attribute you want to change is assigned a value.



Layout

The body of your page should be inside a tag called the **BODY** tag. Inside this tag you can specify the background color (bgcolor) of the page and the color of the text.

`<BODY bgcolor="blue" text="purple">...</BODY>`



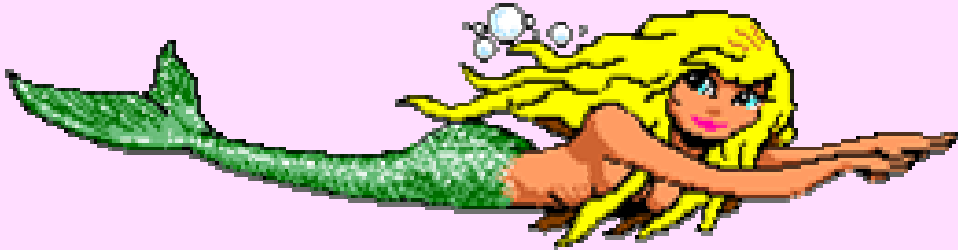
You can center things on your page using the **CENTER** tag:

`<CENTER>...</CENTER>`

Otherwise it will align on the left side of the page.

More Layout

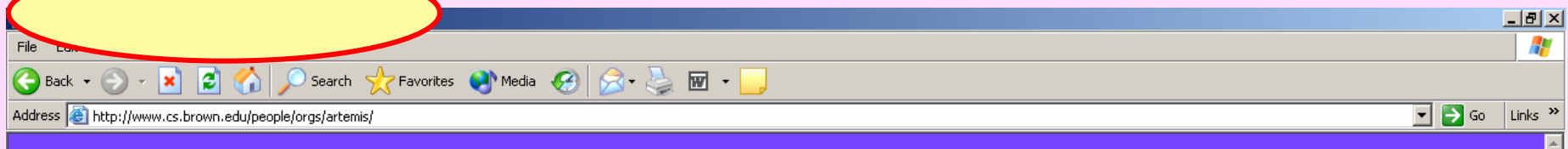
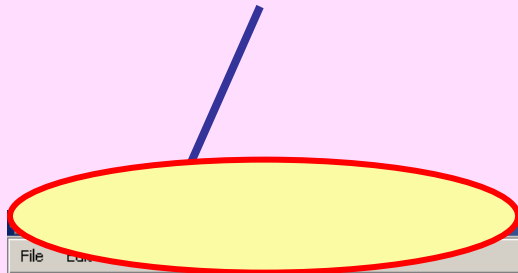
Here are the **TITLE** tags:



```
<TITLE>...</TITLE>
```

If you want the title of the page to appear in the top bar, use the **HEAD** tags:

```
<HEAD>...</HEAD>
```



Layout Example



```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE> Artemis 2004 </TITLE>
```

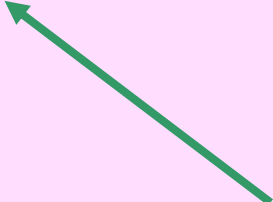
```
  </HEAD>
```

```
  <BODY>
```

-
-
-

```
  </BODY>
```

```
</HTML>
```



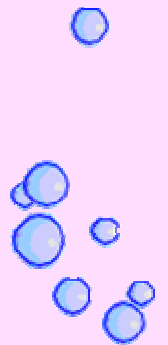
*This will put Artemis 2004
into the web browser
containing your
webpage.*



Basic Style Tags

Here are some common TAGS you will probably want to use in your webpage:

Bold	<code>...</code>
<i>Italic</i>	<code><i>...</i></code>
<u>Underline</u>	<code><u>...</u></code>
<i>Bold Italic</i>	<code><i>...</i></code>





Fonts



You can choose what kind of text is on your web page using **FONT** tags.

You can specify the *font*, **color** and **size (1-7)**.

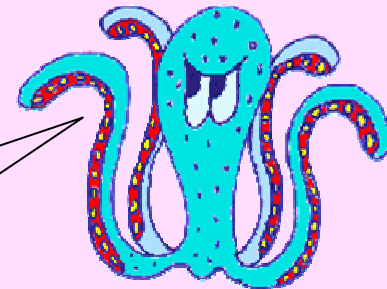
Example:

```
<FONT face="impact" color="orange" size="7">
```

This tag will make text that looks like this!

```
</FONT>
```

Don't forget the end tag!



Spacing

HTML is not smart when it comes to spacing. If you hit **ENTER** at the end of a line, it doesn't know what to do, and just keeps right on going.

If you want a new line, you need a **LINE BREAK** tag:

`
`

HTML automatically puts one space between everything, and the spaces you want to add are called **FORCED SPACES**. Any time you want an extra space:

` `



Both of these instructions get inserted where you want the **LINE BREAK** or **FORCED SPACE**, they do NOT have end tags.

Paragraphs

To tell HTML that you want a paragraph, put the text for the paragraph between the **P** (paragraph) tags:

```
<P >... </P >
```

HTML will add an **extra space** between your paragraphs when you use the paragraph tags, similar to what happens when you insert a line break (
).



Paragraph Example

Here is an example of the formatting HTML does to its paragraphs:

This is a paragraph created in HTML.
We must remember that in HTML
paragraphs have end tags to signify the
end of a paragraph.

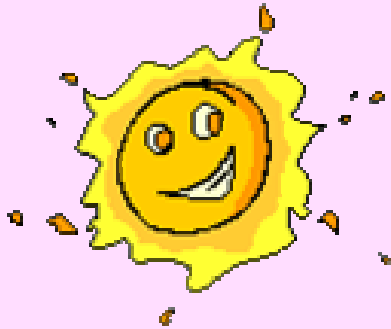
HTML adds a
space between
paragraphs

`<p>` at the beginning
`</p>` at the end of each
paragraph

It is also good to remember that HTML
adds an extra space between each
paragraph, although it does not indent
the first line.

Images

Web pages with just text aren't much fun, so you'll want to add images, such as clip art and pictures.



clip art



pictures

When you add an image to a page, you can specify its:

- Height
- Width
- Title



Image Tag

Suppose the name of the image we want to insert is
Artemis.jpg

The tag would look like this:



```
<IMG src="Images/Artemis.jpg">
```

Here is that tag again with more attributes:

```
<IMG src="Images/Artemis.jpg" alt="Artemis 2003" width=200 height=300>
```

↑
Name of the file

↑
Title of picture

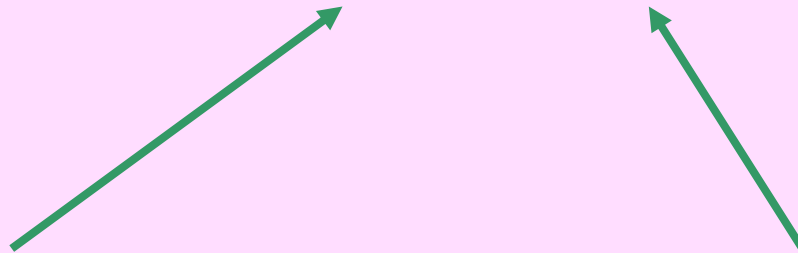
↑ ↑
Width & Height

Image Tag *src*

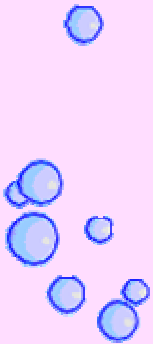


The **IMG** tag's **src** attribute tells the web browser where to look for the picture.

```
<IMG src="Images/Artemis.jpg">
```



In this example, the web browser looks in the folder **Images** and opens the image **Artemis.jpg**.



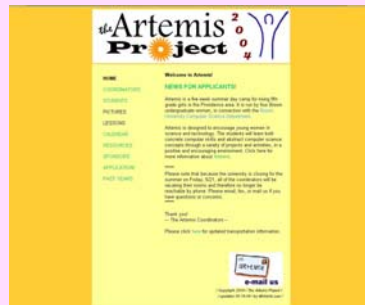
Links

There are 3 basic types of links

1. **Anchor** goes to somewhere else on the same page



2. **Internal** goes to another page within the same website



3. **External** goes anywhere in the world



External Links



`Link Name`

The actual address
of the website

The words the
user will click on

Example:

This:

` Brown CS `

Will look like:

[Brown CS](http://www.cs.brown.edu/)

Adding `target="new"` after the address will open the link in a new window.



Anchored Links



To specify where on the page you want to link to, you need to name the place on the page to go to:

```
<A name="name">This is the place you link to.</A>
```



Name of the target

You can then make links to the target the same way as you make links to other pages, except you add a # to show it's an anchored link:

```
<A href="#name">Click on me to go somewhere else on the page.</A>
```

Internal Links



This is similar to anchored links except that you put the webpage in front of the # symbol.

For example, if you want to go to the part of the [Coordinators.html](#) page that has the name [Sara](#), then you would have the link:



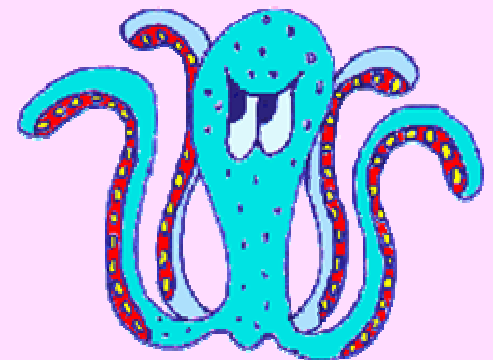
```
<A href="Coordinators.html#Sara">Sara</A>
```



Lists

There are 3 basic types of lists

- Ordered Lists
- Unordered Lists
- Definition Lists



Lists 1

1. **An ordered list** – use when you want the items in your list to be numbered.

Example:

“Ordered List”



“List Item”



This:

```
<OL>
```

```
<LI>Eat breakfast
```

```
<LI>Eat lunch
```

```
<LI>Eat dinner
```

```
</OL>
```

Will look like:

1. Eat breakfast

2. Eat lunch

3. Eat dinner



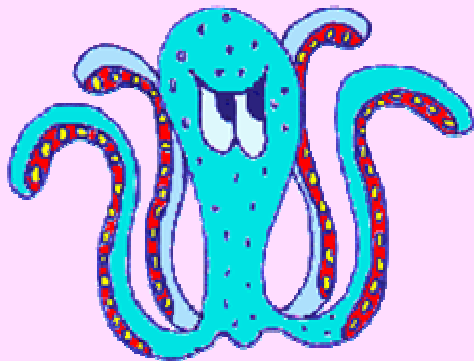
Lists 2

2. **An unordered list** – use when you don't need items to be ordered. Items in the list will be bulleted instead of numbered.

Example:

“Unordered List”

“List Item”



This is a BULLET

This:

```
<UL>
```

```
<LI>A loaf of bread
```

```
<LI>Orange Juice
```

```
<LI>Milk
```

```
</UL>
```

Will look like:

- A loaf of bread
- Orange Juice
- Milk

Lists 3

3. A Definition List – use when you want to define something

Example:

“Definition List”

“Definition Term”

This:

```
<DL>
```

```
<DT>luddite</DT><DD>One who opposes  
technological change. </DD>
```

```
<DT>defenestration</DT><DD>The act of  
throwing something out of a window.</DD>
```

```
</DL>
```

“Definition Data”

Will look like:

luddite

One who opposes technological change.

defenestration

The act of throwing something out of a window.



Tables

Tables help with the layout of words and pictures on a page.

Each **TABLE** has **TABLE ROWS** and each **TABLE ROW** has **TABLE DATA**

Table TAG: `<TABLE>...</TABLE>`

Table Row TAG: `<TR>...</TR>`

Table Data TAG: `<TD>...</TD>`



```
<HTML>
  <TABLE border=1>
    <TR>
      <TD> Krista </TD>
      <TD> Greer </TD>
    </TR>
    <TR>
      <TD> Sara </TD>
      <TD> Hillenmeyer
      </TD>
    </TR>
    <TR>
      <TD> Michelle </TD>
      <TD> Lee </TD>
    </TR>
    <TR>
      <TD> Adrienne </TD>
      <TD> Trudeau </TD>
    </TR>
  </TABLE>
</HTML>
```

Sample Table

Krista	Greer
Sara	Hillenmeyer
Michelle	Lee
Adrienne	Trudeau

Making Your Table Fancy



Alignment: You can align the things in your table using **ALIGN** and **VALIGN**.



ALIGN moves your data horizontally (you can tell it to align “left”, “right”, or “center.” For example:

```
<TD ALIGN="right">
```

VALIGN moves your data vertically (you can tell it to align “top”, “bottom”, or “center.” For example:

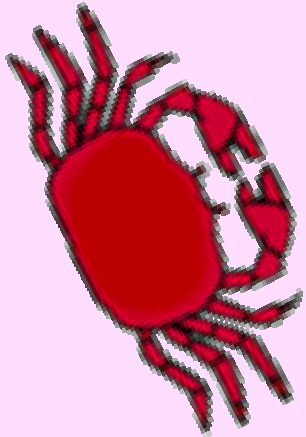
```
<TD VALIGN="top">
```

More Fancy Tables

Inside the **TABLE TAG** you can specify the following:

- Border
- Cell Padding
- Cell Spacing
- Width
- Height

Spacing around
table data



Examples:



```
<TABLE border=1 cellpadding=2 cellspacing=2>
```

```
<TABLE width=200 height=300>
```

Viewing Your Page

- In a *browser* (such as Internet Explorer), under the **File** menu, click **Open...** In the box that pops up, click the **Browse** button and find your file.



- If you make changes, click the **Refresh** button to see their effects.