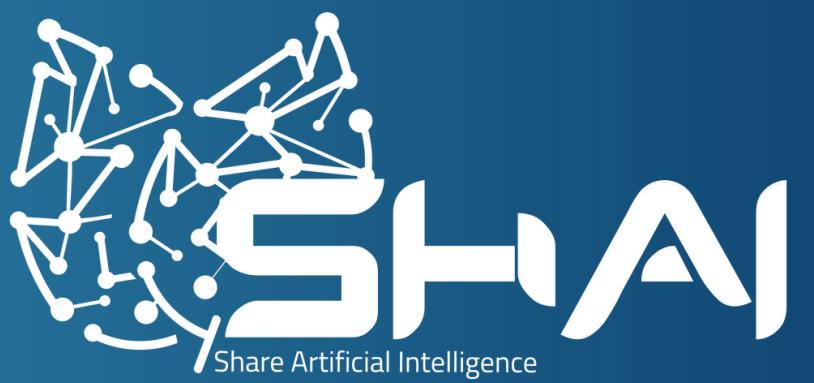
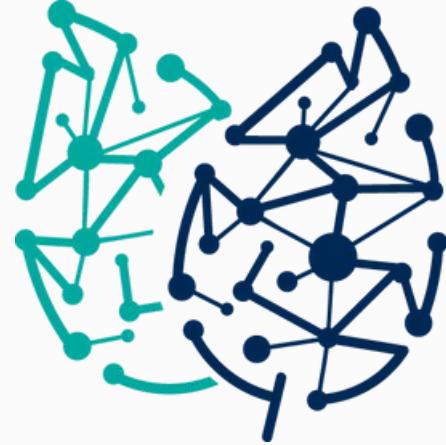


HTML5





Training Outcomes



- 1 Structure Web Pages:** Create well-structured, semantic web pages using HTML5 elements like `<header>`, `<footer>`, `<article>`, `<section>`, and more.
- 2 Forms and Validation:** Build forms using HTML5 form controls, and implement input validation using HTML attributes such as `required`, `minlength`, `pattern`, etc.
- 3 Multimedia Elements:** Integrate and manage audio, video, and image elements with attributes like `controls`, `autoplay`, and `poster`.
- 4 Responsive Design with Meta Tags:** Use the `viewport` meta tag for creating mobile-friendly web pages.
- 5 Linking and Navigation:** Create accessible and efficient navigation using `<a>` tags, linking to internal and external resources.
- 6 Accessibility Best Practices:** Implement basic accessibility features, such as using ARIA roles and proper element structure for screen readers.

KWL Strategy



k

What I know

w

What I want to learn

l

What I learned





Build the Base





Training



JOURNE

1

2

3

4

5

Introduction to
HTML

Paragraph
Headings Tags

Lists in
HTML

Hyperlinks
and
Images in
HTML

Meta Tags in
HTML

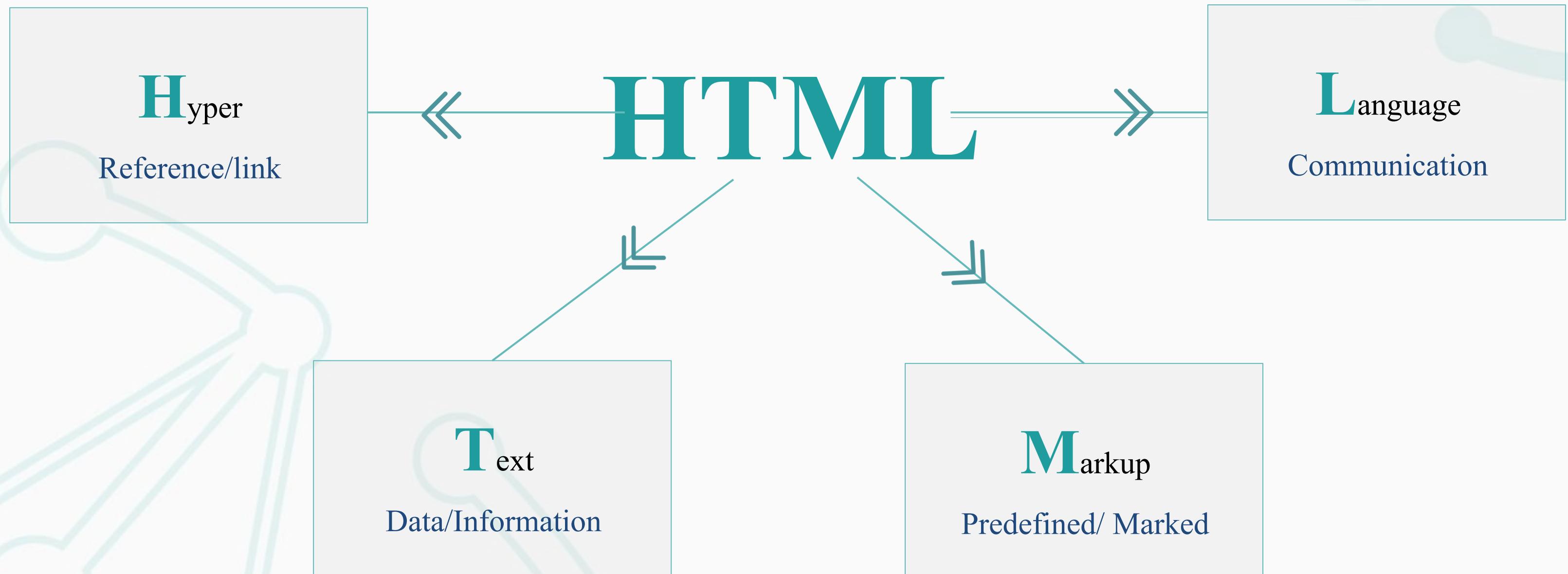




Introduction to HTML⁵

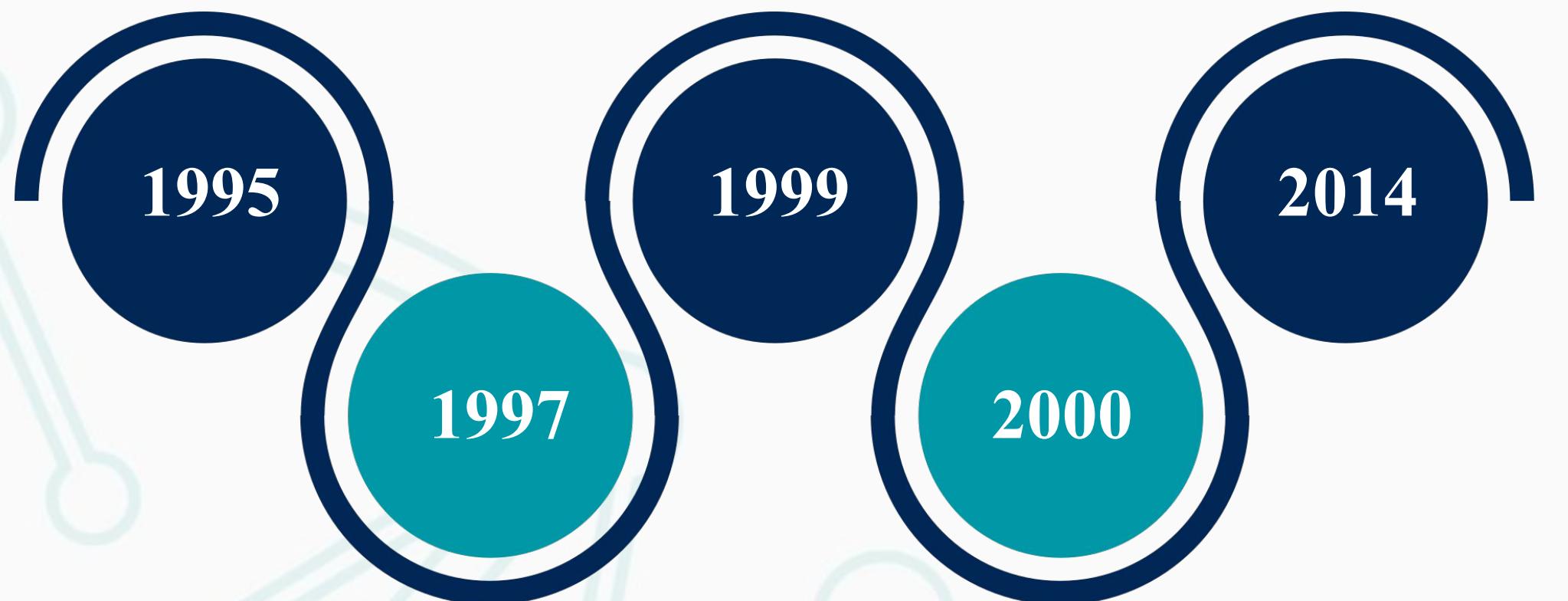


What is HTML?





Brief History of HTML?

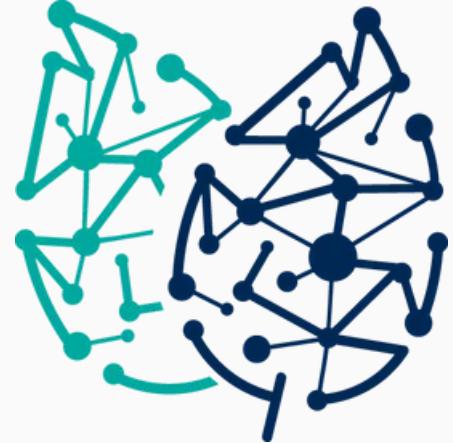


[lin
k](#)



Importance of HTML in Web Development





Introduction to **SEMANTIC HTML**

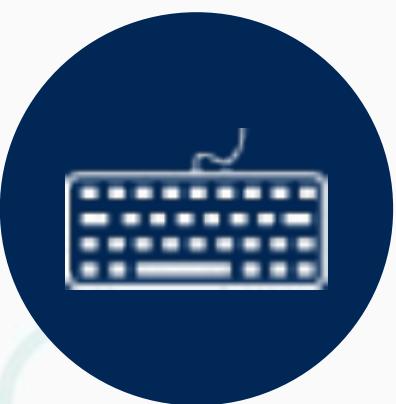


Why is it important?

Accessibility



Screen Readers



Keyboard Navigation



Meaningful Content



ARIA Roles



Introduction to **SEMANTIC HTML**



Why is it important?

SE



**Improved Crawling
and Indexing**



Rich Snippets



Better Ranking



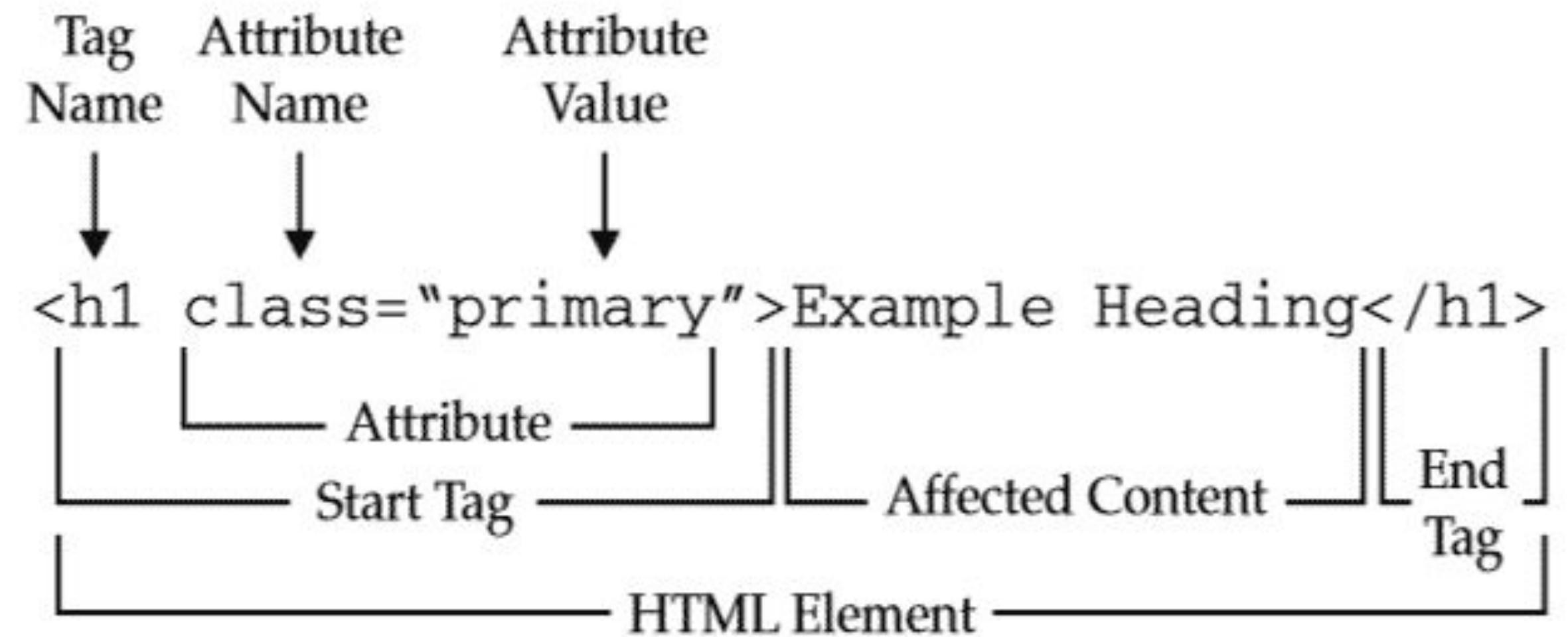
Enhanced Readability

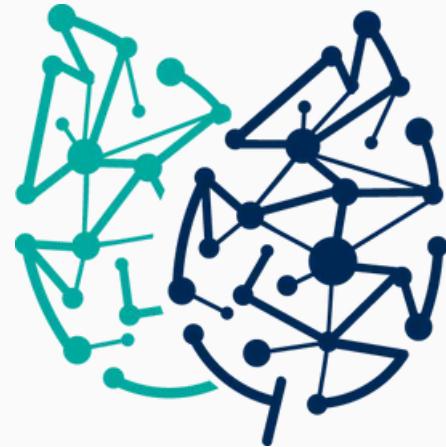


HTML Elements and Attributes



HTML Tags





HTML Document STRUCTURE



HTML Page Structure

```
<!DOCTYPE html>           ← Tells version of HTML
<html>                  ← HTML Root Element
<head>                  ← Used to contain page HTML metadata
    <title>Page Title</title>   ← Title of HTML page
</head>

<body>                  ← Hold content of HTML
    <h2>Heading Content</h2>   ← HTML heading tag
    <p>Paragraph Content</p>   ← HTML paragraph tag
</body>

</html>
```



Time to Reflect





Training



JOURNEY

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Introduction to
HTML

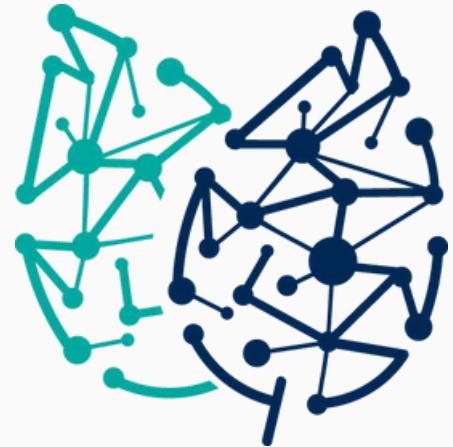
Paragraph
Headings Tags

Lists in HTML

Hyperlinks
and
Images in
HTML

Meta Tags in
HTML





Basic Tags and THEIR USES

Headings
and
Paragraphs





Time to Reflect





Training



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Headings Tags

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HTML

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Hyperlinks
and
Images in
HTML

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Meta Tags in
HTML





List In HTML

Ordered and Unordered lists in HTML

1. Coffee
2. Tea
 - Green tea
 - Black tea
3. Milk

```
<ol>
  <li>Coffee</li>
  <li>Tea
    <ul>
      <li>Green tea</li>
      <li>Black tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ol>
```



Time to Reflect





Training



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Introduction to
HTML

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Lists in HTML

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Hyperlinks and
Images in
HTML

5

Meta Tags in
HTML





Hyperlinks and Images in HTML



Silhouette of a person facing right, with a large white outline of the head and shoulders.

WIKIPEDIA
The Free Encyclopedia

Search Wikipedia

Create account ...

Octopus

105 languages

Article Talk Read View source View history ☆

(Top)

From Wikipedia, the free encyclopedia

This article is about the order of cephalopod. For other uses, see *Octopus* (disambiguation).

An octopus (PL: octopuses or octopodes, see below for variants) is a soft-bodied, eight-limbed mollusc of the order Octopoda (/ɒk'təpədə/, /ək-TOP-ə-də^[3]). The order consists of some 300 species and is grouped within the class Cephalopoda with squids, cuttlefish, and nautiloids. Like other cephalopods, an octopus is bilaterally symmetric with two eyes and a beaked mouth at the center point of the eight limbs.^[a] The soft body can radically alter its shape, enabling octopuses to squeeze through small gaps. They trail their eight appendages behind them as they swim. The siphon is used both for respiration and for locomotion, by expelling a jet of water. Octopuses have a complex nervous system and excellent sight, and are among the most intelligent and behaviourally diverse of all invertebrates.

Octopuses inhabit various regions of the ocean, including coral reefs, pelagic waters, and the seabed; some live in the intertidal zone and others at abyssal depths. Most species grow quickly, mature early, and are short-lived. In most species, the male uses a specially adapted arm to deliver a bundle of sperm directly into the female's mantle cavity, after which he becomes senescent and dies, while the female deposits fertilised eggs in a den and cares for them until they hatch, after which she also dies. Strategies to defend themselves against predators include the expulsion of ink, the use of camouflage and threat displays, the ability to jet quickly through the water and hide, and even deceit. All octopuses are venomous, but only the blue-ringed octopuses are known to be deadly to humans.

Octopuses appear in mythology as sea monsters like the Kraken of Norway and the Akkorokamui of the Ainu, and probably the Gorgon of ancient Greece. A battle with an octopus appears in Victor Hugo's book *Tollers of the Sea*, inspiring other works such as Ian Fleming's *Octopussy*. Octopuses appear in Japanese art, shrines, There

Octopus
Temporal range:
Middle Jurassic – recent

PreC E S D C P J K PgN

Common octopus
(*Octopus vulgaris*)

Scientific classification

Kingdom: Animalia
Phylum: Mollusca
Class: Cephalopoda



Time to Reflect





Training



JOURNEY

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Introduction to
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and
Images in
HTML

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Meta Tags in
HTML



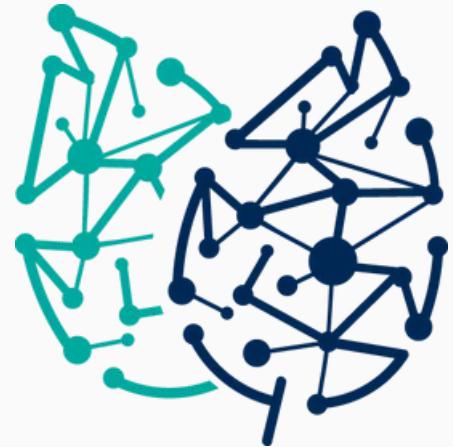


image tags

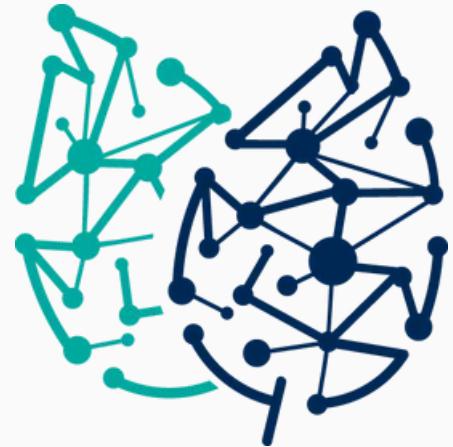
Tags in HTML



Welcome to My Website

Here's an image of a beautiful sunset:





Tags in HTML

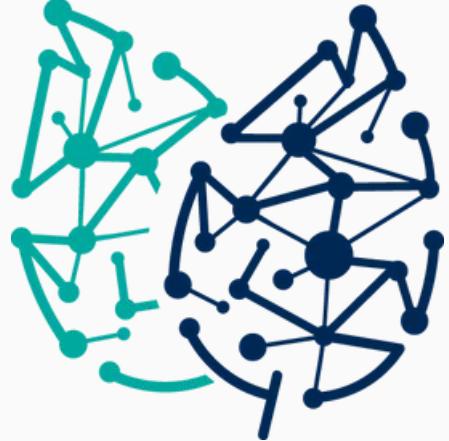


Audio

`<audio>`

Video

`<video>`



meta tags in

Meta Tags in HTML



```
6
7
8
9
<head>
  <title> html page </titles>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta name="author" content="John Doe">
  <link rel="contents" href="#toc">
</head>
<body>
```

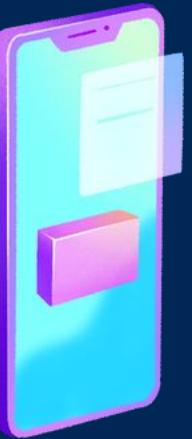


Time to Reflect



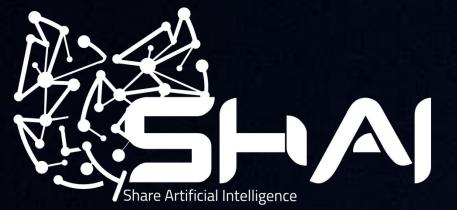


Share Artificial Intelligence



Gamify
Your
Training





Elevate the Elements





Training



JOURNE

Y

1

HTML 5
semantic

2

Formatting
Tags

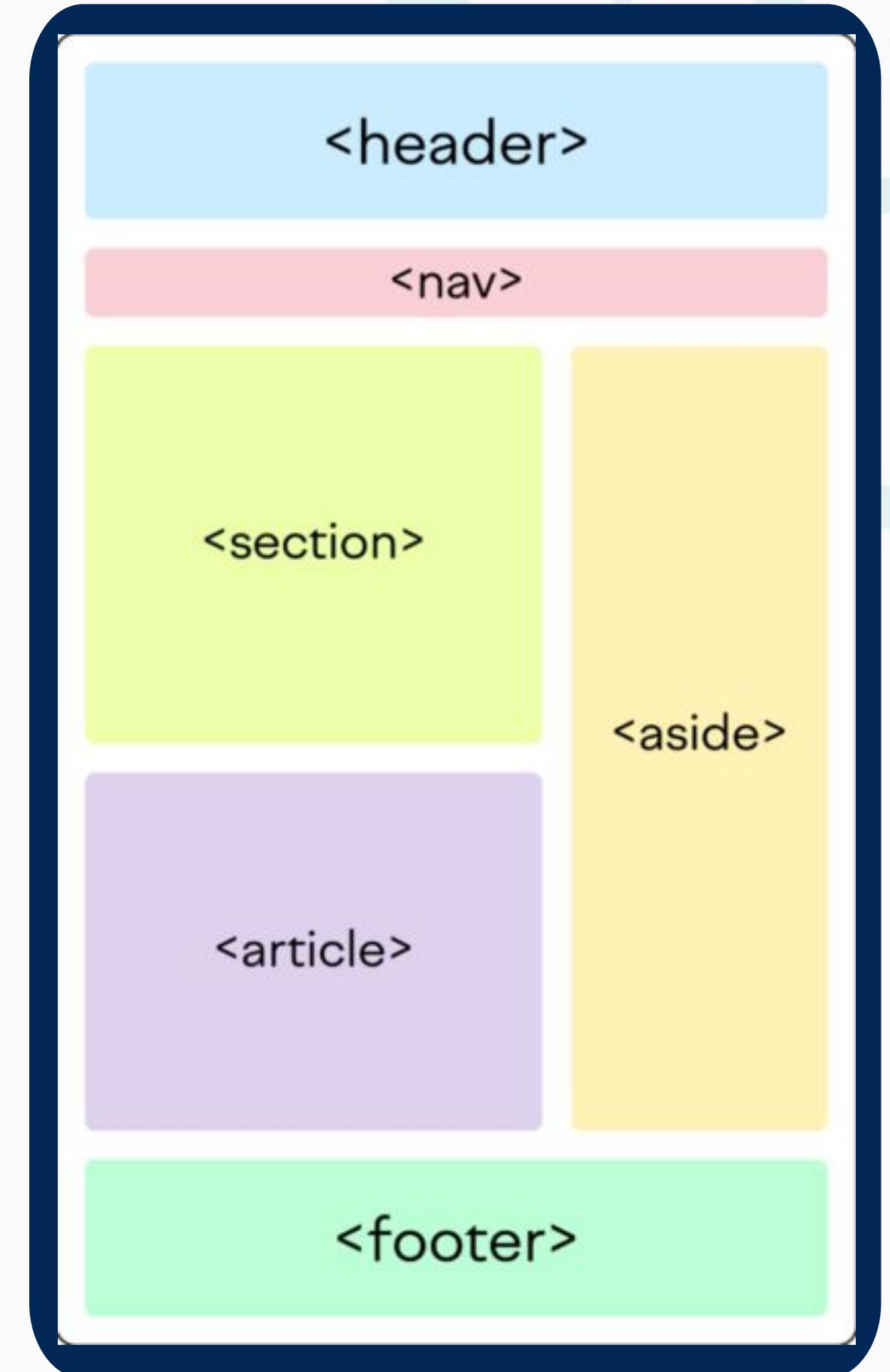
3

Table





Introduction to Semantic HTML

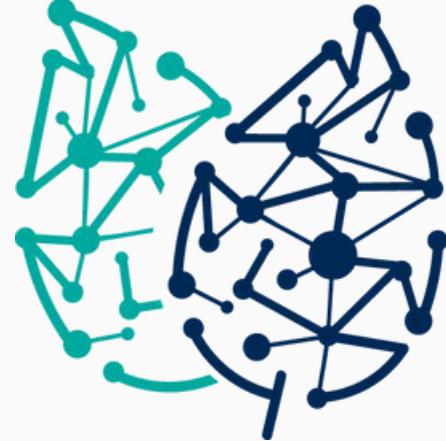




Introduction to **SEMANTIC HTML**



What is semantic
HTML?
tags that convey the meaning of the content they enclose



Introduction to **SEMANTIC HTML**



Benefits of Using Semantic HTML

1.

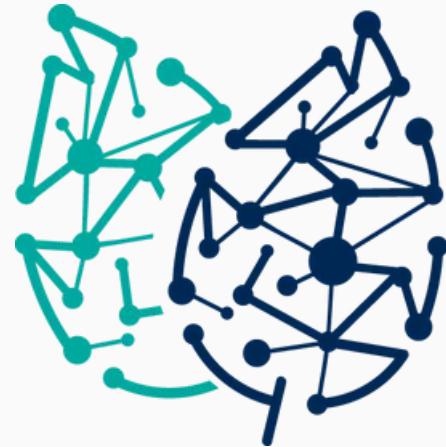
Improve readability

2.

**Better search engine
optimization**

3.

Enhanced accessibility



HTML5 NEW ELEMENTS

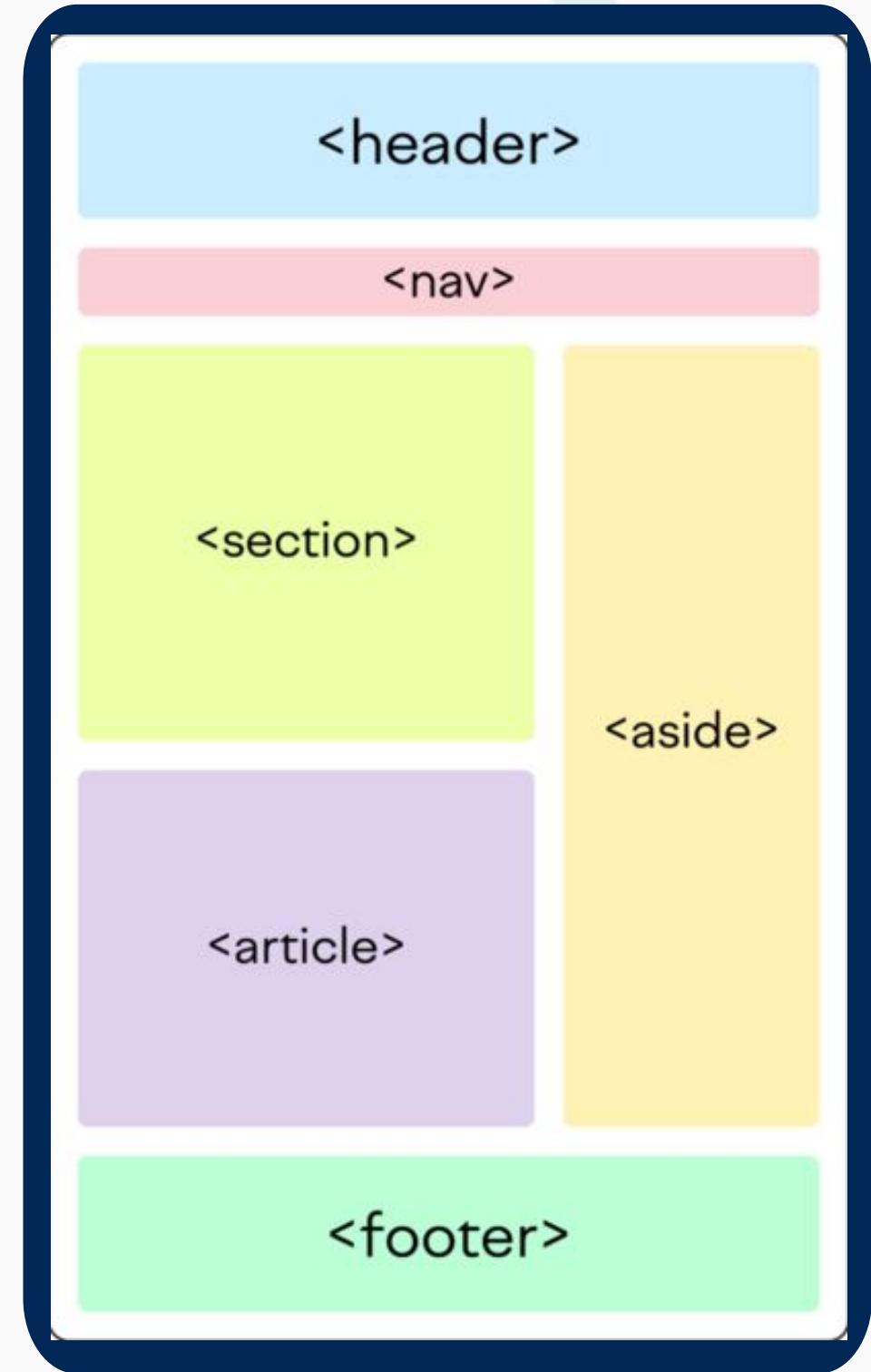
Structural Elements

`<article>`

`<section>`

`<nav>`

`<aside>`

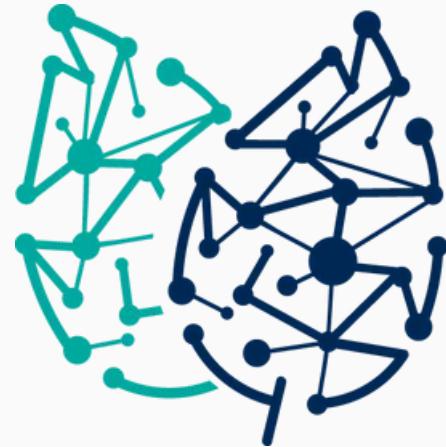




HTML5 NEW ELEMENTS

Let's Discuss!





HTML5 NEW ELEMENTS



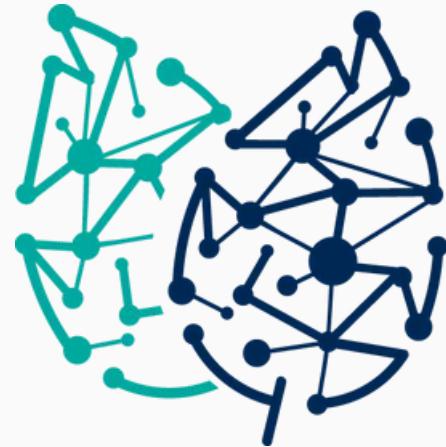
Structural Elements

01

<article>

**Defines independent,
self-contained content.**

**Blog posts, news
articles, forum posts.**



HTML5 NEW ELEMENTS

Structural Elements

purpose

usecases

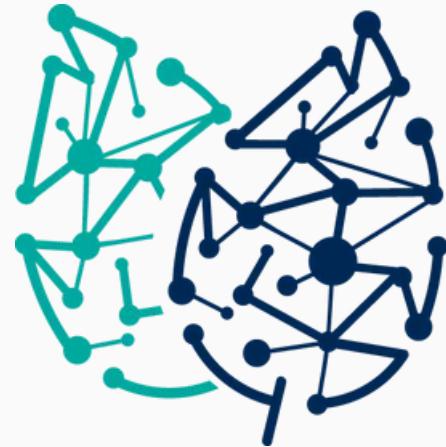
02

<section>

Groups related content
together.

Chapters, tabbed
content, sections of a
document.





HTML5 NEW ELEMENTS



Structural Elements

03

`<nav>`

Contains navigation links.

**Main navigation,
sidebar navigation,
footer navigation.**



HTML5 NEW ELEMENTS



Structural Elements

04

`<aside>`

Contains content related to the main content but not essential to its understanding.

Sidebars, pull quotes, advertisements.



Time to Reflect





Training

JOURNE

Y

HTML 5
semantic



**Formatting
Tags**



Table

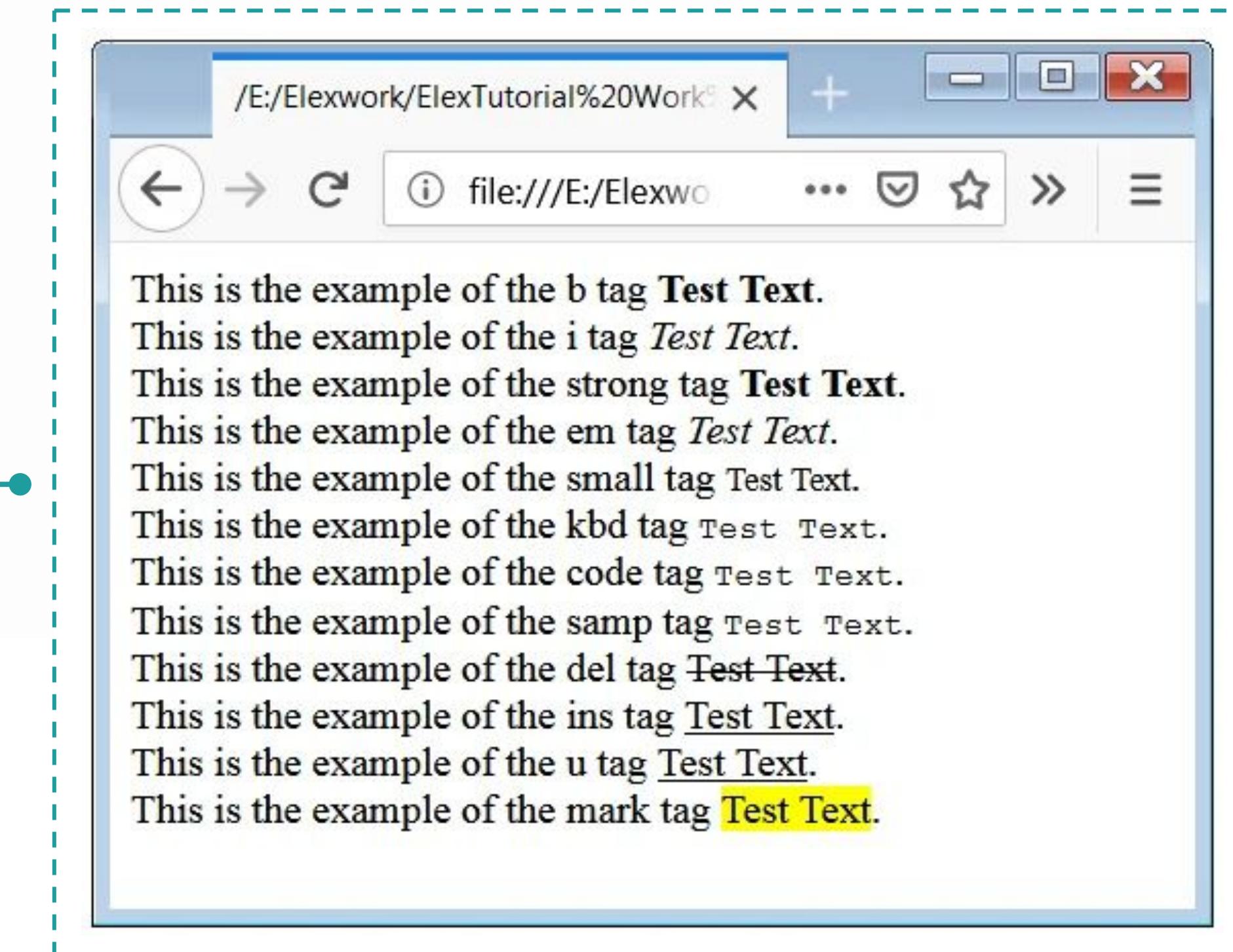


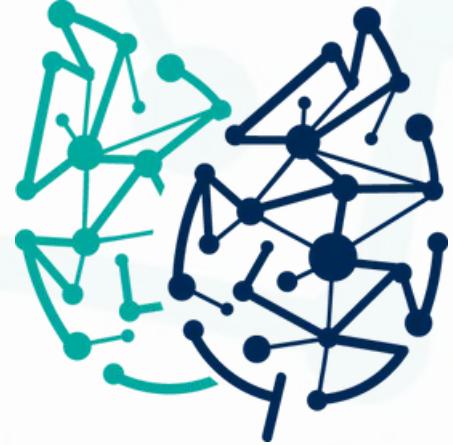
Formatting Tags in HTML

<i>
<u>

<mark>
<small>

<ins>





Formatting Tags in HTML

<center>
<p align="center">

ALIGNMENT

FLUSH LEFT

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

CENTERED

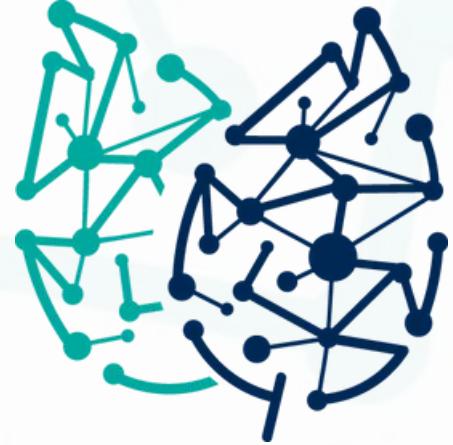
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

FLUSH RIGHT

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

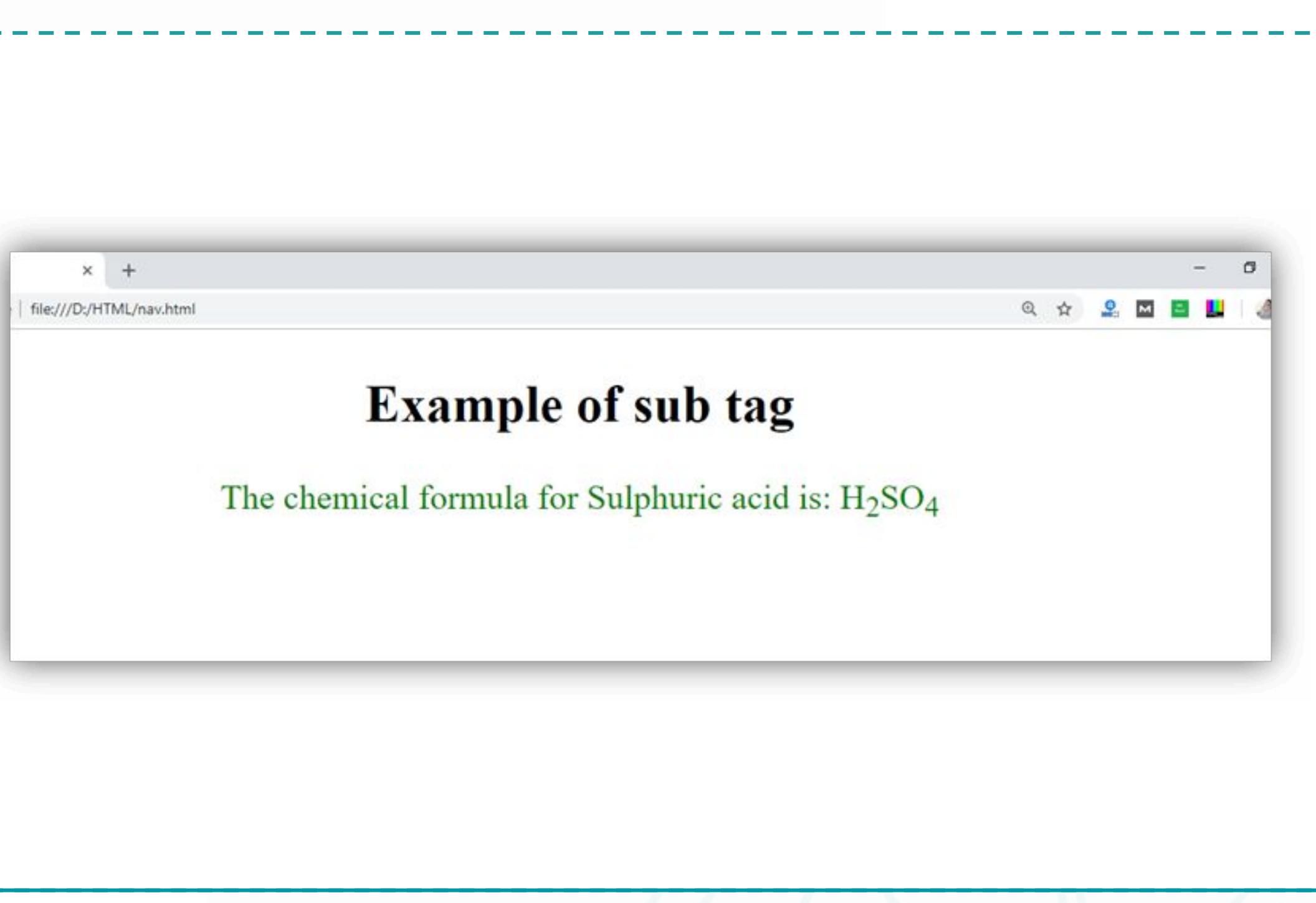
JUSTIFIED

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum .
l a b o r u m



Formatting Tags in HTML

<sub>
<sup>





Time to Reflect





Training

JOURNE

Y

HTML 5
semantic



Formatting
Tags



Table





Tables in HTML

<table>

<tr>

<th>

<td>



Name	Age	Grade
John Doe	16	A
Jane Smith	17	B
Sam Brown	16	C

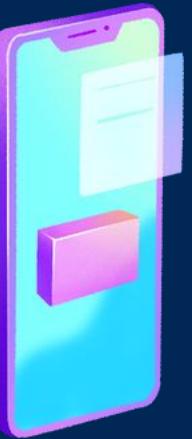


Time to Reflect



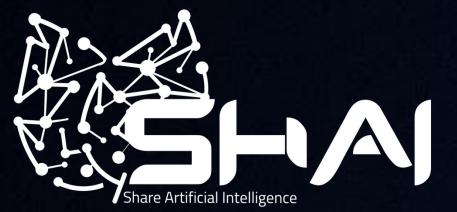


Share Artificial Intelligence



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Training





Code Like Pro





Training



JOURNE

Structure of a
Form In HTML



Key Attributes
of the <form>
Tag



Form
Elements



Form
Validation





Form in HTML

The image displays a composite view. On the left, there is a screenshot of a mobile application interface showing two forms. The top form has fields for Name, Address, City, State, and Zip. The bottom form has fields for Name, Email, Phone, Address, County, State, and Zip code, with a "Register" button at the bottom. On the right, there are two blocks of HTML code. The top code block shows a form with fields for Name, Address, City, State, and Zip, with the action set to "formprocessor.html". The bottom code block shows a form with fields for First Name, Last Name, Email, and a Submit button, with the action set to "home.html".

```
<form action="formprocessor.html" method="get">
  <p>Name: <input type="text" name="Name" /></p>
  <p>Address: <input type="text" name="Address" /></p>
  <p>City: <input type="text" name="City" /></p>
  <p>State: <input type="text" name="State" /></p>
  <p>Zip: <input type="text" name="Zip" /></p>
</form>
```

```
<form action="home.html">
  First Name:<br>
  <input type="text" name="first_name">
</br>
  Last Name:<br>
  <input type="text" name="last_name">
</br>
  Email:<br>
  <input type="text" name="email">
</br>
  <input type="submit" name="Submit">
</form>
```



Advanced HTML Form

HTML5 offers powerful tools for creating dynamic, user-friendly forms.

New form elements enhance accessibility, improve validation, and support richer user input.

Forms are essential for data collection, registration, search, and login systems.



Application Form

First Name: Last Name:

Date of birth: mm / dd / yyyy Age:

Gender: Male Female Email Address: Enter email address

Positions Available: Junior Developer Mid-level Developer Senior Developer

Programming Languages: Java JavaScript Python

Password: Confirm Password:



Time to Reflect





Training



JOURNE

Structure of a
Form In HTML

1

**Key Attributes
of the <form>
Tag**

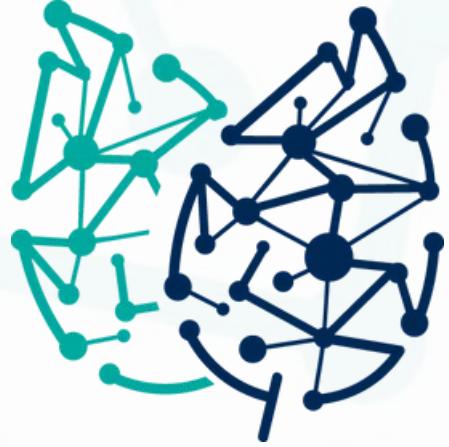
2

Form
Elements

3

Form
Validation





Key Attributes of the **<form>** Tag



```
<form action = "URL_to_process_form_data" method = "POST">  
    <!-- Form elements here -->  
    <input type="submit" value="Submit">  
</form>
```

action ... method ... target ... name



Time to Reflect





Training



JOURNE

Structure of a
Form In HTML

1

Key Attributes
of the <form>
Tag

2

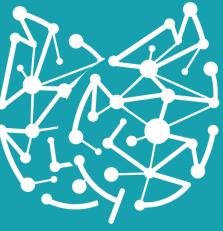
Form Elements

3

Form
Validation

3





Form elements



**Form
elements**

textarea

fieldset and legend

Input

Select Element

Labels



Input Types and Attributes



Text

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

email

```
<input type="email" id="email" name="email">
```

password

```
<input type="password" id="password" name="password">
```

radio

```
<input type="date" id="dob" name="dob">
```

checkbox

```
<input type="number" id="age" name="age">
```

submit

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

Reset Button

```
<input type = "reset" value= "Reset">
```



Input Types and Attributes

name

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

value

```
<input type="text" id="name" name="name" value="John Doe">
```

placeholder

```
<input type="text" id="name" name="name" placeholder="Enter your name">
```



Time to Reflect





Training

JOURNE

Structure of a
Form In HTML

1

Key Attributes
of the <form>
Tag

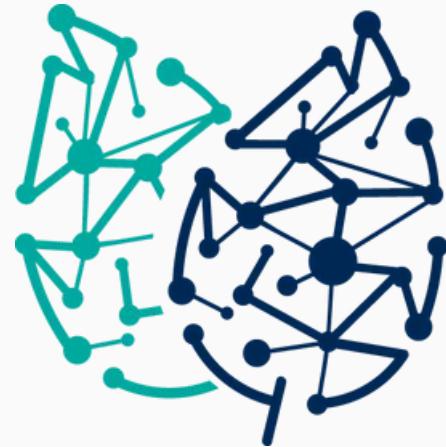
2

Form
Elements

3

Form Validation





Advanced HTML Custom Validation

HTML5 allows form validation with attributes like required, pattern, minlength, and maxlength.

The novalidate attribute disables automatic validation for custom validation using JavaScript.



Registration Form

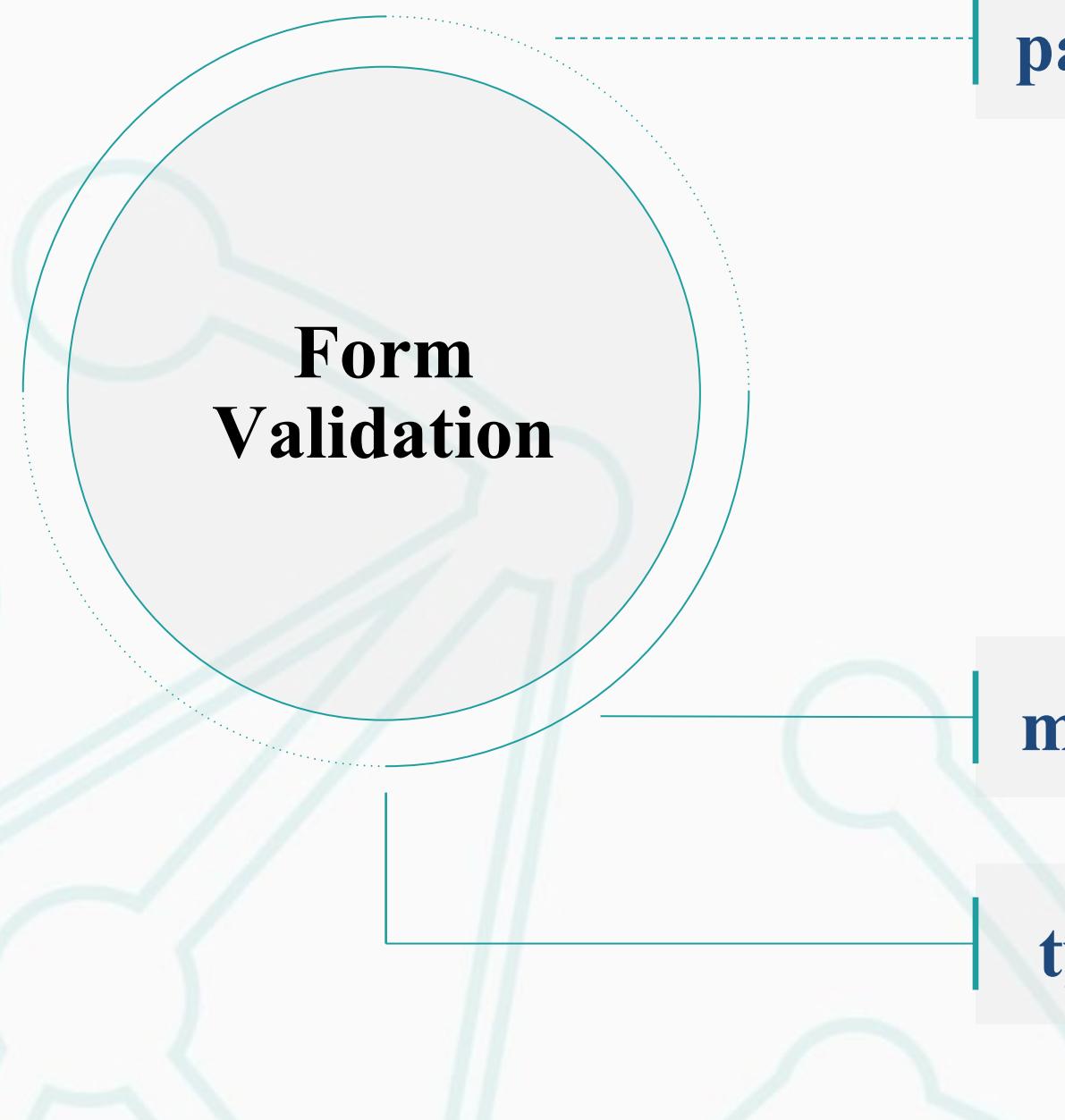
Name <input type="text" value="Enter your name"/> Please enter your name!	Mobile number <input type="text" value="Enter your mobile number"/> Please enter mobile number.
Email <input type="text" value="Enter your email"/> Please enter an email!	Language <input type="text" value="Select language"/> Please select your language!
Password <input type="text" value="Enter your password"/> Please enter password.	Attachment <input type="button" value="Choose File"/> No file chosen Please select JPG, PNG, PDF or ZIP file.
Confirm Password <input type="text" value="Enter your confirm password"/> Please enter confirm password.	Gender <input type="radio"/> You must select a gender. <input checked="" type="radio"/> Male <input type="radio"/> Female <input type="checkbox"/> Please confirm terms of use. I accept the Terms of Use

Register Now

Developed by Shinerweb



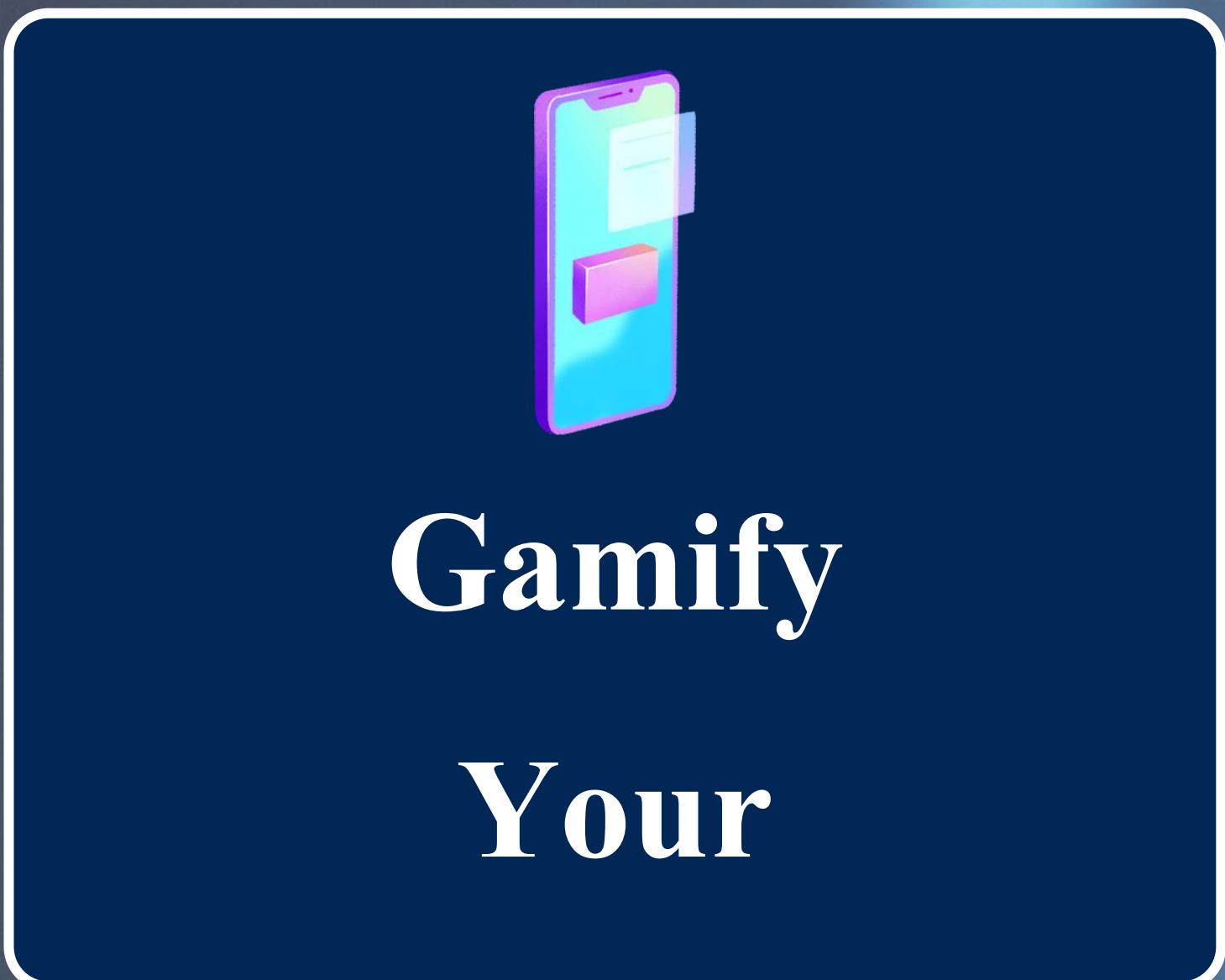
Form Validation





Time to Reflect





Gamify
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KWL Strategy



k

What I know

w

What I want to learn

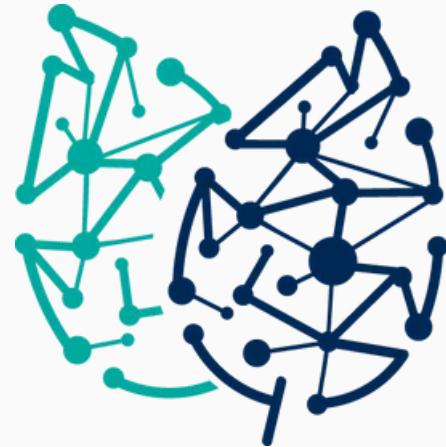
l

What I learned



Time to Reflect



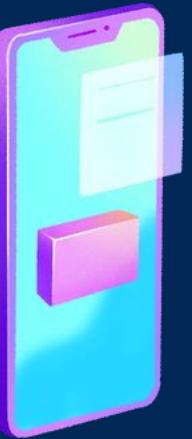


Q&A





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Assignment

