



Web - Frontend (React)

4 Week Inhouse training month

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with subtle diagonal lines.

Week 1

Introduction to HTML, CSS, JavaScript

Prerequisites Tools

Text Editor

Visual Code Studio*



Extensions

Live Server*



Web browser

FireFox, Chrome, Edge





HTML

H - Hyper

T - Text

M - Markup

L - Language

HTML is a markup language that defines how the content is structured



How does **HTML** does so ?

HTML, consists a sets of **elements or tags** which allow us to do so.

These elements lets browser to identify what we are asking for in structured way.

We will be telling the browser that certain element should behave as heading , paragraph or as a link.

Basic HTML elements

```
<p>My Cat is very grumpy</p>
```

Let's break it down together

Anatomy of an HTML element



- a) Opening tag b) Closing tag c) Content d) Element



Anatomy of HTML document

Collection of HTML elements/tags

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    ...
```

```
  </head>
```

```
  <body>
```

```
    ...
```

```
  </body>
```

```
</html>
```

}

Head

}

Body



HTML document explained

1. `<!DOCTYPE html>`

It is an information to the browser about what document type to expect. Since html has different release version 1.0, 2, 3.2, 4.01 and currently 5. All the HTML document must start itself with this tag.

2. `<html> ... </html>`

It represents the root of an HTML document. This acts as container for all the other HTML elements.

3. `<head> ... </head>`

Contains metadata and information for the document ex : Internal Styling, External Stylesheets, Scripts.

4. `<body> ... </body>`

Defines the document body



HTML Attribute

Attributes are always specified in the opening tag.

Attribute provide additional information about elements.

Attributes usually come in of name/value pairs like : name = "value "

```
<a href="https://google.com">Google</a>
```

Attribute Name : href

Attribute Value : https://google.com



Common examples attributes

Image Element attributes

```

```

Attribute Name : src

Attribute Value :
<http://pctechnotes.com/wp-content/uploads/2013/02/web-hosting.png>



Multiple attributes in an element

Multiple attributes

```

```

We can also have multiple attributes in an html element.

In the above example we have 4 attributes :

1. src
2. width
3. height
4. alt



Inline Styling in HTML

The HTML style attribute is used to add styles to an element, such as color, font, size, and more

Example :

Single Attribute

```
<p style=" color : red ;" > Learning Inline Styling </p>
```

Multiple Attributes

```
<p style=" color : red ; background-color : blue" > Learning Inline Styling </p>
```

Styling Image with HTML

Initial



Final





HTML colors

In HTML, colors can be specified using :

1. RGB (RED, GREE, BLUE)

RANGE: 0-255



`rgb(255, 99, 71)`

2. RGBA (RED, GREEN, BLUE, ALPHA)

RANGE: 0-255



`rgba(255, 99, 71, 0.5)`



HTML colors

3. HEX Values (Hexadecimal Representation)

RANGE: 00 TO FF

`#ff6347`

4. HSL (Hue : degree , saturation or brightness : % , lightness : %)

`hsl(9, 100%, 64%)`

5. HSLA (Hue : degree , saturation or brightness : % , lightness : % , alpha)

`hsla(9, 100%, 64%, 0.5)`



File Paths

A file path describes the location of a file in a web site's folder structure.

File paths are used when linking to external files, like :

- Images
- Javascripts
- Stylesheet

File path can be specified in two ways :

1. Absolute Path
2. Relative Path



File Paths

Absolute Path : An absolute file path is the full URL to a file

Example

```

```

Relative Path : A relative path points to a file relative to the current page

Example

```

```



Block and Inline Elements

Every HTML element have default display value.

There are two display values :

Block

Ex : `div`, `section`, `h1`, `p`, `li`, `ul`

Inline

Ex : `span`, `a`, `img`, `label`, `string`, `button`

NOTE : An inline cannot contain a block level element but reverse is true.

Block and Inline Elements

- Block elements are often used as a container for other HTML elements
- A block-level element always takes up the full width available
- A block level element has a top and a bottom margin

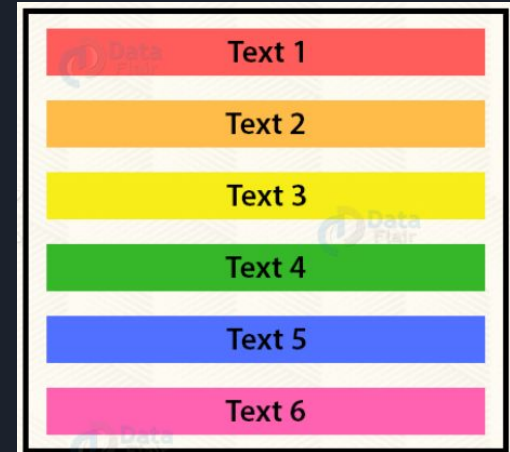
`<div>`

`<h1>I am James</h1>`

`<h2>I am a Front-End engineer </h2>`

`<div> ... </div>`

`</div>`



Block and Inline Elements

An inline element does not start on a new line.

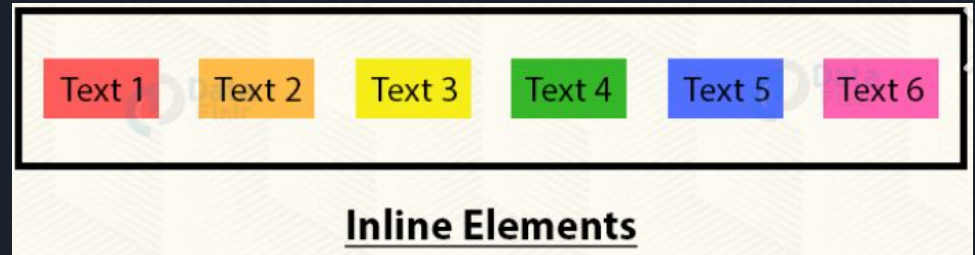
An inline element only takes up as much width as necessary.

Example :

```
<span> Hi, I am an Inline Element </span>
```

```
<input type="text" />
```

```
<label>First Name</label>
```



Building a Form

User Details

BOOK PIZZA

Email

Enter your email

Full Name

Full Name

- ☐ Pizza
- ☐ Burger
- ☐ Softdrink

- ☐ Online
- ☐ Pickup

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Let's Start Building



Developer Tools



Developer Tools is a set of web developer tools built into browser. We can use them to examine, edit, and debug HTML, CSS, and JavaScript.

1. Page Inspector / Elements

We can view and edit content and layout.

2. Console

Messages logged by web page.

3. Responsive design mode

Visualize website layout on different devices



GitHub

1. Create an account
2. Create a Repository
3. Upload the code
4. Host the code using GitHub

