BOOTCAMP

## WELCOME TO HIML

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## Development Environment

#### **Download and Install**

Crome Browser Visual Studio Code

#### **Some Useful Resources**

- 1. https://www.w3.org/TR/html5/
- 2. https://caniuse.com/
- 3. https://validator.w3.org/
- 4. https://www.w3schools.com/



What is HTML

## HyperText Markup Language



## HyperText Markup Language

**HyperText:** HyperText means text which contains links to other texts and that's basically the entire web.

One document points to another document which points to a bunch of other documents and it grows on and on

**Markup:** Markup means to mark something up. HTML surrounds and wraps that content in some markup language like tags.

**Language:** Language basically implies that it has its own syntax meaning there's a right and a wrong way to code it.



## HTML History

2011 onwards HTML5

WHATWG & W3C

THEY STARTED WORKING TOGETHER

2007

XHTML 1.0 2000

2004
WHATWG - HTML
WEB HYPERTEXT APPLICATION

**TECHNOLOGY GROUP** 

1997
HTML 4.0 & 4.01
WORLD WIDE WED CONSORTIUM



## THREE MAIN WEB TECHNOLOGIES

HTML

CSS

JavaScript

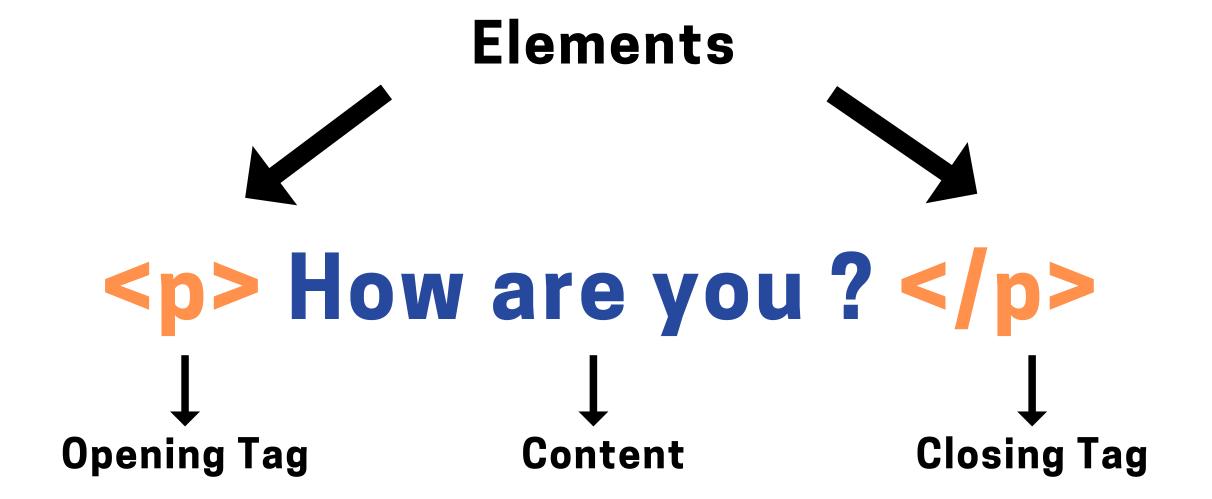
Structure

Style

Behaviour



## HTML Anatomy





## HTML Anatomy

## **Attributes**

<a href = "http://goharness.in"> How are you? </a>

Attribute is a **Name Value Pair** that is kind of a meta data about the element itself that it's being applied to.

Attributes are properties used to provide additional information about an element.

The most common attributes include the **id** attribute, which identifies an element; the **class** attribute, which classifies an element; the **src** attribute, which specifies a source for embeddable content; and the **href** attribute, which provides a hyperlink reference to a linked resource.



## HTML Document Structure

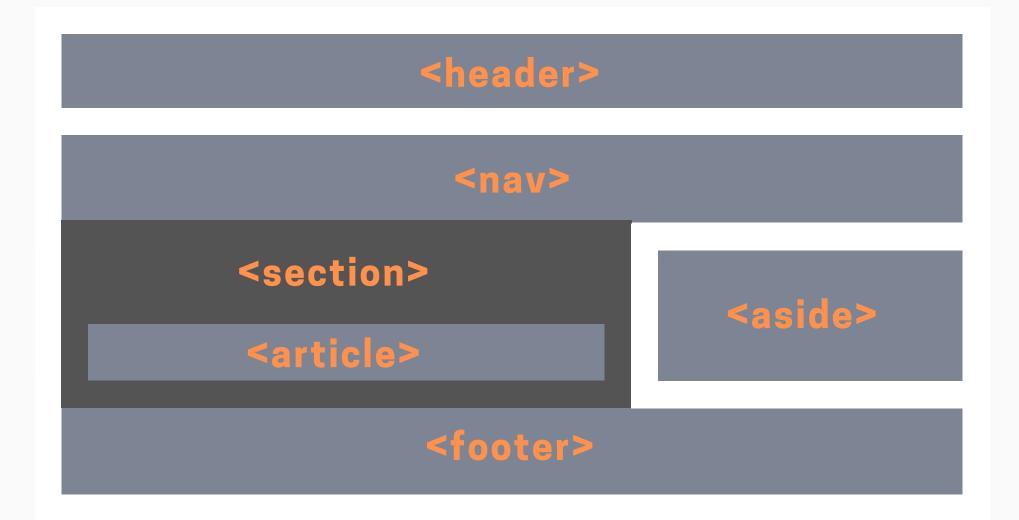
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title> Hello World </title>
  </head>
  <body>
    <h1> Hello World </h1>
    <a href = "http://goharness.in"> How are you? </a>
  </body>
</html>
```



## What are Semantic Elements?

A semantic element clearly describes its meaning to both the browser and the developer. These are the element that implies some meaning to the content.

HTML5 offers new semantic elements to define different parts of a web page:





## Block vs Inline Elements

#### **BLOCK ELEMENTS (In HTML5 - Flow Content)**

Block-level elements begin on a new line, stacking one on top of the other, and occupy any available width. Block-level elements may be nested inside one another and may wrap inline-level elements. eg., <div>, Heading Elements,

## INLINE ELEMENTS (In HTML5 - Phrasing Content)

Inline-level elements do not begin on a new line. They fall into the normal flow of a document, lining up one after the other, and only maintain the width of their content.

Inline-level elements may be nested inside one another; however, they cannot wrap block-level elements. eg., <span>, <b>, <strong>



# EXERCISE



## BASIC HTML TAGS



**Headings** - Headings are block-level elements, and they come in six different rankings, <h1>through <h6>

**Paragraphs** - Paragraphs are defined using the block-level element. Paragraphs can appear one after the other, adding information to a page as desired.

**Bold Text** - There are two elements that will bold text for us: the **<strong>** and **<b>**elements.

**Italicize Text** - The **<em>** element is used semantically to place a stressed emphasis on text. The other option, the **<i>** element, is used semantically to convey text in an alternative voice or tone.

Underline Text - <u> element is used to underline content.



**Divisions - <div>**s, and **<span>**s are HTML elements that act as containers solely for styling purposes.

**Image** - Image is an inline element, it is a self-containing, or empty element, which means that it doesn't wrap any other content and it exists as a single tag

```
<img src="apple.jpg" alt="Red apple on the table" width="200px"
height="200px">
```

**Hyperlink** - The anchor element is declared with the opening **<a>** and closing **</a>** tags encompassing the text, and the hyperlink reference attribute and value are declared with href="http://goharness.in" in the opening tag.

<a href="http://goharness.in/">goHarness India</a>



#### **Special Characters**

**&It; -** the sequence for <

**> -** the sequence for >

& - the sequence for &

" - the sequence for "

- for Non-breaking space

© - the sequence for copyright ©

® - the sequence for registered trademark

<br/>
<br/>
- It should appear at the end of lines that should be broken.

<hr> - It is used for horizontal line</br>



**Audio** - This element accepts a source URL specified by the src attribute. Several other attributes may accompany the src attribute on the **<audio>** element; the most popular include **autoplay**, **controls**, **loop**, and **preload**.

<audio src="classic.mp3" controls></audio>

**Video** - <video> element is similar to <audio> element and all attributes apply too.

<video src="learnHTML.mp4" controls poster="HTML.jpg"></video>



Comments within HTML - HTML comments start with <!-- and end with -->.

**Creating Lists** - HTML provides three different types to choose from: **unordered**, **ordered**, and **description lists**.

#### 1. Unordered List

```
orangeGreenBlue
```

#### 2. Ordered List

```
    Take water in a PAN
    Boil water for 15 min
    Add sugar and egg in the water and keep steering
```



#### 3. Description List

#### **Email**

```
<a href="mailto:nishun@goharness.in?
subject=Learn%20HTML&body=Interested%20in%20learning%20HTML">
Email Me</a>
```



### **Working with Tables - Table Structure**

```
 Table starting Tag
  Table row Tag
   ......  Table header Tag
  .....
  .....
  Table data tag
   Table closing Tag
```

The scope attribute helps to identify exactly what content a table header applies to a row or column.



# EXERCISE



#### **Working with Forms**

```
Starting of form <form> ..... </form>
```

#### 1. Fieldset

Fieldsets group form controls and labels into organised sections. It is a block-level element that wraps related elements, specifically within a <form> element, for better organisation.

```
<form>
    <fieldset>
        Other Form Control Tags and Labels
        </fieldset
        </form>
```



#### **Working with Forms**

#### 2. Text Fields

One of the primary elements used to obtain text from users.

```
<input type="text" name="username">
```

New HTML5 input types color / date/ datetime / email / month / number / range / search / tel / time / url / week

#### 3. Textarea

It can accept larger passages of text spanning multiple lines.

<textarea name="comment">Add your comment here</textarea>



#### **Working with Forms**

#### 4. Radio Buttons

Radio buttons permit users to select one option only

```
<input type="radio" name="course" value="HTML" checked> HTML
<input type="radio" name="course" value="CSS"> CSS
<input type="radio" name="course" value="JavaScript"> JavaScript
```

#### 5. Check Boxes

Check boxes allow users to select multiple values.

```
<input type="checkbox" name="course" value="HTML" checked> HTML
<input type="checkbox" name="course" value="CSS"> CSS
<input type="checkbox" name="course" value="JavaScript"> JavaScript
```



#### **Working with Forms**

#### 6. Drop-Down Lists

Provide users with a long list of options

```
<select name="course">
    <option value="HTML" selected> HTML </option>
    <option value="CSS"> CSS </option>
    <option value="JavaScript"> JavaScript </option>
</select>
```

#### **Drop-Down List with Multiple Selections**

```
<select name="course" multiple>
Rest same as above
```



## **Working with Forms**

#### 7. Button

```
<br/>
<br/>
det In Touch<br/>
</button>
```

#### 8. Label

Labels provide captions or headings for form controls

```
<label>
   Username
   <input type="text" name="username">
   </label>
```



## **Working with Forms**

#### Form Attributes

**Disabled** - The disabled Boolean attribute turns off an element or control so that it is not available for interaction or input.

**Required** - The required HTML5 Boolean attribute enforces that an element or form control must contain a value upon being submitted to the server.

```
<input type="email" name="email-address" required>
```



# EXERCISE & PROJECT

