

Starting soon!

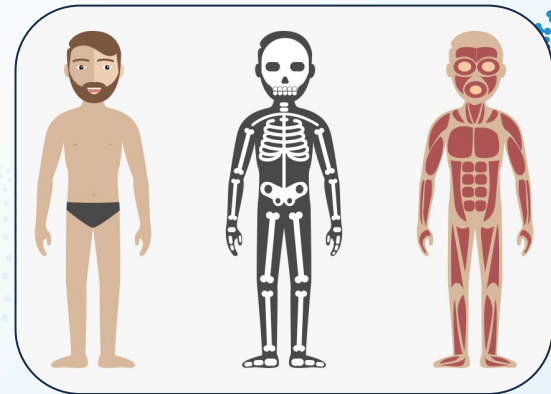
Intro to HTML

JFSS CS Club 2023
Ali



Introduction

- Websites made up of three languages
- Each manage different aspect
 - **Structure** - HTML (HyperText Markup Language)
 - **Looks** - CSS (Cascading Style Sheets) - looks
 - **Logic** - JS (Javascript)
- Focusing on HTML today

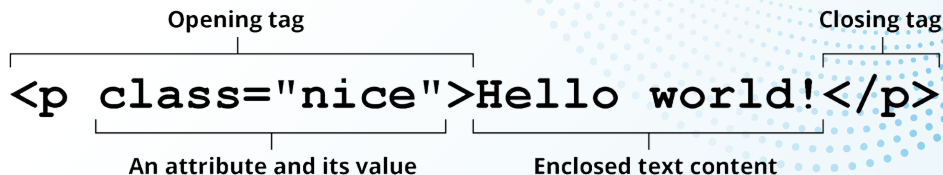


HTML

More about structure

What's in an HTML file?

- Elements
 - Tells browser what to show
 - General structure:
 - Opening tag
 - Attributes
 - Content
 - End Tag



The diagram illustrates the structure of an HTML element using the example `<p class="nice">Hello world!</p>`. Brackets and labels identify the components: the opening tag `<p class="nice">` is labeled "Opening tag"; the attribute `class="nice"` is labeled "An attribute and its value"; the text `Hello world!` is labeled "Enclosed text content"; and the closing tag `</p>` is labeled "Closing tag".

```
<p class="nice">Hello world!</p>
```

Opening tag

Closing tag

An attribute and its value

Enclosed text content

Required Elements

- All sites required to have certain elements:
 - `<!DOCTYPE html>`
 - Declares file to follow HTML5 standard
 - `<html></html>`
 - Root element, indicates start/end of HTML
 - `<head></head>`
 - Contains metadata about file (ex. title)
 - `<body></body>`
 - Contains everything you see on screen

Example HTML

○ ○ ○

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My Website</title>
    <link href="mystyle.css" rel="stylesheet">
  </head>

  <body>
    <h1>Hello World!</h1>
    <p>I like turtles</p>
    
    <a href="https://frasercodes.vercel.app">click here!</a>
  </body>
</html>
```

More into Elements

- Examples:
 - Heading 1: `<h1></h1>`
 - Paragraph: `<p></p>`
 - Anchor / hyperlink: `<a>`
- Attributes:
 - Provides additional info about elements
 - Varies based on element
 - Ex.
 - `img` → `src`, `alt`
 - `a` → `href`
 - general → `width`, `height`, `style`, `title` (not `<title>!`)

Element Syntax

- Keep a / in ending tags
 - Good: `<h1></h1>`
 - Bad: `<h1><h1>`
- Indent when nesting tags
 - Good:

```
<html>  
  <p>Hello World!</p>  
</html>
```

- Bad:

```
<html>  
<p>Hello World!</p>  
</html>
```


Element Attributes

- ```

```
- Things to keep in mind:
  - Attribute always lowercase
    - **Good:** `<p title="my title">`
    - **Bad:** `<p Title="my title">`
    - **Why:** `<p tltLE="my title">`
  - Value wrapped with quotations (single / double)
    - **Good:** `<p title="cool title">`
    - **Bad:** `<p title=cooltile>`  
or `<p title=cool title>`

# Headings

- 6 different sized headings
  - 1 is largest, 6 is smallest
- Element name: h, suffixed with heading number

**This is heading 1**

**This is heading 2**

**This is heading 3**

**This is heading 4**

**This is heading 5**

**This is heading 6**

# Useful Elements

- **Anchor:** `<a></a>`
  - Hyperlink, links to another page
  - Clickable
  - Link defined using href attribute
- **Image:** `<img />`
  - Self-closing tag, no ending bracket
  - Attributes:
    - image source → src
    - alternative text → alt
    - width, height
- **Button:** `<button></button>`
  - Clickable button

A decorative graphic consisting of several concentric, wavy lines of small blue dots, creating a sense of motion and depth. The dots are arranged in a way that suggests a wave or a signal, with the lines curving and flowing across the frame.

# Let's get started!

Open up `repl.it` / preferred editor

<https://bit.ly/3CsJlxp>

A decorative graphic consisting of a series of blue dots arranged in a wavy, undulating pattern that spans the width of the slide, positioned below the URL.