



BOOTCAMP

v2023



Introduction to HTML



What is HTML?

HyperText Markup Language

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

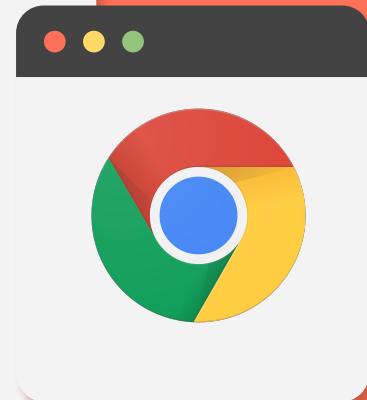
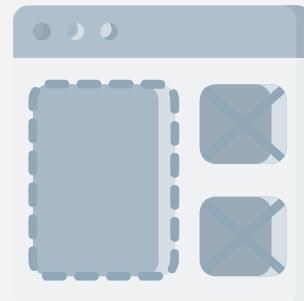
It is the most basic building block of the Web.

Software used to Create Websites



01. Text-Editor

VS Code, Sublime Text,
Notepad++, Atom



02. Browser

Google Chrome, Safari,
Mozilla Firefox, Internet
Explorer

HTML

```
<h1>Top level heading: Maybe a page title</h1>
```

```
<p>A paragraph of text. Some information we would like to communicate to the user. This can be as long or short as we would like.</p>
```

```
<ol>
  <li>Number one on the list</li>
  <li>Number two</li>
  <li>A third item</li>
</ol>
```

Web Page

Top level heading: Maybe a page title

A paragraph of text. Some information we would like to communicate to the user. This can be as long or short as we would like.

1. Number one on the list
2. Number two
3. A third item

HTML STRUCTURE

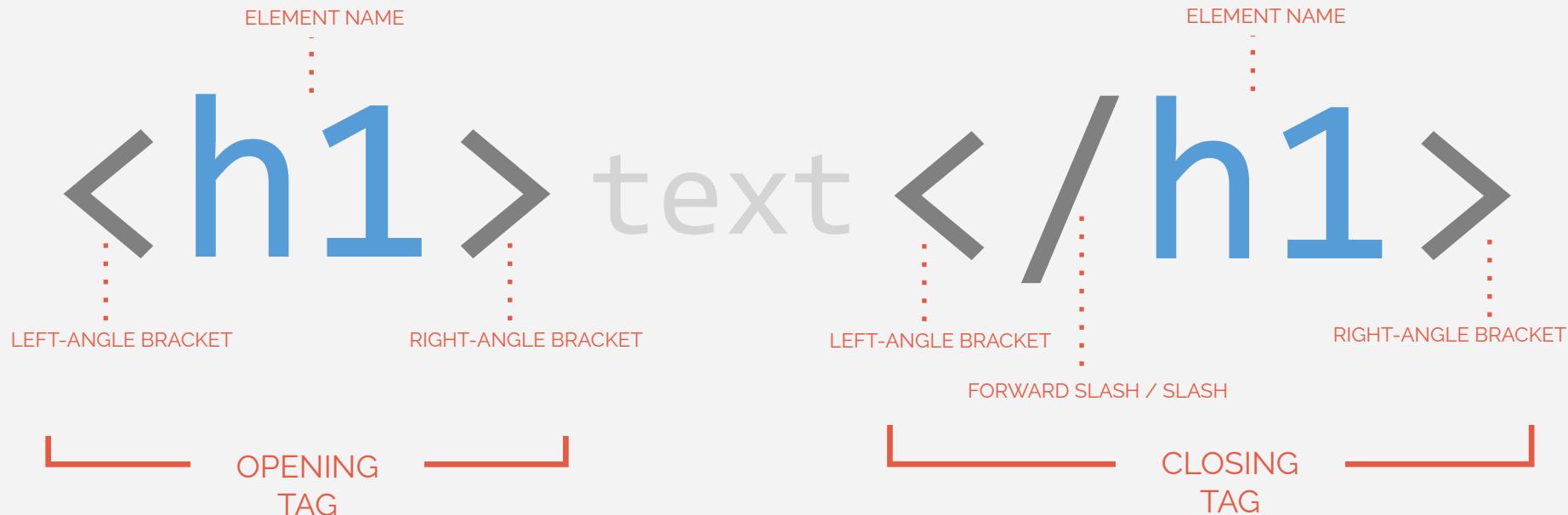
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document Title</title>
  <link rel="stylesheet" href="css/style.css">
</head>
<body>
  <!-- contents here -->
</body>
</html>
```

VS Code shortcut: ! or html:5



HTML Tags, Elements, and Attributes

HTML SYNTAX





HTML Elements & Tags

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

HTML Syntax:

```
<h1 class="topHeading">Top level heading: Maybe a page title</h1>
```

Case-insensitive

Tags in HTML are case-insensitive, i.e. they can be written in uppercase or lowercase.

1 | <title>My HTML Page</title>

2 | <TITLE>My HTML Page</TITLE>

3 | <Title>Coffee Bean</Title>

Nesting Elements

Elements can be placed within other elements too.

1 | <p>My name is Kirby</p>

2 | <p>My name is Kirby</p>

X 3 | <p>My name is Kirby</p>

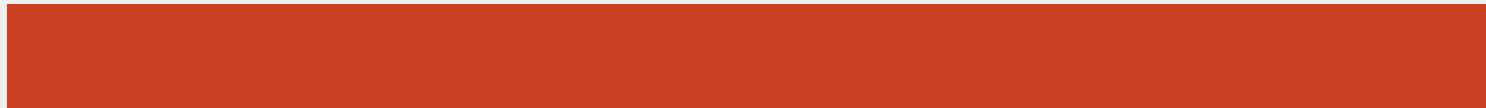


Block Elements vs Inline Elements

Block Elements always start on a new line and takes up the full width of a page, from left to right.

A block-level element can take up one or multiple lines and has a line break before and after the element.

BLOCK ELEMENTS



BLOCK ELEMENTS

```
<h1>Top level heading</h1>
```

```
<p>My name is Kirby.</p>
```

```
<p>This will occupy an entire horizontal space.</p>
```

```
<div>This is also a block element.</div>
```



Block Elements vs Inline Elements

Inline Elements do not cause a line break or start on a new line, and does not take up the full width of a page.

Its width only extends as far as it is defined by its tags.

It is usually used within other HTML elements.

INLINE ELEMENTS



INLINE ELEMENTS

```
<p>This contains an <em>inline-level</em> element.</p>
```

```
<p><strong>Warning:</strong> Do not touch.</p>
```

```
<p>Span is a generic <span>inline container.</span></p>
```

Div vs Span

Div, also known as ***division tag***, is used in HTML to make divisions of content on the web page like text, images, header, footer, navigation bar, etc. It is also used to group elements together.

The div element is a **block** element.

Div vs Span

Span is an inline container for inline elements and content. It used to group inline elements for styling purposes (by using the class or id attributes).

The span element is an **inline** element.



HTML Attributes

Attributes provide additional information about an element.

HTML Attributes

ATTRIBUTE
NAME

ATTRIBUTE
VALUE

```
<p class="class-name"> Text </p>
```

_____ ATTRIBUTE _____



HTML Attributes

- **class** - specifies a class name to an element; used for styling
- **id** - specifies a unique identifier to an element; used to target an element



HTML Typography



HTML Headings

Headings are used to create headings in descending order of importance where **<h1>** is the most important and **<h6>** is the least.

It is basically the headlines for your web page.

HEADING

<h1>Most important heading</h1>

<h2>Heading 2</h2>

<h3>Heading 3</h3>

<h4>Heading 4</h4>

<h5>Heading 5</h5>

<h6>Least important heading</h6>



HTML Paragraph

Paragraph elements are used to create paragraphs.

To create a paragraph:

< p > Your text here **< /p >**

PARAGRAPH

```
<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Beatae id  
repellat cupiditate eaque. Vitae sit sed dolores totam quod. Molestiae  
ipsam nam accusamus, quos eligendi at odio obcaecati! Velit,  
veniam!</p>
```

VS Code shortcut: p>lorem30



Line Breaks

Line Breaks are used to add a single line break in a text.

To insert a line break use:

**
**

LINE BREAK

```
<p>Hold fast to dreams,<br>for if dreams die,<br>life is a  
broken-winged bird<br>that cannot fly.</p>
```



Horizontal Rule

Horizontal Rule is used to add a thematic break between paragraph-level elements.

To insert a horizontal rule:

<hr>

HORIZONTAL RULE

< p > First story. Lorem ipsum, dolor sit amet consectetur adipisicing elit. Assumenda fugiat architecto eaque neque adipisci at blanditiis suscipit non sit laboriosam numquam provident officiis quo quibusdam perspiciatis </ p >

< hr >

< p > Second story. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Eveniet, omnis corporis? Deserunt natus placeat vero ad omnis preferendis quia veniam! </ p >



HTML Links

HTML Links

Anchor tags < a > are used to define a hyperlink that links one page to another page, as well as files, location, or any URL.

The **href** attribute is the most important attribute of the HTML **< a >** tag, and which links to destination page or URL.

LINKS

```
<a href="www.twitter.com">Twitter</a>
```

to an external page

```
<a href="contact-us.html">Contact Us</a>
```

to another page

```
<div id="top">Header</div>  
<a href="#top">Back to top</a>
```

to another location on the same page

HTML Activity 1

My first Heading

My first paragraph.

Adding Links:

[Link to File](#)

[Link to a website](#)

html-act1.html



HTML Lists



HTML Ordered Lists

Ordered List is a type of list that is numerically or alphabetically ordered.

1. Item 1
2. Item 2
3. Item 3

ORDERED LIST

```
<ol>  
  <li>Item 1</li>  
  <li>Item 2</li>  
  <li>Item 3</li>  
</ol>
```



HTML Unordered Lists

Unordered List is a type of list that is not ordered. It is rendered as a bulleted list.

- Item 1
- Item 2
- Item 3

UNORDERED LIST

```
<ul>  
  <li>Item 1</li>  
  <li>Item 2</li>  
  <li>Item 3</li>  
</ul>
```

HTML Lists

The `` and `` elements may be **nested** as desired, and may alternate without restrictions.

1. Fruits
 - o Banana
 - o Apple
2. Desserts
 - o Chocolate Bar
 - o Cake

NESTED LIST

```
<ol>
  <li>Fruits
    <ul>
      <li>Banana</li>
      <li>Apple</li>
    </ul>
  </li>
  <li>Desserts
    <ul>
      <li>Chocolate Bar</li>
      <li>Cake</li>
    </ul>
  </li>
</ol>
```



HTML Images

HTML Images

The **img** element adds an image into the document.

The **src** attribute defines the URL or the path to the image.

The **alt** attribute defines the alternate text for an image for when it is not displayed.



HTML Images

The **height** attribute defines the height of the image. Use **%** (percentage) or **px** (pixel).

The **width** attribute defines the width of the image. Use **%** (percentage) or **px** (pixel).

IMAGE

```

```

HTML Activity 2

The Rabbit



- Rabbits are amazing athletes. They can jump as high as 90 centimetres in one leap!
- A baby rabbit is called a kit, a female is called a doe and a male is called a buck.
 - Rabbits are very social creatures that live in groups.



Facts about rabbits:

1. A single bunny is a lonely bunny
2. They can live for up to 12 years
3. They are masters of hearing

html-act2.html



HTML Tables



HTML TABLES

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

To create an HTML table:

<table></table>

TABLE

<table>

1	2	3
4	5	6
7	8	9

</table>

Table Row

The **tr** element defines a **row** inside a table. A table row can contain **one** or **more <th>** or **<td>**.

To create a row:

```
<tr> </tr>
```

TR

<table>

1	2	3
4	5	6
7	8	9

</table>



Table Data

The **td** element defines a **data cell** inside the table.

To create a data cell:

```
<td> </td>
```

TD

<table>

1st row <tr>

<td> 1 </td> <td> 2 </td> <td> 3 </td> </tr>

2nd row <tr>

<td> 4 </td> <td> 5 </td> <td> 6 </td> </tr>

3rd row <tr>

<td> 7 </td> <td> 8 </td> <td> 9 </td> </tr>

</table>



Table Header

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

To create a table header:

```
<thead> </thead>
```



Header Cell

The **header cells** contain the header information or the column names of the table. By default, the font weight is **bold**, and aligned to the **center**.

To create a header cell:

```
<th> </th>
```

THEAD + TH

<table>

```
<thead> <tr> <th> Name </th> <th> Age </th> <th> Email </th> </tr> </thead>
```

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

```
<tr> John 29 john@email.com </tr>
```

```
<tr> Jane 27 jane@email.com </tr>
```

</table>



Table Body

tbody is used to group the **body content** of an HTML table.

To create a table body:

```
<tbody> </tbody>
```

TBODY

<table>

<tr>

Name

Age

Email

</tr>

<tbody>

<tr>

John

29

john@email.com

</tr>

<tr>

Jane

27

jane@email.com

</tr> </tbody>

</table>



Colspan

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

Syntax:

```
<td colspan="2">
```

Colspan

Name	<th colspan="2"> Contact Numbers <th data-kind="ghost"></th>	
Bill	12345	67890
Steve	13579	24680



Rowspan

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

Syntax:

```
<td rowspan="2">
```

TABLES: Rowspan

Name	Bill	Steve
<td rowspan="2"> Contact Numbers </td>	12345	13579
	67890	24680

HTML Activity 3

My Work Plan for the Week					
	Monday	Tuesday	Wednesday	Thursday	Friday
Activity	Meeting at Room 202	Business Lunch at 1pm	Project due by 5pm	Web Conference	Early Finish (4pm)
	Club Practice	Meeting at 2pm	NONE	NONE	Submit report

html-act3.html



HTML Forms



HTML 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.

FORM STRUCTURE

```
<form action="#" method="#">  
  <label for="full-name">Full Name</label>  
  <input type="text" name="full_name" id="full-name">  
  
  <input type="submit" name="btn_submit" value="Submit">  
</form>
```



Form Structure

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

The **method** attribute defines **how** the form-data is passed.



Labelling Form Controls

Labelling form controls is 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.



Kinds of Form Controls

- Text Input
- Password Input
- Number Input
- Date
- Email
- Text Area
- Radio Button
- Checkbox
- Dropdown List Box
- Multiple Select Box
- File Input Box
- Button
- Form Validation
- Placeholder

Text Input

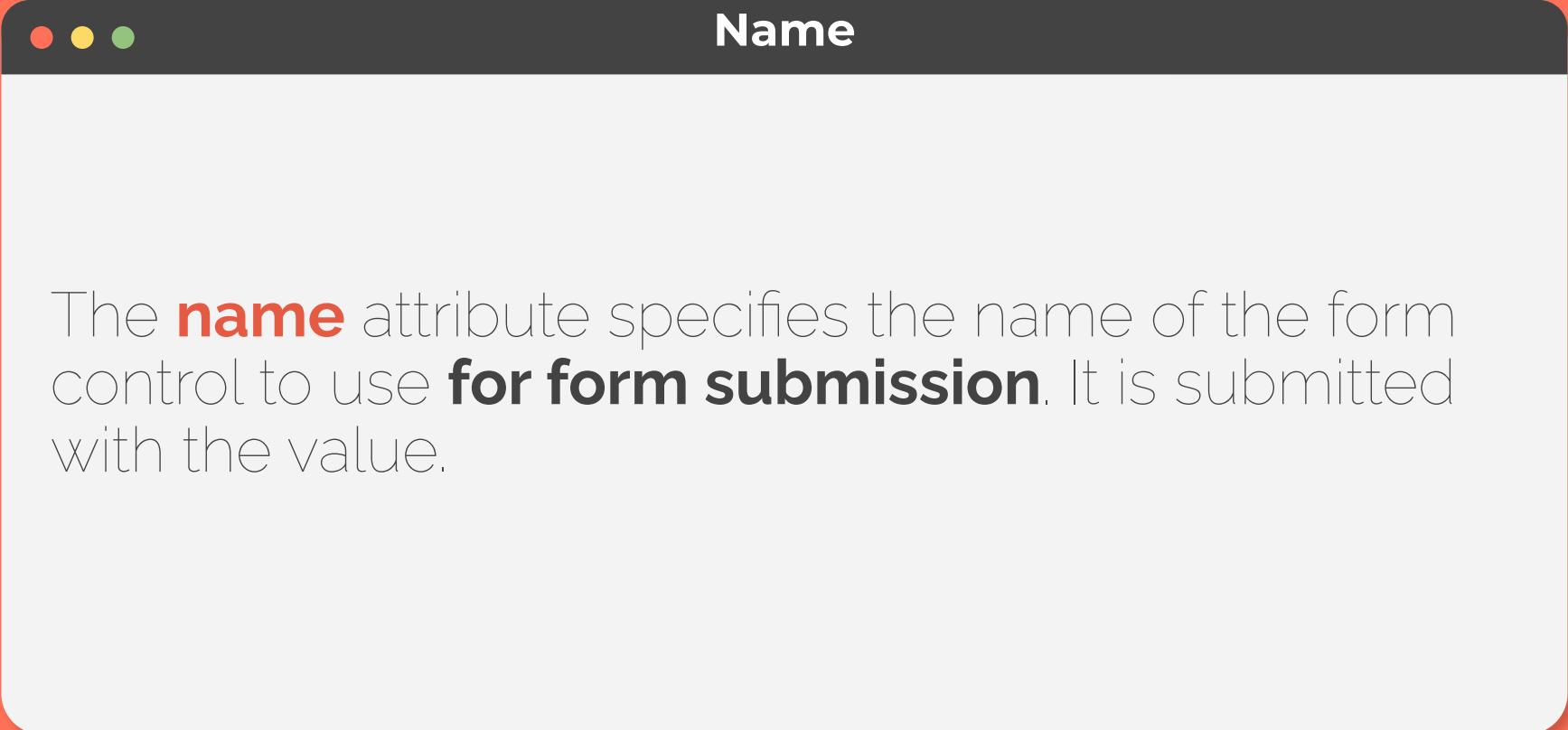
Syntax

```
<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="last-name">
```

Web Page

First Name: Last Name:



Name

The **name** attribute specifies the name of the form control to use **for form submission**. It is submitted with the value.

Password Input

Syntax

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

Web Page

Password:

Number Input

Syntax

```
<label for="age">Age</label>
<input type="number" name="age" id="age">
```

Web Page

Age

Date Input

Syntax

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

Web Page

Birthday 

Email Input

Syntax

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

Web Page

Email:

Textarea

Syntax

```
<label for="comments">Comments:</label>
<br>
<textarea name="comments" id="comments"
cols="60" rows="10"></textarea>
```

Web Page

Comments:

Radio Button

Syntax

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

Web Page

Please select your favorite music genre:

- Rock
- Pop
- Jazz

Checkbox

Syntax

```
<p>Please select your favorite food:</p>
<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 food:

Ramen Sushi Curry

Dropdown List

Syntax

```
<label for="device">What is your device?</label>
<select name="device" id="device">
    <option value="macbook">Macbook</option>
    <option value="ipad">iPad</option>
    <option value="iphone">iPhone</option>
</select>
```

Web Page

What is your device? Macbook ▾

Multiple Select

Syntax

```
<label for="car">Select a car:</p>
<select name="car" id="car" multiple>
    <option value="toyota">Toyota</option>
    <option value="nissan">Nissan</option>
    <option value="honda">Honda</option>
</select>
```

Web Page

Select a car:

Toyota
Nissan
Honda

File Input Box

Syntax

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

Web Page

image.png

Input:Submit

Syntax

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

Web Page

Submit

Button:Submit

Syntax

```
<button type="submit" name="submit">Submit</button>
```

Web Page

Submit



Form Validation

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

Form Validation

- **required** attribute checks whether the input field is **filled in or not** before being submitted.
- **min / max** attribute limits the **minimum** or **maximum** value of a **numeric type** input fields.



Placeholder

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

Placeholder

Syntax

```
<label for="full-name">Full Name</label>
<input type="text" name="full_name" id="full-name"
placeholder="John Doe">
```

Web Page

Full Name

HTML Activity 4

Please fill this survey form

First Name:

MI:

Last Name:

City:

State:

Zip Code:

Choose a Sport:

Basketball Football Hockey

Choose a Year:

Freshman Sophomore Junior Senior

Choose your favorite food:

Chips
Pizza
Nachos

Please let us know your comments

html-act4.html



Introduction to CSS



What is CSS?

Cascading Style Sheets

Used to style and layout web pages.

It is a simple design language to simplify the process of designing web pages.

CSS Syntax

```
body {  
background-color: black;  
}
```

SELECTOR : body

CURLY BRACKET : {

PROPERTY NAME : background-color

COLON : :

PROPERTY VALUE : black

SEMI-COLON : ;



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 SELECTORS

UNIVERSAL

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 <p>My name is Kirby</p>
```

CSS

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

CSS SELECTORS

CLASS

HTML

```
1 <p class="class-name">My name is Kirby</p>
```

CSS

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

CSS SELECTORS

ID

HTML

```
1 <p id="id-name">My name is Kirby</p>
```

CSS

```
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.



CSS Rules

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

Lore 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

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

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

Select all `` child of parent ``

HTML

```
<ul class="nav-links">
  <li><a href="#">Home</a></li>
  <li><a href="#">Menu</a></li>
  <li><a href="#">Blog</a></li>
</ul>
```

CSS

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

OR using a parent class

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



CSS Typography

SALMON

rgb(250, 128, 114)

opacity: 1

rgba(250, 128, 114, 1)

#fa8072



CSS Color

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



CSS Color

color name

All modern browsers support around **140**

color name values.

However, this is *not* the practical way of applying CSS colors.

rgb

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

CSS Color

opacity

The opacity value specifies the transparency of the object/element.

The property value of opacity should only be in between **0 and 1**. The lower the value, the more the transparency

rgba

RGBA is just like RGB but with the **alpha channel** which determines the **opacity** of the object/element.

 CSS Color

hexcode

Hexcode is specified with the pattern

#RRGGBB: 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**.

Color

```
p {  
    color: red;  
}
```

```
p {  
    color: rgb(0, 0, 255);  
}
```

```
p {  
    color: rgba(0, 0, 255, .5);  
}
```

```
p {  
    color: #00ff00;  
}
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Expedita quis aperiam
 quam quaerat amet, sint laudantium nemo? Necessitatibus, ullam quos.

Lorem ipsum dolor sit amet consectetur adipisicing elit. Expedita quis aperiam
 quam quaerat amet, sint laudantium nemo? Necessitatibus, ullam quos.

Lorem ipsum dolor sit amet consectetur adipisicing elit. Expedita quis aperiam
 quam quaerat amet, sint laudantium nemo? Necessitatibus, ullam quos.

Lorem ipsum dolor sit amet consectetur adipisicing elit. Expedita quis aperiam
 quam quaerat amet, sint laudantium nemo? Necessitatibus, ullam quos.



Font Family

font-family

font-family property defines the font family name for an element.

FONT-FAMILY

SERIF

im

SANS- SERIF

im

MONOSPACE

im



Kinds of Font Family

- **serif** - fonts that have finishing strokes or "tails" at the end
- **sans-serif** - fonts that do not have "tails" or just have plain ends
- **monospace** - fonts that have the same fixed width

Font Family

```
p {  
    font-family: serif;  
}
```

Lorem ipsum dolor sit amet consectetur adipisicing elit.
Expedita quis aperiam quam quaerat amet, sint laudantium
nemo? Necessitatibus, ullam quos.

```
p {  
    font-family: sans-serif;  
}
```

Lorem ipsum dolor sit amet consectetur adipisicing elit.
Expedita quis aperiam quam quaerat amet, sint laudantium
nemo? Necessitatibus, ullam quos.

```
p {  
    font-family: monospace;  
}
```

Lorem ipsum dolor sit amet consectetur adipisicing elit.
Expedita quis aperiam quam quaerat amet, sint laudantium
nemo? Necessitatibus, ullam quos.



Font Size

font-size

font-size property defines the size of the font.

Font size may be defined in **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;  
}
```

bold

```
font-weight-bolder{  
    font-weight: bolder;  
}
```

bolder

```
font-weight-lighter{  
    font-weight: lighter;  
}
```

lighter

```
font-weight-100{  
    font-weight: 100;  
}
```

100

```
font-weight-500{  
    font-weight: 500;  
}
```

500

```
font-weight-900{  
    font-weight: 900;  
}
```

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;  
}
```

normal

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

italic

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

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**.

TEXT ALIGN

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 in **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 preferendis 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;

LETTER SPACING

letter-spacing: 50px;



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;`



CSS Lists

LIST STYLE TYPE

UNORDERED LIST

- list-style-type: ***disc***;
- list-style-type: ***circle***;
- list-style-type: ***square***;

ORDERED LIST

1. list-style-type: ***decimal***;
- a. list-style-type: ***lower-alpha***;
- A. list-style-type: ***upper-alpha***;
- i. list-style-type: ***lower-roman***;
- I. list-style-type: ***upper-roman***;

LIST STYLE POSITION

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

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

- Lorem ipsum dolor sit amet consectetur adipisci
accusamus et doloremque quis ratione accipit
ipsa harum, quos porro dignissimos molliti
• Lorem ipsum, dolor sit amet consectetur adipisci
magni necessitatibus, aliquid dolorum. Veniam
quisquam eiusmod tempore.

- Lorem ipsum dolor sit amet consectetur adipisci
facere exercitationem sint cupiditate impedit
mollitia ea nisi vero natus obcaecati quis,
aut a sapiente fugit, ipsum obcaecati itaque
temporibus autem quibusdam.
- Lorem ipsum dolor, sit amet consectetur adipisci
aut a sapiente fugit, ipsum obcaecati itaque
temporibus autem quibusdam.



List Style

list-style shorthand

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



css Images

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**

BACKGROUND IMAGE

ADDING A BACKGROUND IMAGE

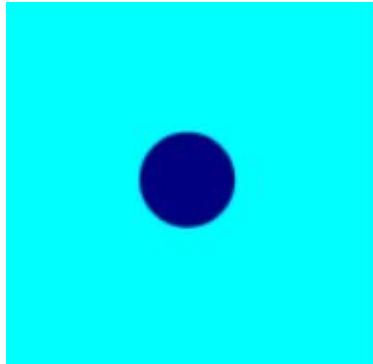
```
background-image: url(images/image.jpg);
```

Note: Make sure to define the height and width of the element

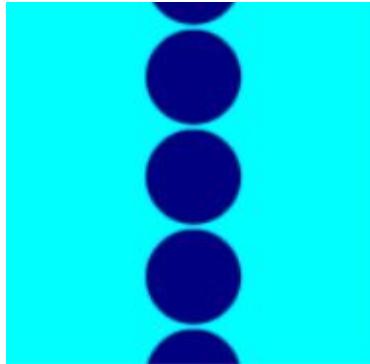
BACKGROUND REPEAT

background-repeat:

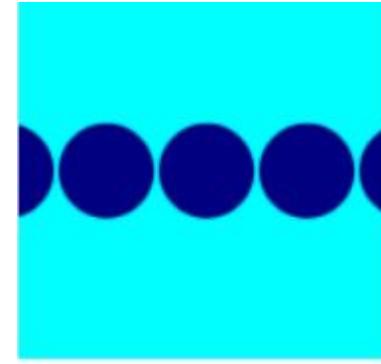
no-repeat;



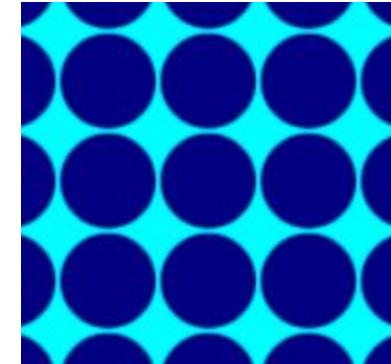
repeat-y;



repeat-x;



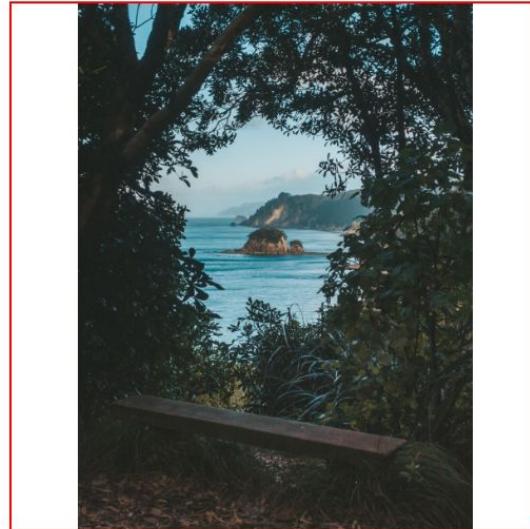
repeat;



BACKGROUND SIZE



`background-size: cover;`



`background-size: contain;`

Note: You can also use this

`background-size: 200px 100px;`

first value = horizontal size

second value = vertical size

BACKGROUND POSITION

background-position: center center;



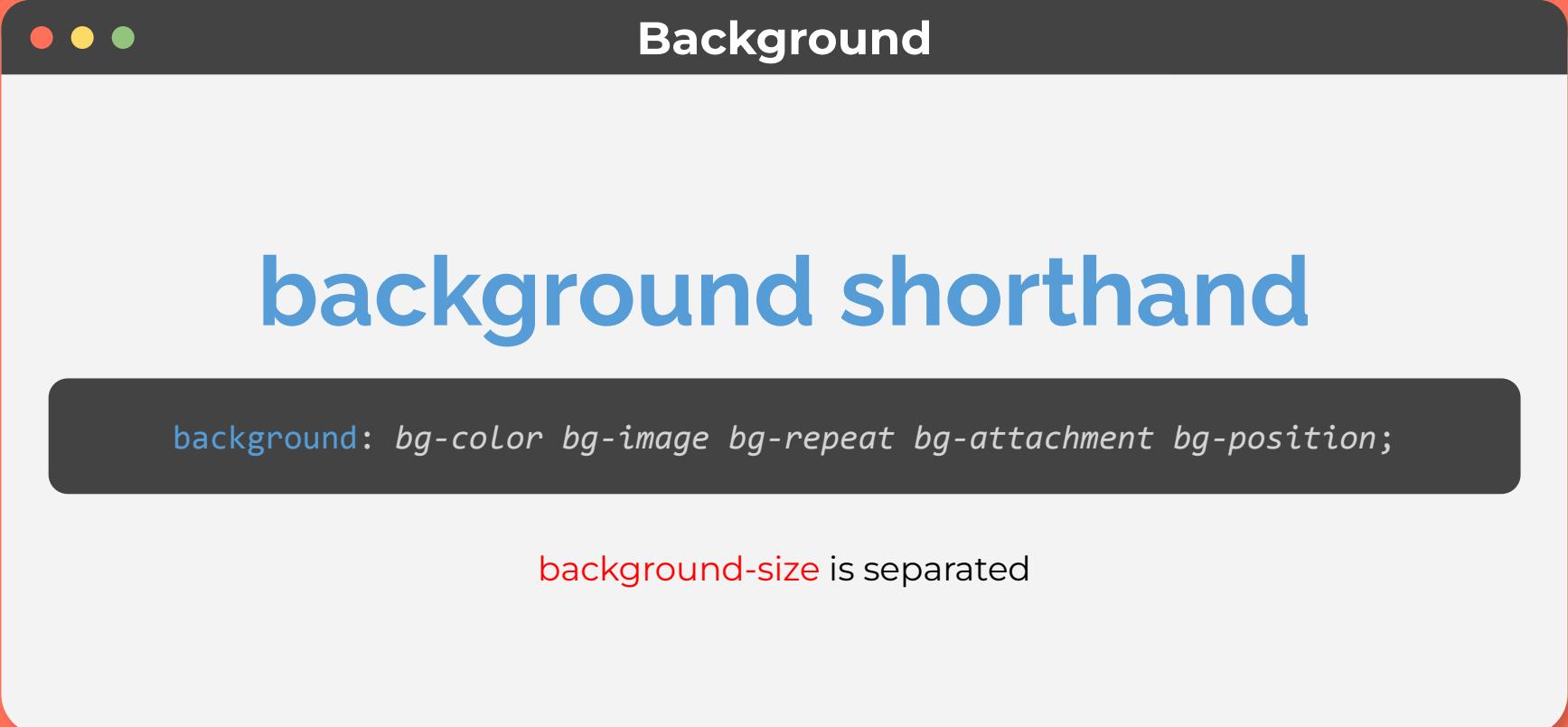
BACKGROUND ATTACHMENT

background-attachment: fixed;

The background image stays in the same position on the page.

background-attachment: scroll;

The background image scrolls with the page.



Background

background shorthand

```
background: bg-color bg-image bg-repeat bg-attachment bg-position;
```

background-size is separated



CSS Tables



Table Properties

CSS Tables can use some previous CSS properties that we learned such as:

- width
- height
- color
- font-size
- text-align

Table Border

```
table, th, td {  
    border: 1px solid black;  
}
```

ID	Name	Age
1	John Doe	31
2	Peter Parker	26

Use the border property to add borders around the table and the cells.

1px – width
solid – style
black – color

Empty Cells

`empty-cells: show;`

To show the empty cells in the table.

1	2
3	

`empty-cells: hide;`

To hide the empty cells in the table.

1	2
3	

Border Collapse

`border-collapse: collapse;`

Table borders are collapse into a single border.

1	2
3	4

`border-collapse: separate;`

Table borders are detached from each other.

1	2
3	4

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

Border Spacing

`border-spacing: 15px 30px;`

When using two values, the **first value** adjusts the **horizontal spacing** while the **second value** adjusts the **vertical spacing**.

1	2	3
4	5	6
7	8	9

CSS Activity 1

ID NO.	PHOTO	NAME	AGE	EMAIL	ADDRESS
1		Alice	26	alice@email.com	35553 KENAI SPUR HIGHWAY
2		Candice	26	candice@email.com	1616 GADSDEN HWY
3		Troy	26	N/A	35553 9256 PARKWAY E
4		Gab	26	N/A	AVALON AVE.
5		John	26	john@email.com	3006 E HIGHLAND



CSS Box Model and Background Color



CSS Background Color

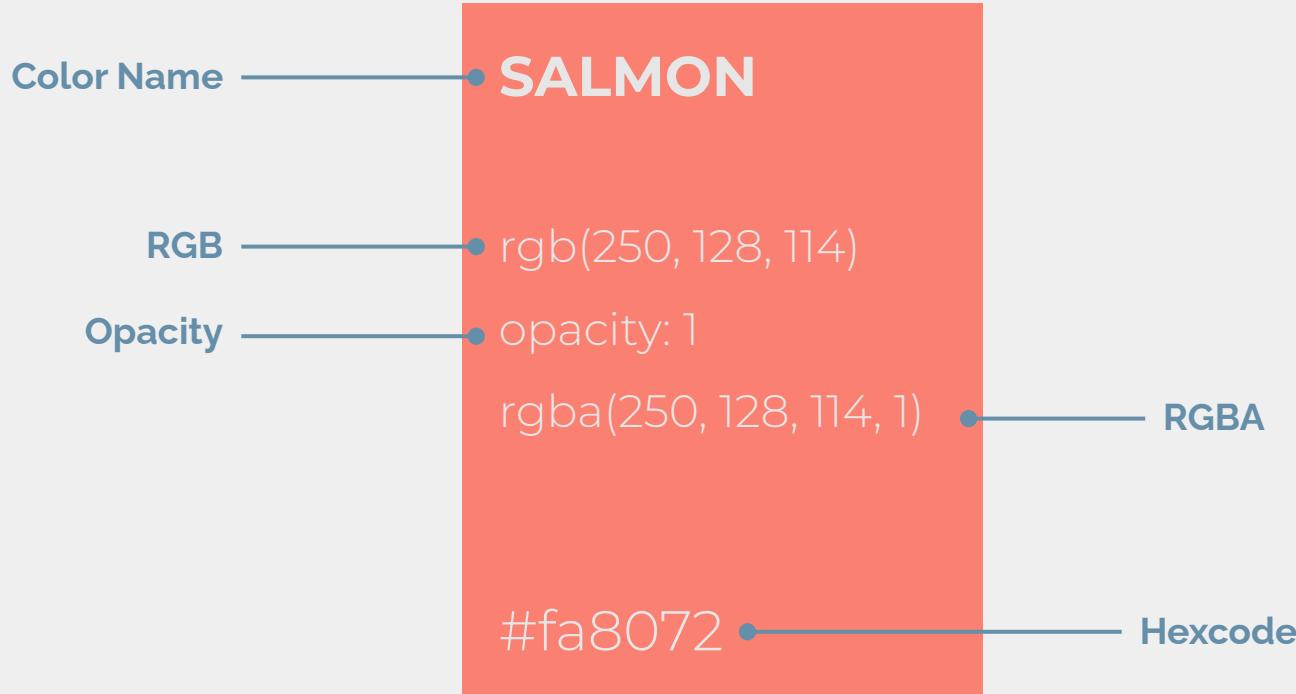
background-color

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

Example:

```
background-color: white;
```

CSS Background Color

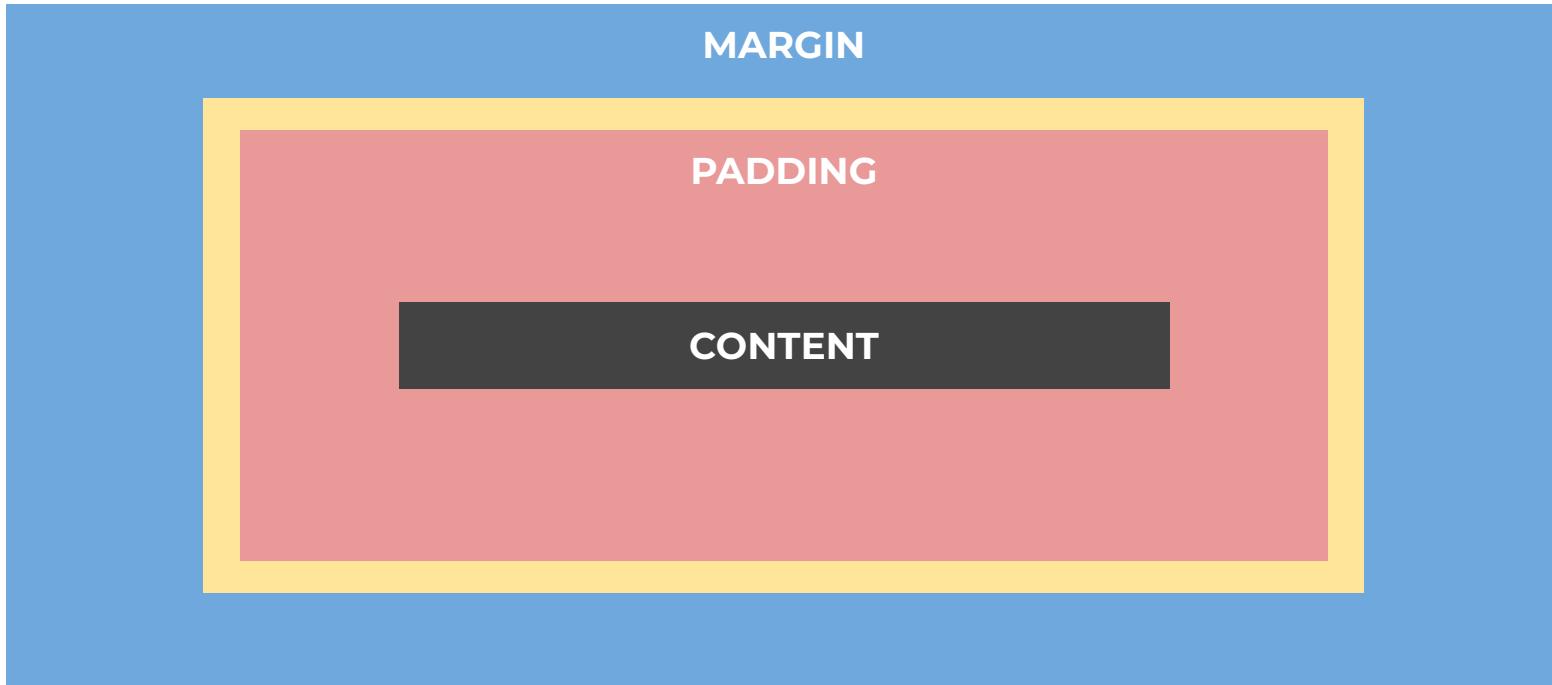


Height & Width

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

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

BOX MODEL



BORDER
is the yellow box.



Margin

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

padding

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

Padding values are applied clockwise

Padding

1 - value padding:

the value applies the padding to all four sides.

Example:

`padding: 10px;`

2 - value padding:

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

Example:

`padding: 10px 20px;`

Padding

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;`

Padding

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

border shorthand

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

Border

border-width:

sets the width of the border.

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

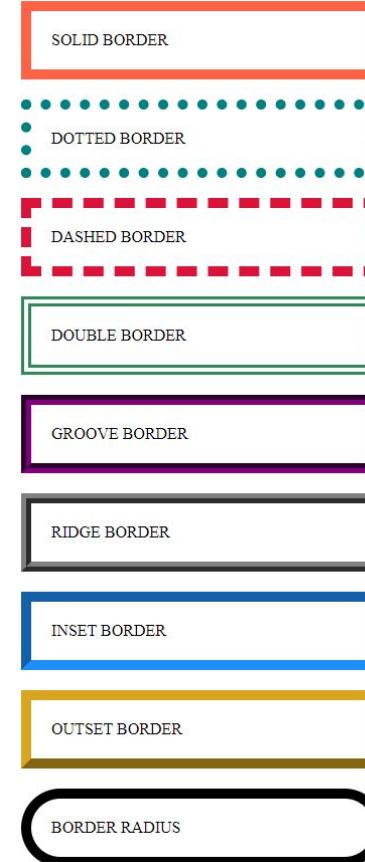
border-color:

sets the color of the border.

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

Border Style

```
.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;  
}
```



Border

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.

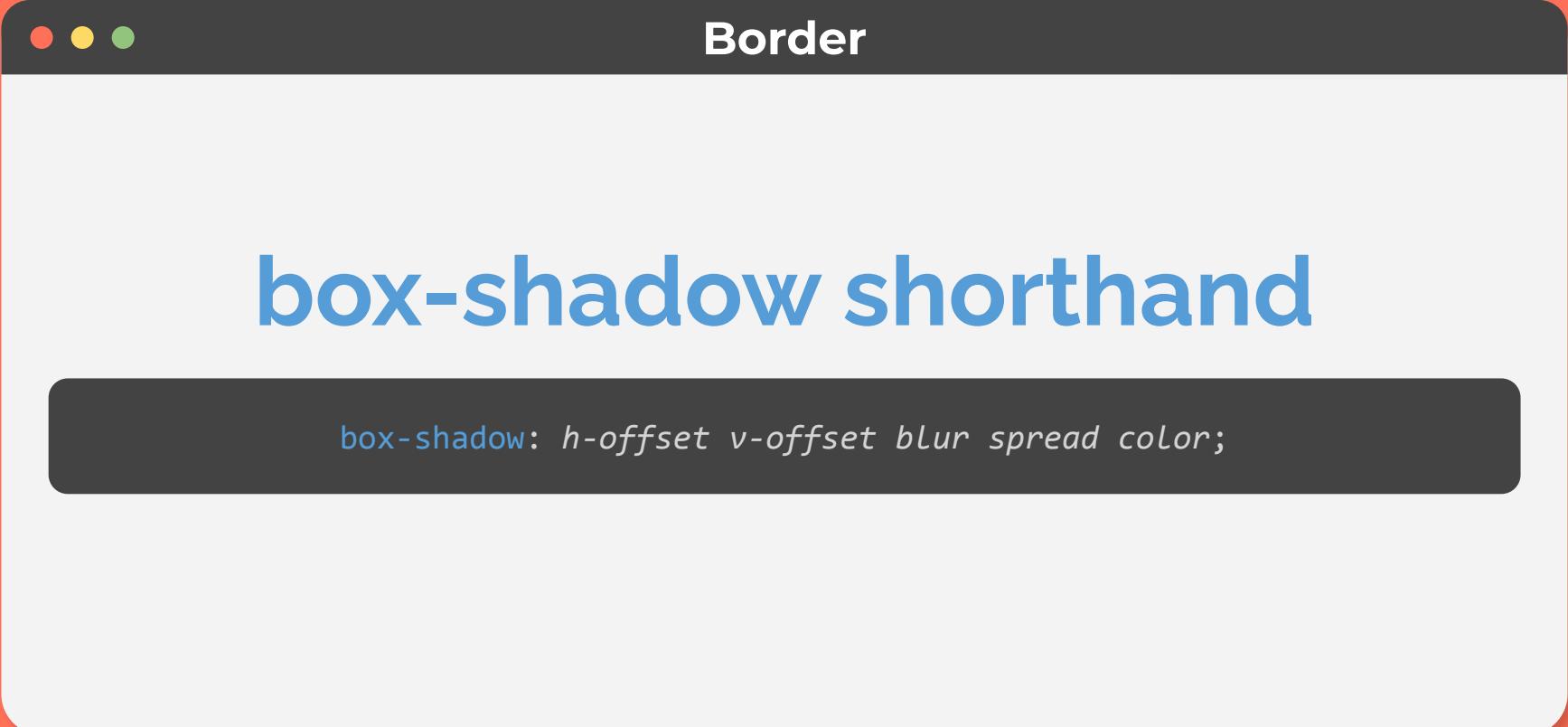
overflow: hidden;	overflow: scroll;
hides the extra content that does not fit in the box	adds a scrollbar to the box so that the user can scroll to see the missing content.



Box Shadow

box-shadow

The **box-shadow** property adds a shadow to an element



Border

box-shadow shorthand

```
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

A white rectangular box with a black border and a red box shadow. The box shadow is a blurred, horizontal oval shape extending to the right of the box, with a color gradient from red to black.

BOX SIZING

By default (`box-sizing:content-box;`), 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.

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;



CSS Layouting

FLOATING

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.

CSS Activity 2

Profile Cards



John Doe

Architect and Designer



Jane Doe

Chef

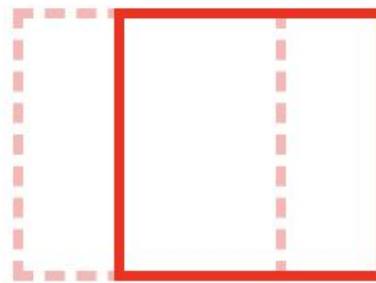
POSITION

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 RELATIVE

```
.red-box {  
  width: 50px;  
  height: 50px;  
  border: 2px solid red;  
  position: relative;  
  left: 20px;  
}
```



The box will move 20px to the right relative to its original position.

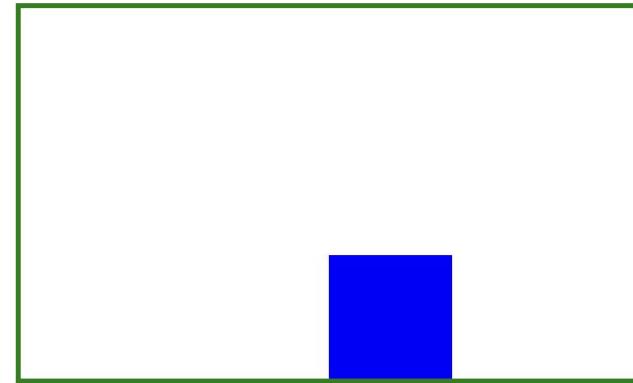
POSITION

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.

POSITION ABSOLUTE

```
.parent {  
    width: 250px;  
    height: 150px;  
    border: 2px solid green;  
    position: relative;  
}  
  
.child {  
    width: 50px;  
    height: 50px;  
    background-color: blue;  
    position: absolute;  
    left: 50%;  
    bottom: 0;  
}
```



The child will move by 50% from the left edge
relative to the width of its parent.
There is no space at the bottom of the child
box relative to its parent.

POSITION

`top | bottom | left | right: % | px;` - are used with `position` to set the placement of an element. They only have an effect on positioned elements, which are elements with the position property set to anything other than static.

The element will move away from the chosen side when its value is positive, and towards it when the value is negative.

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.

Z-INDEX

z-index: value; - controls the vertical stacking order of elements that overlap. Like, layers in photoshop or in a cake.

It only affects elements that have a position value other than static (the default).

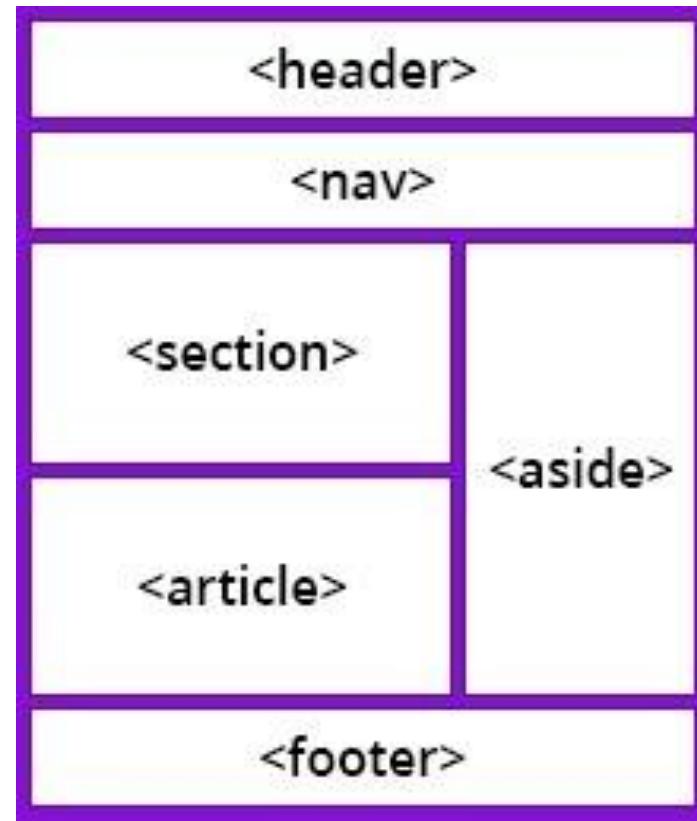


HTML5 Semantic Tags

Semantic Tags

are used to convey the structure of the document in a clear manner. They define the purpose of the element.

TAGS



TAGS

<header> - defines a header of your document. It is always visible for the users at the top part of the page.

<nav> - defines the space for the navigations links.

<section> - defines a separate section within a webpage. Has its own content; Considered as the “***Parent of articles***” .

<article> - defines the article content. The sub-section.

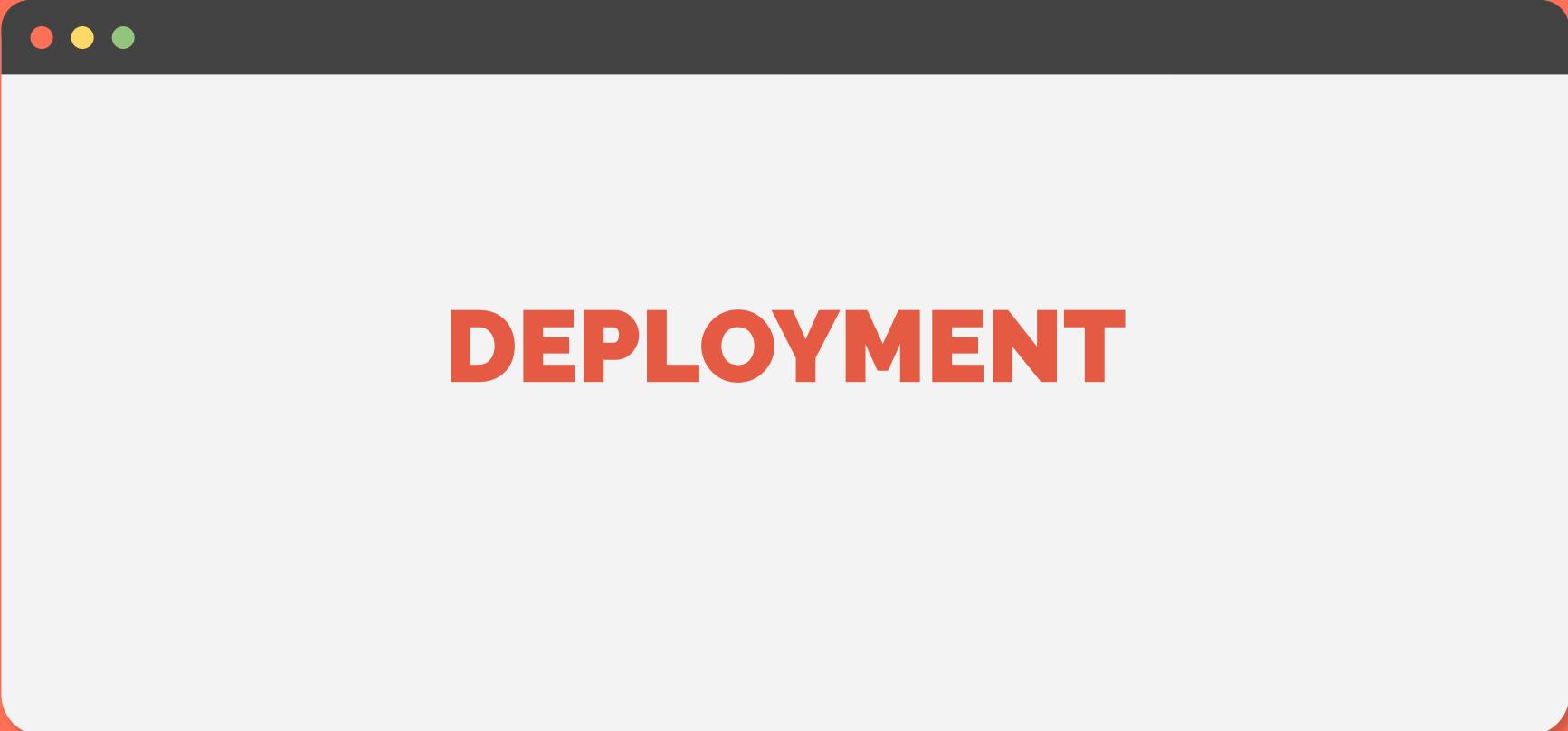
TAGS

<aside> - defines the content which will be set ***to the side***. It is usually used for creating sidebars and side contents.

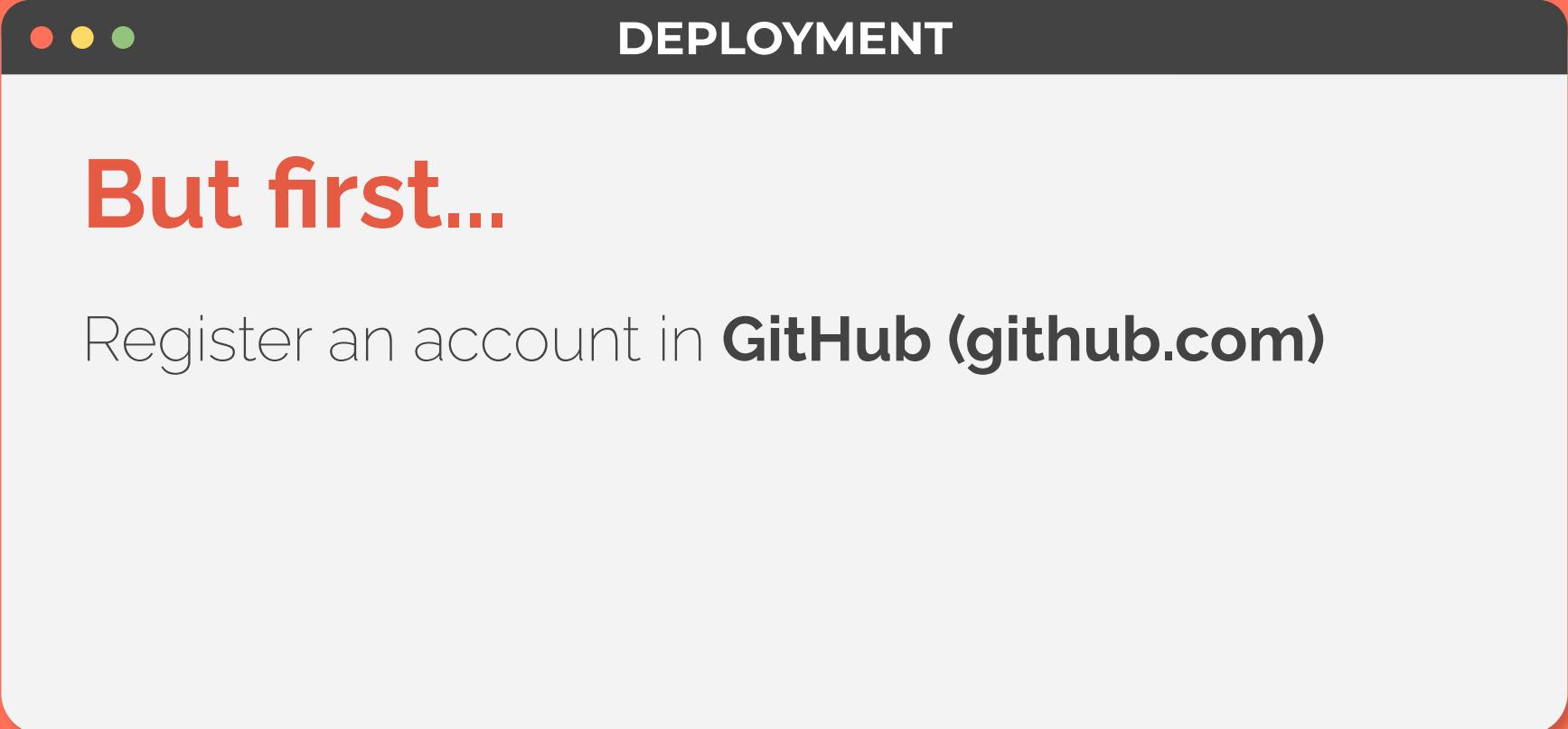
<footer> - defines the **footnote** of the web page or content. Can also be used to show the address and give out the reference links



Deployment



DEPLOYMENT



DEPLOYMENT

But first...

Register an account in **GitHub (github.com)**

DEPLOYMENT

1

Create a repository

Head over to GitHub and create a new repository named `username.github.io`, where `username` is your username (or organization name) on GitHub.

If the first part of the repository doesn't exactly match your username, it won't work, so make sure to get it right.

Create a new repository

A repository contains all project files, including the revision history.

Owner / Repository name * 

Great repository names are short and memorable. Need inspiration? How about [fictional-winner](#)?

Description (optional)

Public Anyone can see this repository. You choose who can commit.

Private You choose who can see and commit to this repository.

Initialize this repository with a README This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None Add a license: None 

Create repository

Note:

Repository name should be **username.github.io**

this should be the same as
the account name



this should always be included
in creating the repo else output
will not be displayed as it is

DEPLOYMENT

Quick setup — if you've done this kind of thing before

 Set up in Desktop

or

HTTPS

SSH

<https://github.com/iamrichell/iamrichell.github.io.git>

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).



In the next page, click **upload an existing file**

DEPLOYMENT

Issues Pull requests Actions Projects Wiki Security Insights Settings

iamrichell.github.io /



Drag files here to add them to your repository

Or [choose your files](#)



Commit changes

Add files via upload

Add an optional extended description...

Commit changes

Cancel

DEPLOYMENT

5

...and you're done!

Fire up a browser and go to <https://username.github.io>.

