BOOTCAMP

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.
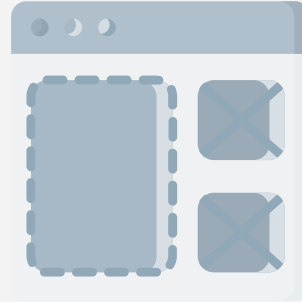
Software used to Create Websites

01. Text-Editor

VS Code, Sublime Text, Notepad++, Atom

02. Browser

Google Chrome, Safari, Mozilla Firefox, Internet Explorer

Visual Studio Code

HTML

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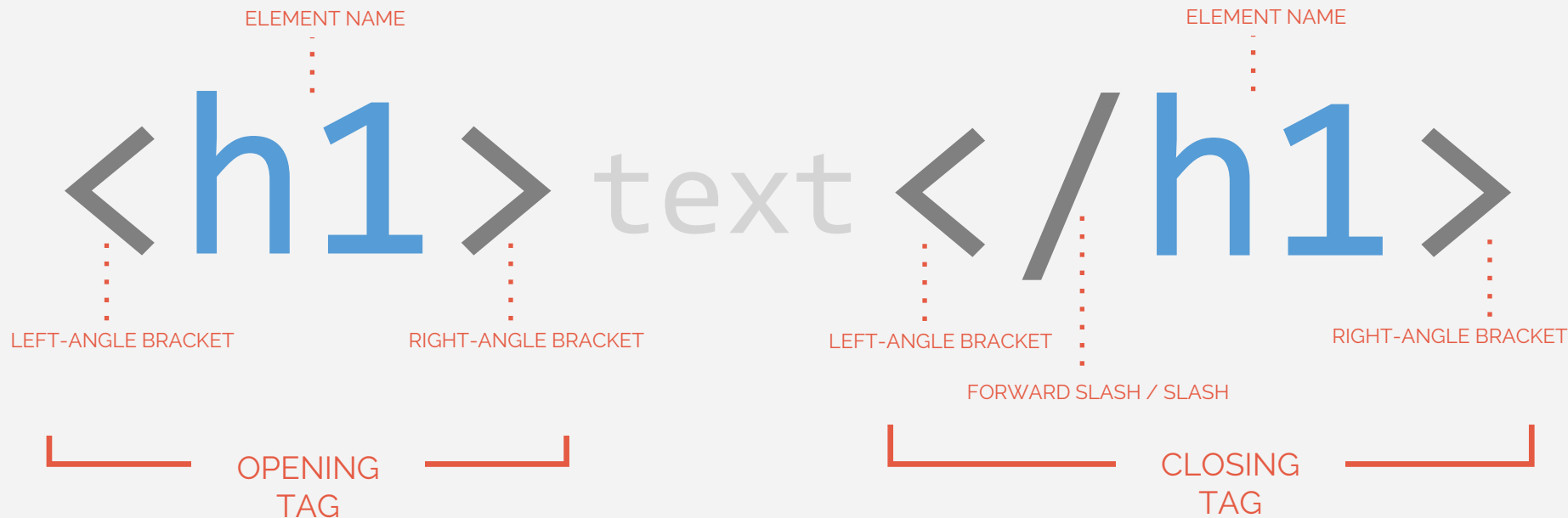
1. Number one on the list
2. Number two
3. A third item

HTML STRUCTURE

```html
<!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>
```

HTML Tags, Elements, and Attributes

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 <strong>Kirby</strong></p>
```

```
x  3 | <p>My name is <strong>Kirby</p></strong>
```

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 vs Inline Elements

Inline Elements does not cause a line break (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

Div vs Span

Div tag, 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 other elements.

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

Div vs Span

Span tag 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 tag is an **inline** element.

Attributes provide additional information about an element.

HTML Attributes

ELEMENT NAME

ATTRIBUTE NAME

ATTRIBUTE VALUE

`<font size="20px"> Text </font>`

ATTRIBUTE

HTML Attributes

Some attributes can be used by most elements like:
- **class** = specifies a class name to one or more elements.
- **id** = specifies a unique id to one or more elements.

While there are other attributes that are only used for a specific elements such as the **src** attribute in the image element.

HTML Typography

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

It is basically the headlines for your web page.

Paragraph elements are used to create paragraphs.

To create paragraph elements:
<p> Your text here **</p>**

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

To insert a line break use:
**
**

Horizontal Rule are used to add a thematic break in an HTML page. It is also used to separate different contents with a horizontal line.

To insert a line break use:
<hr>

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.

HTML Lists

Ordered List

Lists that are numerically or alphabetically ordered.

1. Banana
2. Chocolate
3. Milk

Unordered List

Lists that are not ordered but bulleted list.

- Banana
- Chocolate
- Milk

Nested List

Nested lists are lists within a list.

1. Fruits
   - Banana
   - Apples
2. Dessert
   - Chocolate
   - Cake

HTML Images

HTML Images

The **img** tag is used to add images to the html page.

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

The **alt** attribute defines the alternate text for the image for when it will not be displayed.

HTML Images

The **height** attribute defines the height of the image. You can use **%** or **px**

The **width** attribute defines the width of the image. You can use **%** or **px**

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.

TABLES

<table>

1	2	3
4	5	6
7	8	9

</table>

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

Table head is uses the tag:
<thead> </thead>

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

Table body is uses the tag:
<tbody> </tbody>

TABLES

`<thead>`	`<th>` **Name** `</th>`	`<th>` **Age** `</th>`	`<th>` **Email** `</th>`
`<tbody>`	`<td>` John `</td>`	`<td>` 29 `</td>`	john@email.com
	`<td>` Jane `</td>`	`<td>` 27 `</td>`	jane@email.com

Table Header

Table Header is used to define a **header cell** in a table. The **header cells** contain the header information or the column names of the table.

Table header is uses the tag:
<th> </th>

TABLES

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

Table Row

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

Table Row is uses the tag:
<tr> </tr>

TABLES

<table>

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

1st Row **<tr>**　　　　　　　　　　　　　　　　**</tr>**

2nd Row **<tr>**　　　　　　　　　　　　　　　　**</tr>**

3rd Row **<tr>**　　　　　　　　　　　　　　　　**</tr>**

</table>

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

Table Data is uses the tag:
<td> </td>

TABLES

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

<tbody>

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

Syntax:
<td colspan="2">

TABLES: Colspan

Name	Contact Numbers	
Bill	12345	67890
Steve	13579	24680

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

Syntax:
<td rowspan="2">

TABLES: Rowspan

NAME	Bill	Steve
Contact Numbers	12345	13579
	67890	24680