

Intro to Web Development

What is HTML?

HyperText Markup Language

HTML describes the structure of the pages. It uses elements and tags.

It is the most basic building block of the Web.



HTML Elements

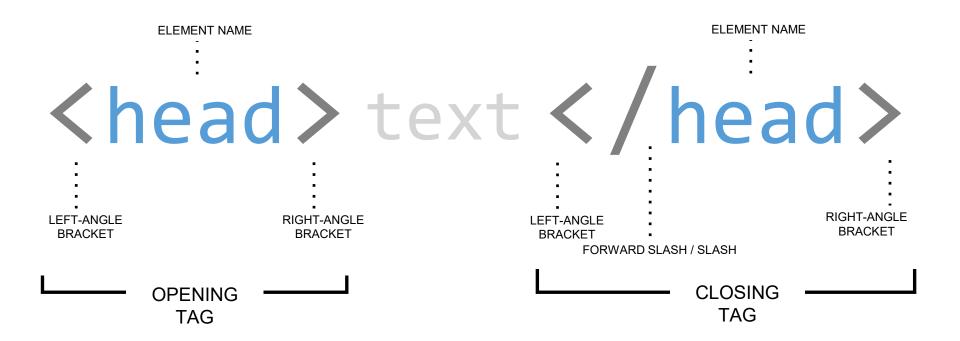
Elements usually have opening and closing tags that surround and give meaning to the content.

Examples

- Body
- Head
- Title
- Meta



HTML Syntax





Kinds of Tags

Container Tags

always wrap around text or graphics and comes in a set with an opening and closing tag.

<title> My First Webpage </title>

Empty Tags

do not have to be wrapped around text and do not require a closing tag; stand alone

<meta>

Basic HTML Tags

Tag Name	Description
html	meant to act as links to a set of rules that the HTML page had to follow
<html></html>	the parent tag or root element of a webpage
<head></head>	first child of html tag. Site page information for web browsers and Search engines.
<title></title>	displayed in browsers tab, used only once inside head tag
<meta/>	used to define the charset family, description, keywords, Author, robots and Geo Location of a website
<body></body>	used to create the page structure or content; structure includes Headings, Paragraphs, images, tables, division, etc of the website



HTML Structure

Tags

Doctype
HTML Tag
Head Tag
Title Tag
Meta Tag
Body Tag

Basic HTML Tags

Tag Name	Use
<h1> </h1>	A section heading level 1. Headings are up to <h6> </h6>
	A paragraph tag
 	Line break
<hr/>	Horizontal Rule
	Bold text
	Insert comment in the source code. A short description of code. Not displayed in the browser.



Nesting Elements

Elements can be placed within other elements.

Example

```
My name is <strong>Raymart</strong>
My name is <strong>Raymart</strong>
```



Activity Time

Click the link provided in the chat box.

HTML List Tags

Unordered List

Non sequential list. List with bullets. In HTML5, type attribute of unordered list is deprecated.

UL Example 1: Bullet List

```
      Coffee
      Milk
      Tea
```

- Coffee
- Milk
- Tea



HTML List Tags

Ordered List

Sequential list. Use numbers, alphabets and Roman characters as list style.

OL Example 1: Uppercase Alphabet List

```
     Coffee
     Milk
     Tea
```

- 1. Coffee
- 2. Milk
- 3. Tea



HTML List Tags

Description List

List with description term and description data.

Syntax:





The World's First Website

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?

If you would like to support the web..

Getting code

Getting the code by anonymous FTP, etc.

Source: http://info.cern.ch/hypertext/WWW/TheProject.html



Exercise 2: Re-create The World's First Website

- Create a new html file name
- Apply what you have learned today, about HTML tags and attributes.
- 3. Save page as B15_EXERCISE2_LASTNAME.html file on your system.
- 4. Double click the file and your page is live on browser.
- 5. Present your version of World's First Website!



HTML Reference

https://www.w3schools.com/html/default.asp

https://developer.mozilla.org/en-US/docs/Learn/HTML

Learning Outcomes



What have you learned today?

Technical Skills

- 1. Introduction to Web Development
- 2. Introduction to Web Stacks
- 3. HTML Tags
- 4. HTML Attributes

Soft Skills

- Communication Skill
- 2. Research
- 3. Problem-solving

HTML Tables

HTML Tables are used to arrange data like text, images, links, other tables, etc. into rows and columns of cells.

Note: To add borders to the table you can use the **border** attribute.

To define the width of the table you can also use the **width** attribute.



HTML Tables

<thead></thead>		Name		Age	Email	
	>	John	>	29	john@email.com	
	>	Jane	>	27	jane@email.com	



HTML Table Head

Table Head is used to group the **header content** of an HTML table.

Table head is uses the tag:

<thead> </thead>



HTML Table Row

Table Row is used to define a **row** inside the table. The table row can contain **1** or more **>** or **>**.

Table Row is uses the tag:



HTML Table Data

Table Data is used to define a data cell inside the table.

Table Data is uses the tag:

<

Name	Age	Email	
John	29	john@email.com	
Jane	27	jane@email.com	



HTML Tables

<thead></thead>		Name		Age	Email	
	>	John	>	29	john@email.com	
	>	Jane	>	27	jane@email.com	



HTML Table Colspan

Colspan attribute is used to make a cell span for more than 1 column.

Syntax:

Name	Contact Number				
Bill	12345	67890			
Steve	13579	24680			



HTML Table Rowspan

Rowspan attribute is used to make a cell span for more than 1 row.

Syntax:

NAME	Bill	Steve		
Contact Number	12345	13579		
Contact Number	67890	24680		



HTML Table Forms

HTML Forms are used to collect different kinds of user inputs, such as contact details like name, email address, phone numbers, or details like credit card information, etc.



HTML Structure

HTML Forms

The form structure consists of an opening and closing tag of **<form>**. This is to declare that you are creating an **HTML Form**.

The **action** form attribute defines **where** should the form-data go after it is submitted.

While the **method** form attribute defines **how** the form-data is passed



HTML Forms

Labelling form controls are needed to make the form more **user-friendly**. As it shows the user what should be filled up inside the input field.

To label form controls:

<label for="input-id">Label Name</label>

Note: The for attribute should be equal to the id of the input field.



HTML Form Controls

Form Controls are used to 'control' the different types of data or values inputted by the user.

- Text Input
- Password Input
- Date
- Email
- Text Area
- Radio Button
- Checkbox
- Dropdown List Box

- Multiple Select Box
- File Input Box
- Submit Button
- Image Button
- Button
- Form Validation
- Placeholder



HTML Text Input

Syntax

```
<label for="first-name">First Name</label>
<input type="text" name="first-name"
id="first-name">

<label for="last-name">Last Name</label>
<input type="text" name="last-name" id="flast-name">
```

Web Page

```
First Name: John Last Name: Doe
```



HTML Password Input

Syntax

```
<label for="password">Password</label>
<input type="password" name="user_password"
id="password">
```

Web Page

Password: •••••



HTML Date Input

Syntax

```
<label for="date">Date</label>
<input type="date" name="date" id="date">
```

Web Page

Date: mm/dd/yyyy 📋



HTML Email Input

Syntax

```
<label for="email">Email</label>
<input type="email" name="email" id="email">
```

Web Page

Email: test@email.com



HTML Text Area

Syntax

```
<textarea name="comments" id="comments" cols="60" rows="10"></textarea>
```

Web Page

Commen			



Syntax

```
Please select your music genre:
<input type="radio" name="genre" id="rock"
value="rock">
<label for="rock">Rock</label>
<input type="radio" name="genre" id="pop"
value="pop">
<label for="rock">Rock</label>
<input type="radio" name="genre" id="jazz"
value="jazz">
<label for="rock">Rock</label></label></label></label></label>
```

Web Page

Please select your favorite music genre:

● Rock ○ Pop ○ Jazz



Syntax

```
Please select your favorite food:
<input type="checkbox" name="food"
id="ramen" value="ramen">
<label for="ramen">Ramen</label>
<input type="checkbox" name="food"
id="sushi" value="sushi">
<label for="sushi">Sushi</label>
<input type="checkbox" name="food"
id="curry" value="curry">
<label for="curry">Curry</label>
```

Web Page

Please select your favorite music genre:

● Rock ○ Pop ○ Jazz



HTML Dropdown List

Syntax

Web Page

What is your device:

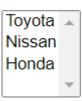




Syntax

Web Page

Select a Car:





HTML Input Box

Syntax

```
<input type="file" name="file" id="file">
```

Web Page

Choose File image.png



HTML Submit Button

Syntax

```
<input type="submit" name="submit" id="submit"
value="Submit">
```

Web Page

Submit



HTML Button

Syntax

<button>I am a button

Web Page

I am a button



HTML Form Validation

HTML5 has the ability to validate most user data once submitted. This is done by using validation attributes in the form elements.

- required = checks whether the input field is filled in or not before being submitted.
- min and max = limits the minimum or maximum value of the numerical type input fields.



HTML Form Validation

placeholder attribute provides a **small hint or description** for the users on what they will put in the input field.



Types of CSS

Inline CSS

uses the **style** attribute inside the HTML Elements.

Internal CSS

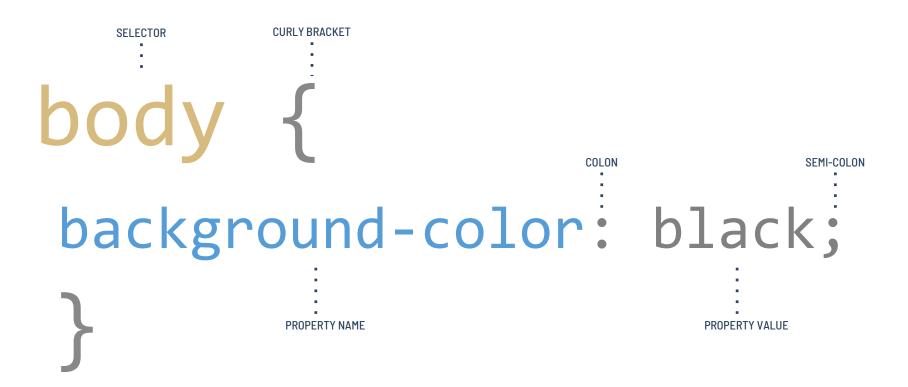
uses the **<style>** element inside the **<head>** of the HTML page.

External CSS

uses an external CSS file which is linked by the <**link**> element inside the <**head**> of the HTML page.



CSS Syntax





Universal Selector

CSS

```
1 *{
2 color: blue;
3 }
```

NOTE:

THIS IS CALLED A UNIVERSAL SELECTOR.
YOU CAN USE THIS TO ADD STYLES TO ALL ELEMENTS



CSS SELECTORS - Element

```
HTML
```

```
1 My name is Kirby
```

```
CS
```

```
1  p {
2    color: blue;
3 }
```



CSS SELECTORS - Class

HTML

```
1 My name is Kirby
```

```
1 .class-name {
2    color: blue;
3 }
```



CSS SELECTORS - ID

HTML

```
1 My name is Kirby
```

```
1 #id-name {
2 color: blue;
3 }
```



Class vs ID

class attribute is used to identify more than one element.

id attribute is used to identify one unique element.



If the two selectors are identical, the latter of the two will take precedence.

Here you can see the **second selector** takes precedence over the first.

```
h1 {
    color: red;
}

h1 {
    color: blue;
}
```

Top level heading: Maybe a page title

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Tempore, dolore.

- Number one on the list
- Number two
- A third item



If one selector is more specific than the others, the more specific rule will take precedence over more general ones.

```
h1.header1 {
    color: red;
}

h1 {
    color: blue;
}
```

Top level heading: Maybe a page title

Lorem ipsum, dolor sit amet consectetur adipiscing elit. Tempore, dolore.

- Number one on the list
- Number two
- A third item



Select all <Ii> child of parent

```
HTML CS
```

```
<a href="#">Home</a>
 <a href="#">Menu</a>
 <a href="#">Blog</a>
```

```
ul li {
    color: blue;
```

Select all <Ii> child of parent

```
HTML
```

```
    <a href="#">Home</a>
    <a href="#">Menu</a>
    <a href="#">Blog</a>
```

CS

```
ul li {
color: blue;
}
```

OR using a parent class

```
.nav-links li {
   color: blue;
}
```



CSS Color

SALMON

rgb(250, 128, 114)

opacity: 1

rgba(250, 128, 114, 1)

#fa8072



CSS Color

color

the **color** property defines color of the text.

Example:

color: black;



color name

all modern browsers support around **140 color name values.** However, this is not the practical way to use CSS colors

rgb

RGB color value specifies the **red**, **green**, **or blue intensity**. The intensity value should only be from **0 to 255**.



hexcode

hexcode is specified with:

#RRGGBB which means RR for red value, GG for green value, and BB for blue value. These hexadecimal values specifies the colors. All values should be in between **00 and FF**.



Exercise 3: Philippine Tourist Spots

- 1. Create a travel blog website that will help promote Philippine tourism.
- 2. Select one (1) city in the Philippines that you want to cover.
- 3. The blog should include the following:
 - Pictures of the location (tourist spots, historical places etc.)
 - Discuss the culture of the city (food, festival, rituals, transportation etc.)
 - Things to bring
 - Sample itinerary
 - Tips in visiting the city
 - Hyperlinks to hotels, social media sites and other related articles.
 - Comment section
- 4. Enhance the webpage using CSS formatting and other styles.
- 5. Insert the screenshots of your codes and sample web page output below.
- 6. Save your files following the format:
- a. WD11_EXERCISE3_LastName_Firstname (docx or pdf format)
- b. WD11_EXERCISE3_LastName_Firstname.html
- c. WD11_EXERCISE3_LastName_Firstname.css
- 7. Upload your Exercise 3 files to Github pages.
- 8. Submit the github page link to the canvas



CSS Background Color

background-color

the **background-color** property defines color of the background of an element.

Example:

background-color: rgb(76, 175, 80)



Background Image

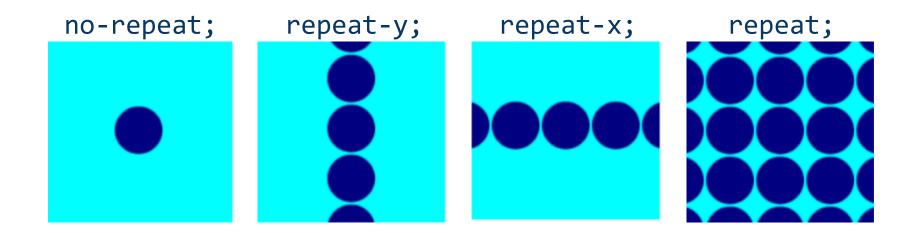
ADDING A BACKGROUND IMAGE

background-image: url(images/image.jpg);

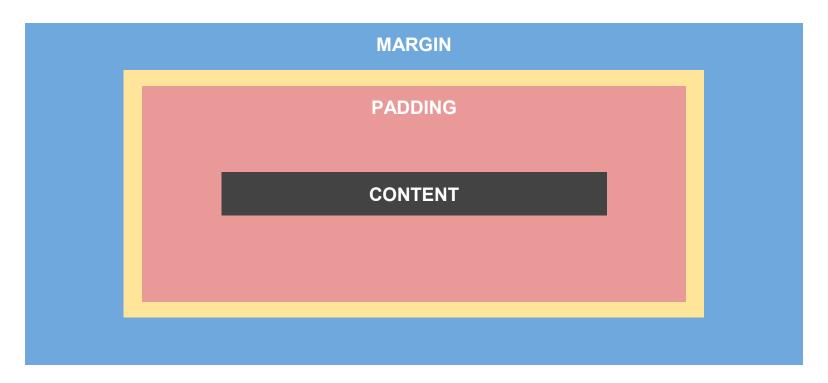


Background Repeat

background-repeat:







BORDER

is the yellow box.



margin

the margin property sets the margin for an element.

Note:

Margin values are applied clockwise



Margin

1 - value margin:

-the value applies the margin to all four sides.

Example:

margin: 10px;

2 - value margin:

- first value = top and bottom side
- second value = right and left side

Example:

margin: 10px 20px;



Margin

3 - value margin:

- first value = top side
- second value = right and left side
- third value = bottom side

Example:

margin: 10px 20px 30px;

4 - value margin:

- first value = top side
- **second** value = **right** side
- third value = bottom side
- fourth value = left side

Example:

margin: 10px 20px 30px 40px;



Margin

Note:

margin property is a shorthand.

To apply margin on individual sides you can use the following properties:

- margin-top
- margin-right
- margin-bottom
- margin-left



padding

the **padding** property sets the padding for an element.

Note:

Padding values are applied clockwise



1 - value padding:

-the value applies the padding to all four sides.

Example:

padding: 10px;

2 - value padding:

- first value = top andbottom side
- second value = right and left side

Example:

padding: 10px 20px;



3 - value padding:

- **first** value = **top** side
- second value = right and left side
- third value = bottom side

Example:

padding: 10px 20px 30px;

4 - value padding:

- **first** value = **top** side
- **second** value = right side
- third value = bottom side
- fourth value = left side

Example:

padding: 10px 20px 30px 40px;



Note:

padding property is a shorthand.

To apply padding on individual sides you can use the following properties:

- padding-top
- padding-right
- padding-bottom
- padding-left



Border

border

the **border** property adds a border to the element.



border shorthand

border: border-width border-style border-color;



Padding

border-width:

sets the width of the border.

The value of the border-width can be: **px**

border-color:

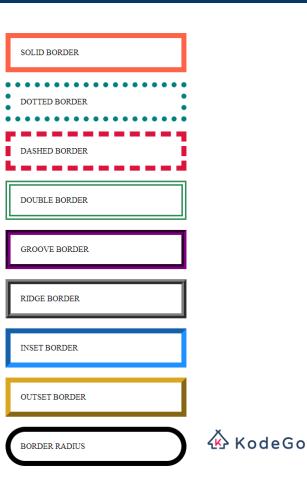
sets the color of the border.

The value of the border-color can be: color name, rgb, or hexcode



Border Styles

```
.solid{
      border: 10px solid tomato;
.dotted{
      border: 10px dotted teal;
.dashed{
      border: 10px dashed crimson;
.double{
      border: 10px double seagreen;
.groove{
      border: 10px groove purple;
.ridge{
      border: 10px ridge gray;
.inset{
      border: 10px inset dodgerblue;
.outset{
      border: 10px outset goldenrod;
.radius{
      border: 10px solid black;
      border-radius: 50px;
```



Padding

Note:

To apply border on individual sides you can use the following properties:

- border-top
- border-right
- border-bottom
- border-left

And to apply border-radius on an element:

border-radius

border-radius can use **px or** %



Overflow

The **overflow** property tells the browser what to do if the content contained within a box is larger than the box itself.

overflow: hidden;

hides the extra content that does not fit in the box

overflow: scroll;

adds a scrollbar to the box so that the user can scroll to see the missing content.



Box Sizing

By default, the width and height of an element is calculated like this:

width + padding + border = actual width of an element

height + padding + border = actual height of an element

The **box-sizing** property allows us to include the **padding** and **border** in an element's total width and height.



Box Shadow

box-shadow

the box-shadow property adds a shadow to an element

box-shadow: h-offset v-offset blur spread color;



Box Shadow

```
.box-shadow{
    box-shadow: 10px 15px 10px 5px red;
    border: 1px solid black;
}
```

Box shadow



Centering Content

To center a text, you can simply use **text-align**

To center a block element, you can simply use:

- margin-left: auto;
- margin-right: auto;



Font Family

font-family

font-family property defines the font for an element.

```
font-family: Arial, Helvetica, sans-serif;
```



SERIF

im

SANS-SERIF

im

MONOSPACE





Font Size

font-size

font-size property defines the size of the font for an element.

The values for font-size are: px, %, em



Font Size

```
font-size-10{
     font-size: 10px;
font-size-20{
     font-size: 20px;
font-size-30{
     font-size: 30px;
font-size-40{
     font-size: 40px;
font-size-50{
     font-size: 50px;
```

```
Font size 10px
```

Font size 20px

Font size 30px

Font size 40px

Font size 50px

Font size 100%

Font size 200%

Font size 300%

Font size 400%

Font size 500%



Font Weight

font-weight

font-weight property defines the weight or how thick of thin the font is.

The values for font-weight are: bold, normal, lighter, or from 100 to 900.



Font Weight

```
font-weight-bold{
      font-weight: bold;
font-weight-bolder{
      font-weight: bolder;
font-weight-lighter{
      font-weight: lighter;
font-weight-100{
      font-weight: 100;
font-weight-500{
      font-weight: 500;
font-weight-900{
      font-weight: 900;
```

bold

bolder

lighter

100

500

900



Font Style

font-style

font-style property specifies the font style of the text.

The values for font-style are: **normal, italic, oblique.**



Font Style

```
font-style-normal{
        font-style: normal;
}

font-style-italic{
        font-style: italic;
}

font-style-oblique{
        font-style: oblique;
}
```

normal

italic

oblique



Text Transform

text-transform

text-transform property specifies the capitalization of the text.

The values for text-transform are: **uppercase**, **lowercase**, **capitalize**.



Text Transform

```
text-uppercase{
          text-transform: uppercase;
}

text-lowercase{
          text-transform: lowercase;
}

text-capitalize{
          text-transform: capitalize;
}
```

UPPERCASE

lowercase

Capitalized Text



Text Decoration

text-decoration

text-decoration property specifies the decoration to the text.

The values for text-decoration are: **overline**, **underline**, **line-through**.



Text Decoration

```
text-overline{
         text-decoration: overline;
}

text-line-through{
         text-decoration: line-through;
}

text-underline{
         text-decoration: underline;
}
```

Overline

line-through

underline



Text Align

text-align

text-align specifies the alignment of the text.

The values for text-align are: **left, center, right.**



LEFT

CENTER

RIGHT

```
selector {
   text-align: center;
}
```



Text Shadow

text-shadow

text-shadow adds a shadow to the text.

The syntax of text-shadow is:

text-shadow: h-shadow v-shadow blur-radius color;



Text Shadow

```
text-shadow{
    text-shadow: 2px 2px 3px #961204;
}
```

Text Shadow



Text Indent

text-indent

text-indent property specifies the indentation for the first line of a text/paragraph.

The values for text-indent can be: px, %, em



Text Indent

```
text-indent-px{
    text-indent: 50px;
text-indent-percent{
    text-indent: 5%;
text-indent-em{
    text-indent: 5em;
```

50 px Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis vitae molestias distinctio quia optio saepe laboriosam, ad voluptates id? Adipisci illum consequatur laborum harum provident quo pariatur perferendis quaerat vero.

5% Lorem ipsum dolor sit amet consectetur adipisicing elit. Officiis impedit modi iure possimus numquam consequatur praesentium, nihil id similique autem quasi accusantium et quam maiores quis recusandae veritatis omnis temporibus!

5em Lorem ipsum dolor sit amet consectetur adipisicing elit. Omnis temporibus doloribus dolorum ex maxime! Provident labore impedit eaque, sapiente accusantium quis architecto voluptatibus illo ab. Nam quas illum quo et.

Letter Spacing

letter-spacing

letter-spacing property **increases** or **decreases** the **spacing** in between the **letters** in a text.

The values for letter-spacing can be in: px



Letter Spacing

```
LETTER SPACING
```

```
LETTER SPACING letter-spacing: 5px;
LETTER SPACING letter-spacing: 10px;
LETTER SPACING letter-spacing: 20px;
LETTER SPACING letter-spacing: 30px;
 ETTER SPACING
letter-spacing: 50px;
```

KodeGo

Word Spacing

word-spacing

word-spacing property **increases** or **decreases** the **spacing** in between the **words** in a text.

The values for letter-spacing can be in: **px**



Word Spacing

WORD SPACING EXAMPLE

WORD SPACING EXAMPLE word-spacing: 10px;

WORD SPACING EXAMPLE word-spacing: 20px;

WORD SPACING EXAMPLE word-spacing: 30px;

WORD SPACING EXAMPLE word-spacing: 40px;

WORD SPACING EXAMPLE word-spacing: 50px;



List Style

UNORDERED LIST

```
list-style-type: none;
• list-style-type: disc;
• list-style-type: circle;
• list-style-type: square;
```

ORDERED LIST

```
    list-style-type: decimal-leading-zero;
    list-style-type: lower-alpha;
    list-style-type: lower-roman;
    list-style-type: upper-roman;
    list-style-type: upper-alpha;
```



List Style Position

```
ol{
    list-style-position: inside;
}
ul{
    list-style-position: outside;
}
```

- 1. Chocolate
- 2. Banana
- 3. Milk
- Chocolate
- Banana
- Milk



List Style Shorthand

```
list-style: list-style-type list-style-position;
```

```
list-style: square outside;
```



CSS Images

The **height** property adjusts the height of the image. You can use % or px

The **width** property adjusts the width of the image. You can use % or px



CSS Tables

CSS Tables can use some previous css properties that we learned.

Properties such as:

- width
- height
- color
- font-size
- text-align
- and etc.



CSS Tables

empty-cells: show;

To show the empty cells in the table.

1 2

empty-cells: hide;

To hide the empty cells in the table.

1 2



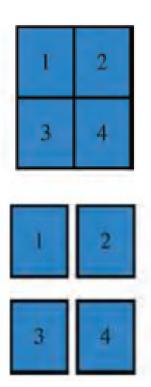
CSS Tables Border Collapse

border-collapse: collapse;

Table borders are collapse into a single border.

border-collapse: separate;

Table borders are detached from each other.





CSS Tables Border Spacing

border-spacing: 15px;

The spacing of both the horizontal and vertical spacing will be adjusted.

1	2	3
4	5	6
7	8	9



CSS Float

float: left;

Aligns the element and its surrounding elements to the left side of the page.

float: right;

Aligns the element and its surrounding elements to the right side of the page.



Clear

clear: none; - the element is not moved down to clear past floats.

clear: left; - the element is moved down to clear past left floats.

clear: right;- the element is moved down to clear past right floats.

clear: both; - the element is moved down to clear past both left and right floats.



Position

position: static; - this is the default positioning;
the element will stick to the normal page flow. So if there is a
left/right/top/bottom/z-index set then there will be no effect on that
element.

position: relative; -an element's original position remains in the flow of the page, just like the static value. But now **left/right/top/bottom/z-index** will work. The positional properties can move the element from the original position in that direction.



Position

position: absolute; - the element is removed from the flow of the page and other elements will behave as if it's not even there. All the other positional properties will work on it.

position: fixed; - the element is removed from the flow of the document like absolutely positioned elements. In fact they behave almost the same, only fixed positioned elements are always relative to the document, not any particular parent, and are unaffected by scrolling.



Display

display: block;- displays the element as a **block** element.

Block level elements do not sit inline instead they will create a new line break. By default (without setting a width) they take up as much horizontal space as they can.

display: inline; - displays the element as an *inline* element.

An inline element will accept margin and padding, but the element still sits inline as you might expect. Margin and padding will only push other elements horizontally away, not vertically. An inline element will **not** accept **height** and **width**. It will just ignore it.



Display

display: inline-block;- the element will have the characteristic of a *block* element but sits on a *line*. You are now able to set the *width* and *height*, which will be respected.

display: none; - hides the element.





Thank you!