HTML5

SHAI

Share Artificial Intelligence

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	W	L
What I know	What I want to learn	What I learned

Build the Base

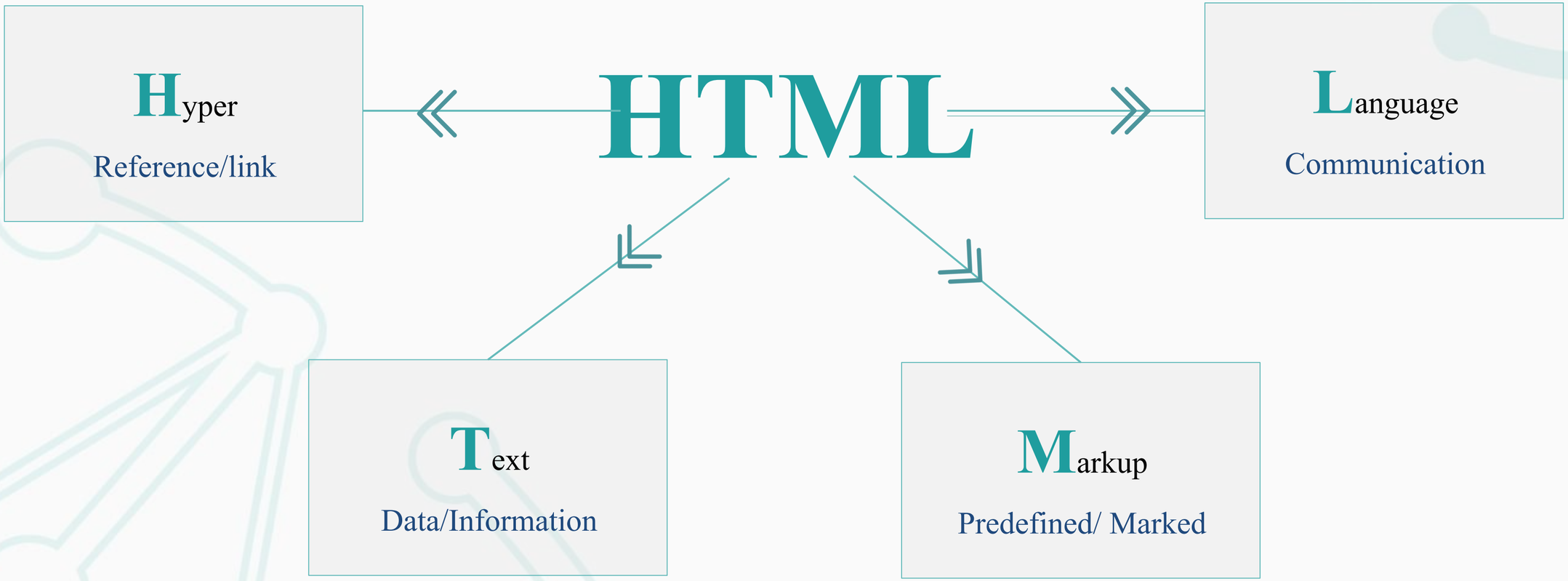
Training

JOURNEY

1. **Introduction to HTML**
2. Paragraph Headings Tags
3. Lists in HTML
4. Hyperlinks and Images in HTML
5. Meta Tags in HTML

Introduction to HTML5

What is HTML?


HTML
Hyper
Reference/link
Language
Communication
Text
Data/Information
Markup
Predefined/ Marked

Brief History of HTML?

1995

1997

1999

2000

2014

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

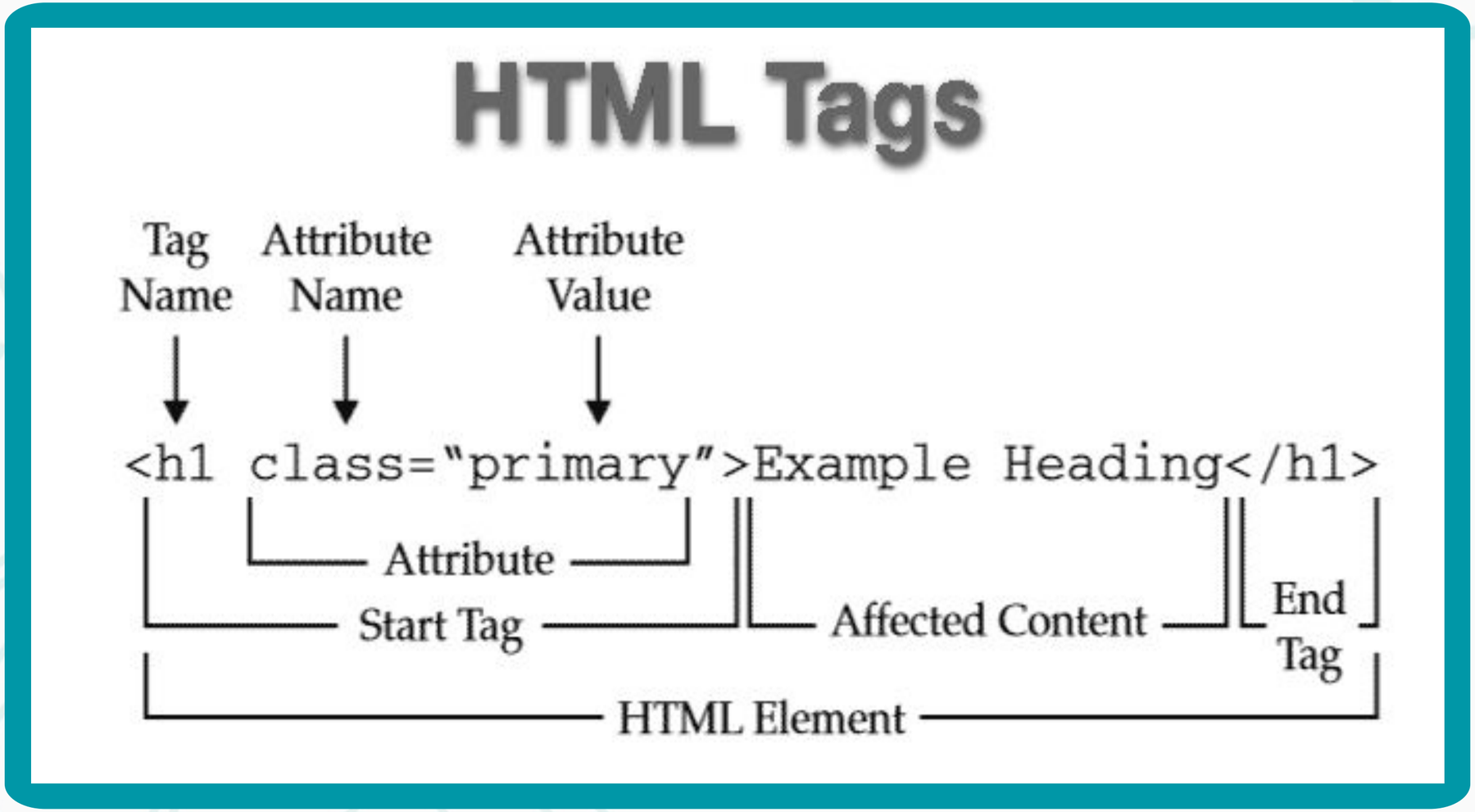
Introduction to SEMANTIC HTML

Why is it important?

SE

- **Improved Crawling and Indexing**
- **Rich Snippets**
- **Better Ranking**
- **Enhanced Readability**

HTML **Elements** and **Attributes**



HTML 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 headling tag
  <p>Paragraph Content</p>    ← HTML paragraph tag
</body>

</html>
```

Time to Reflect

Training

JOURNEY

1. Introduction to HTML
2. **Paragraph Headings Tags**
3. Lists in HTML
4. Hyperlinks and Images in HTML
5. Meta Tags in HTML

Basic Tags and THEIR USES

Headings and Paragraphs

Time to Reflect

Training

JOURNEY

1. Introduction to HTML
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3. **Lists in HTML**
4. Hyperlinks and Images in HTML
5. Meta Tags in HTML

Ordered and Unordered lists in HTML

List 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>
```

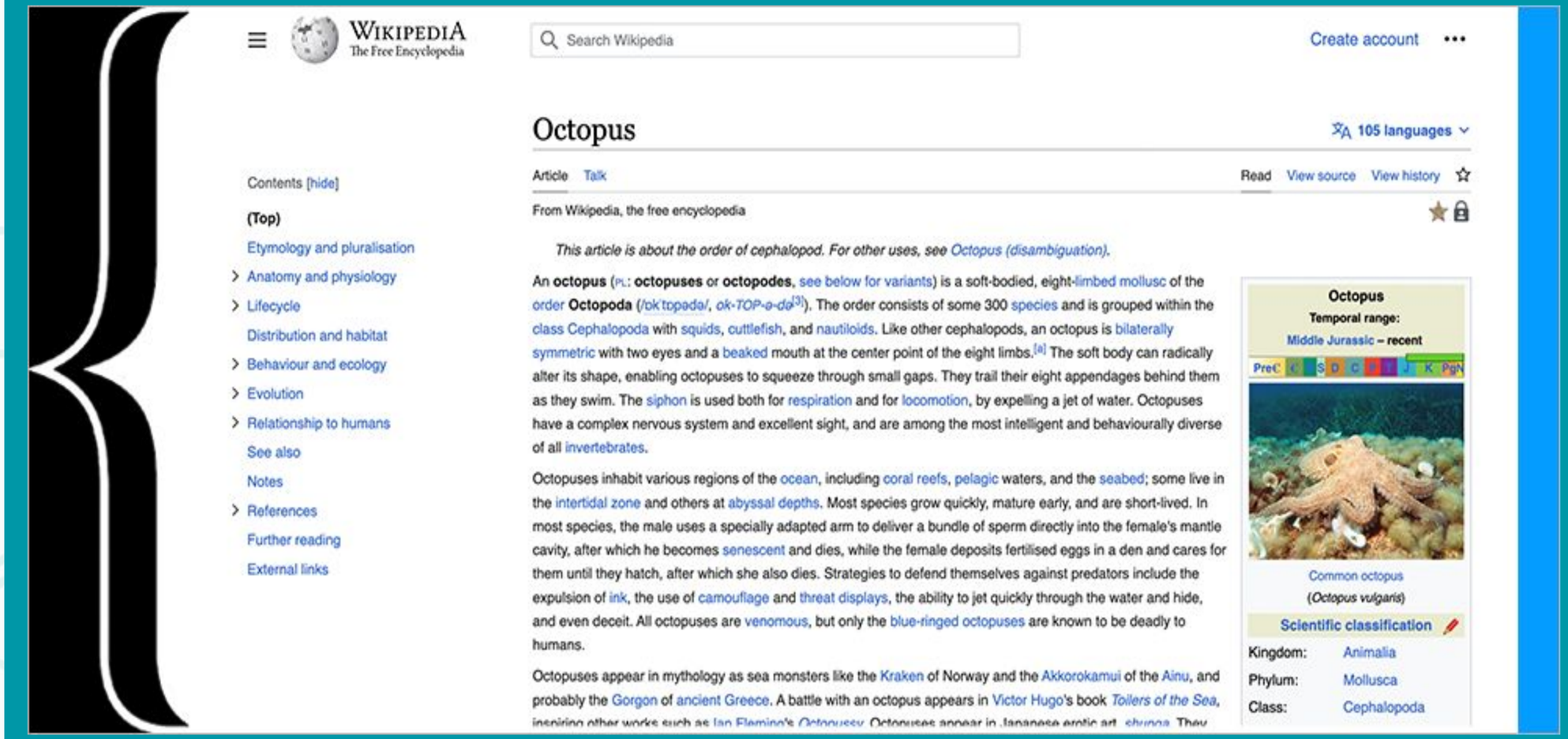
Time to Reflect

Training

JOURNEY

1. Introduction to HTML
2. Paragraph Headings Tags
3. Lists in HTML
4. **Hyperlinks and Images in HTML**
5. Meta Tags in HTML

Hyperlinks and Images in HTML



Wikipedia
The Free Encyclopedia

Search Wikipedia

Create account

Octopus

105 languages

Article Talk

Read View source View history

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** (/ɒkˈtɒpədə/, *ok-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 *Toilers of the Sea*, inspiring other works such as Ian Fleming's *Octopussy*. Octopuses appear in Japanese erotic art, *shunga*. They

Contents [hide]

(Top)
Etymology and pluralisation
Anatomy and physiology
Lifecycle
Distribution and habitat
Behaviour and ecology
Evolution
Relationship to humans
See also
Notes
References
Further reading
External links

Octopus
Temporal range:
Middle Jurassic – recent
PreC Є S D C P T J K PgN

Common octopus
(*Octopus vulgaris*)

Scientific classification

Kingdom:	Animalia
Phylum:	Mollusca
Class:	Cephalopoda

Time to Reflect

Training

JOURNEY

1. Introduction to HTML
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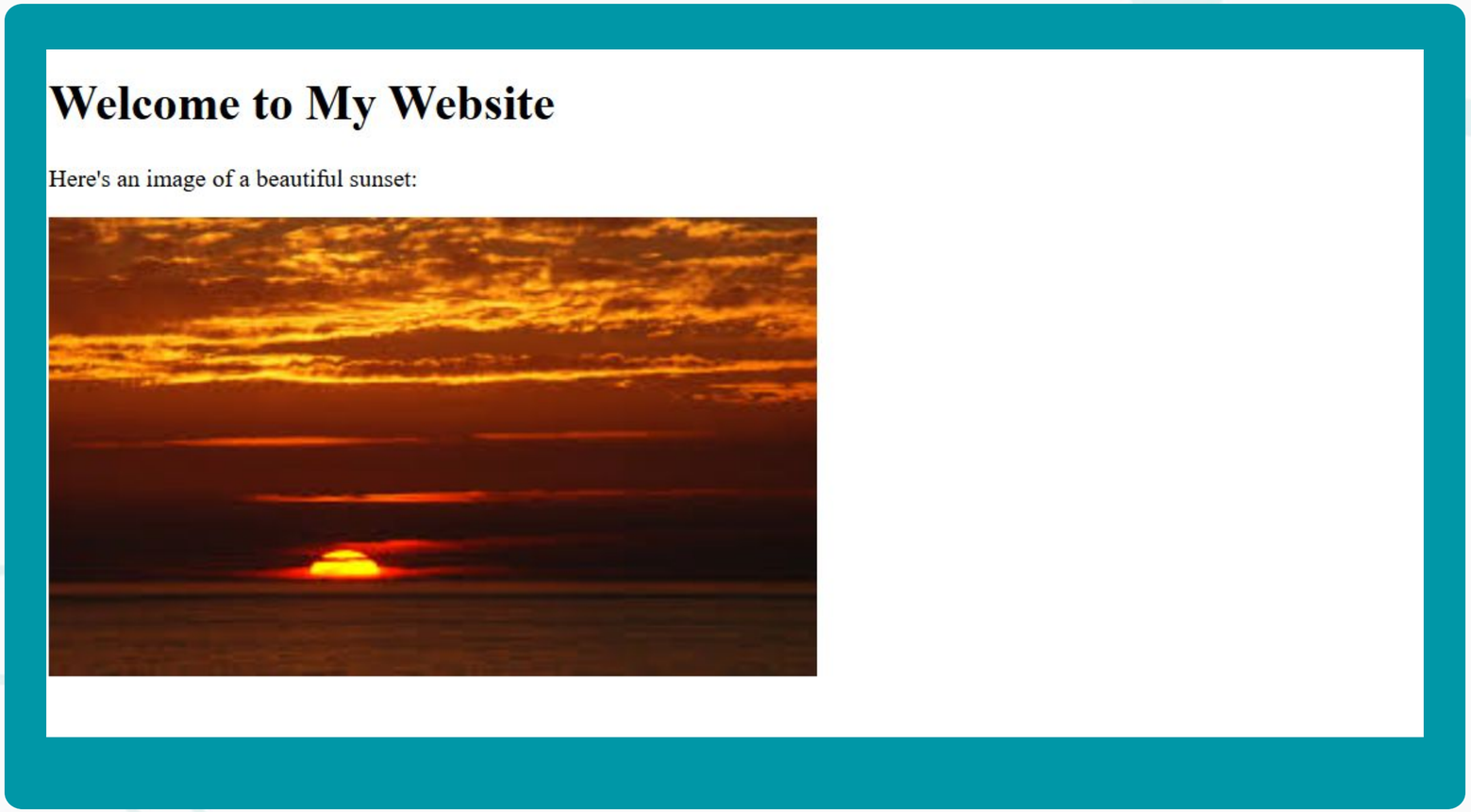
5. **Meta Tags in HTML**

Tags in **HTML**

image tags



Tags in **HTML**

Audio

<audio>

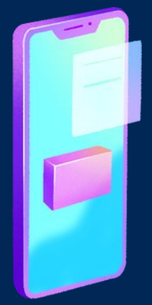
Video

<video>

Meta Tags in **HTML**

meta tags in

Time to Reflect



Gamify Your Training

Elevate the Elements

Training

JOURNEY

1

HTML 5 semantic

2

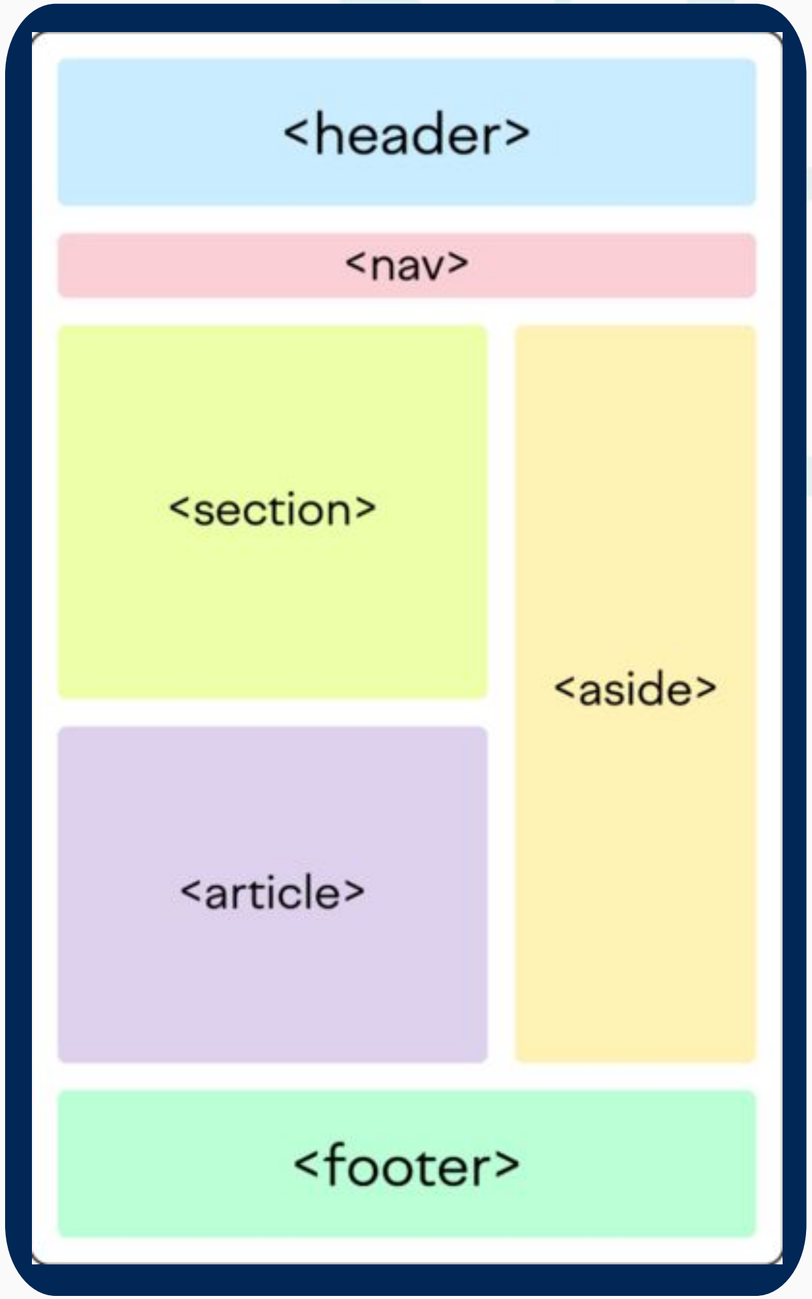
Formatting Tags

3

Table

Introduction to Semantic

HTML



What is semantic HTML ?

tags that convey the meaning of the content they enclose

Benefits of Using Semantic HTML

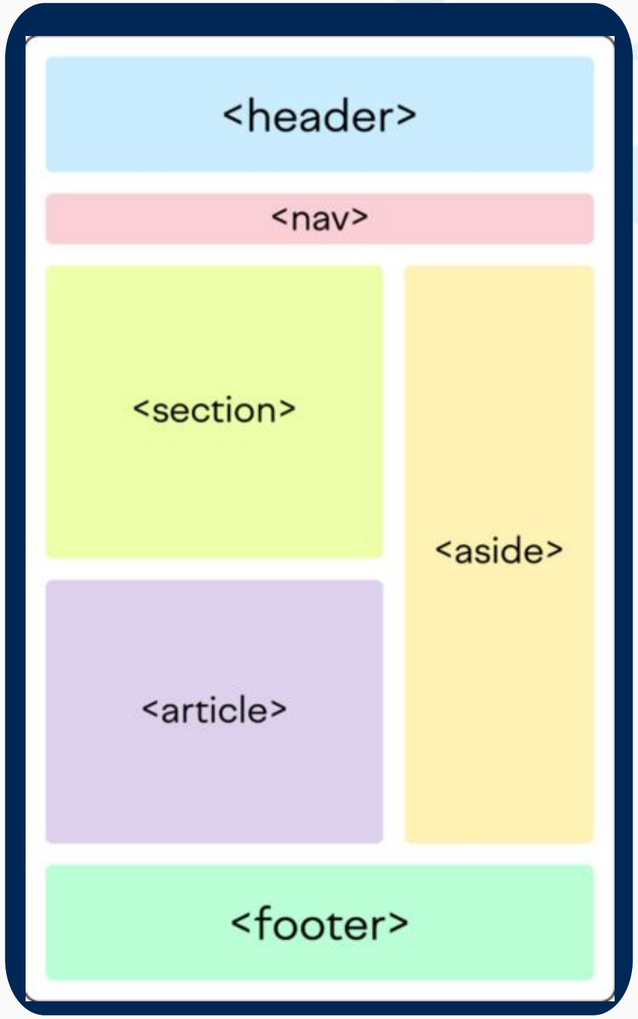
1. Improve readability
2. Better search engine optimization
3. Enhanced accessibility

HTML5

NEW ELEMENTS

Structural Elements

- <article>
- <nav>
- <section>
- <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

02

<section>

purpose

Groups related content together.

usecases

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

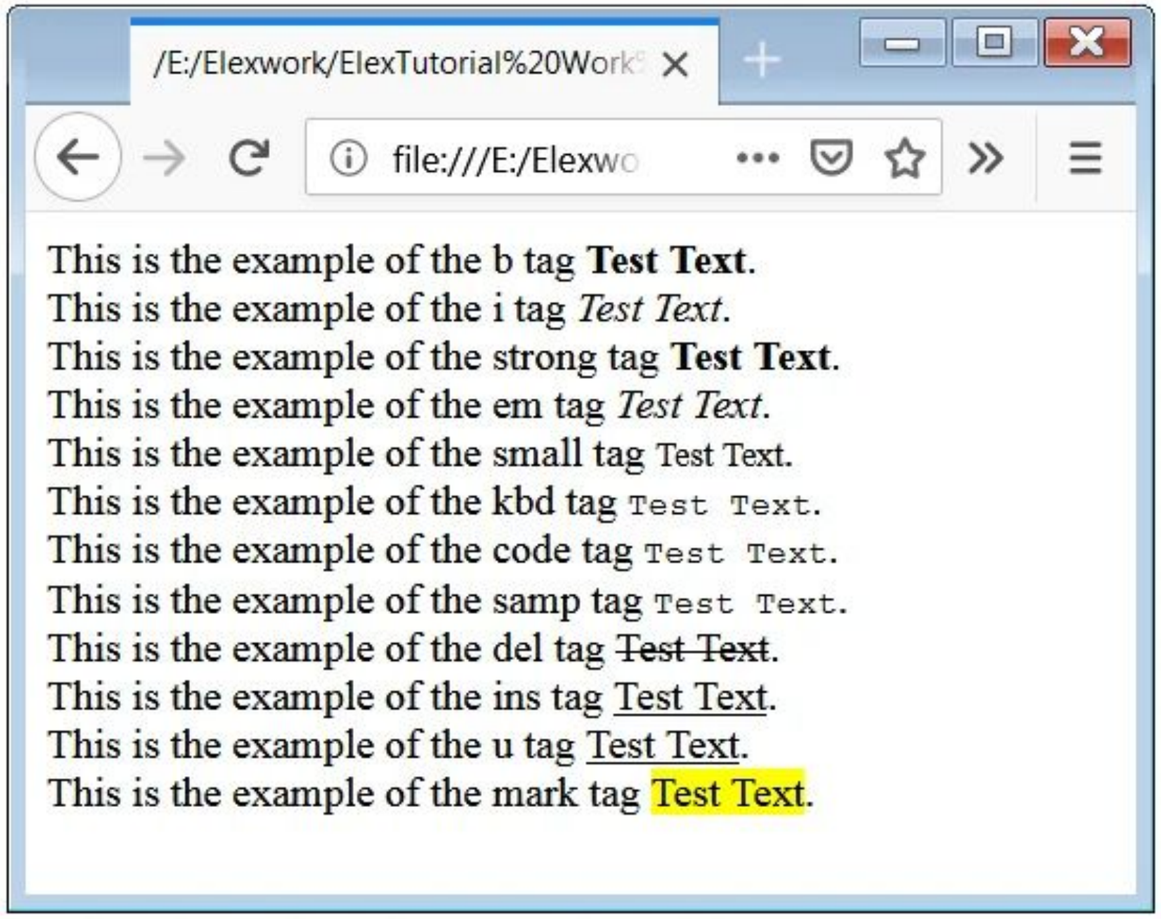
JOURNEY

1. HTML 5 semantic
2. **Formatting Tags**
3. Table

Formatting Tags
in HTML

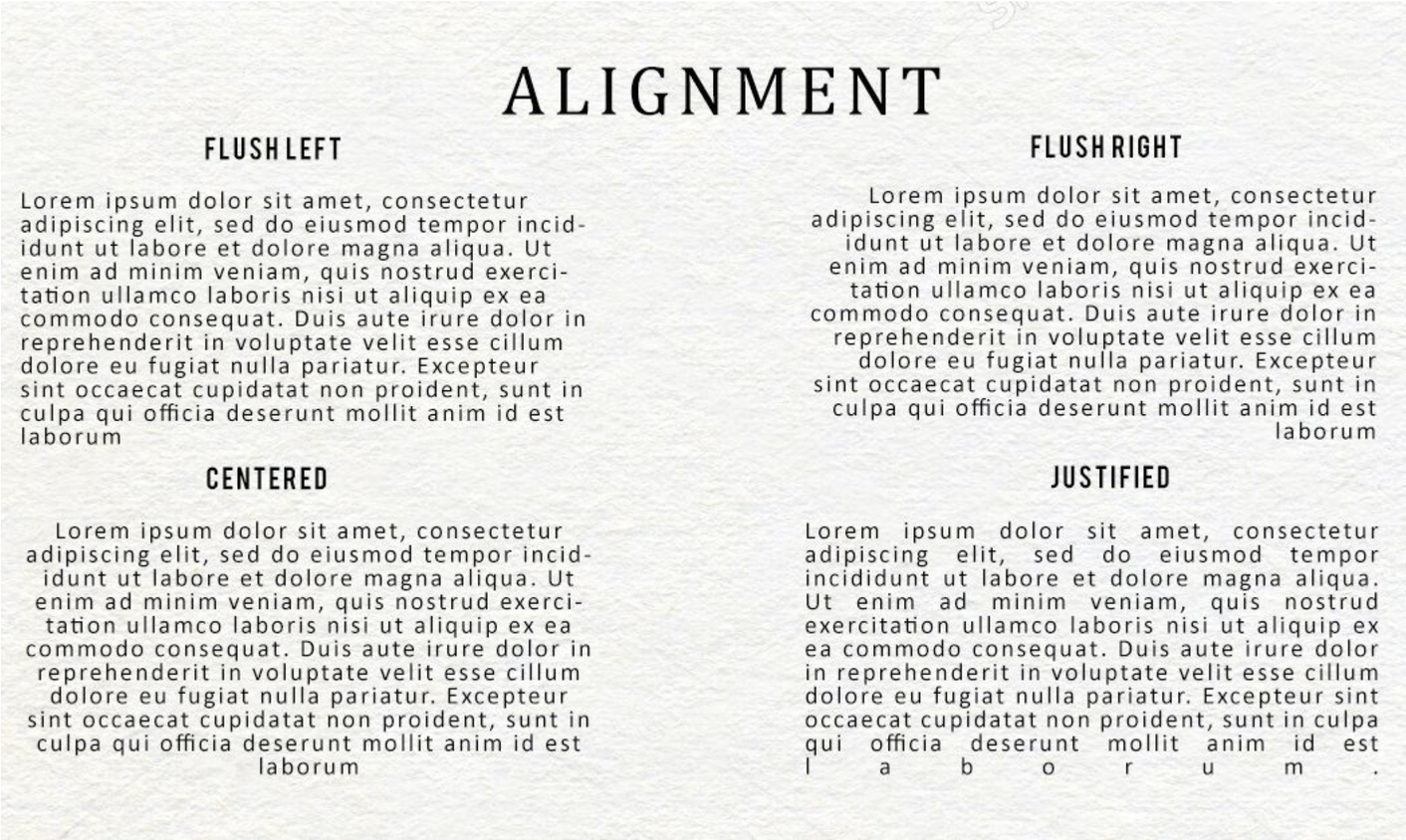
<b>
<i>
<u>

<mark>
<small>
<del>
<ins>



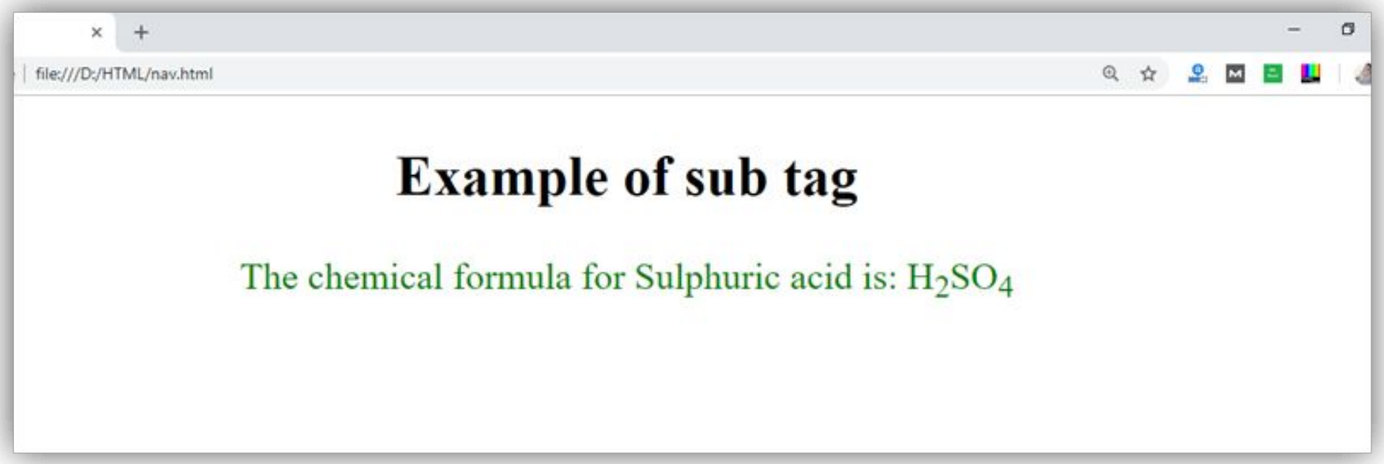
Formatting Tags
in HTML

<p align="center">



Formatting Tags
in HTML

<sub>
<sup>



Time to Reflect

Training

JOURNEY

1. HTML 5 semantic
2. Formatting Tags
3. **Table**

Tables
in HTML

<table>

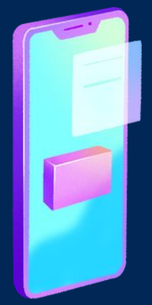
<th>

<tr>

<td>

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

Time to Reflect



Gamify Your Training

Code Like Pro

Training

JOURNEY

1

Structure of a Form In HTML

2

Key Attributes of the <form> Tag

3

Form Elements

3

Form Validation

Form in HTML

Name:

Address:

City:

State:

Zip:

```
<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>
```

First Name:

Last Name:

Email:

Submit Query

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 Email Address: Enter email address

Positions Available: Junior Developer Mid-level Developer Senior Developer

Programming Languages: Java JavaScript Python

Password: Confirm Password:

Submit Reset

Time to Reflect

Training

JOURNE

1

Structure of a Form In HTML

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Form Elements

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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

1

Structure of a Form In HTML

2

Key Attributes of the <form> Tag

3

Form Elements

3

Form Validation

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

1

Structure of a Form In HTML

2

Key Attributes of the <form> Tag

3

Form Elements

3

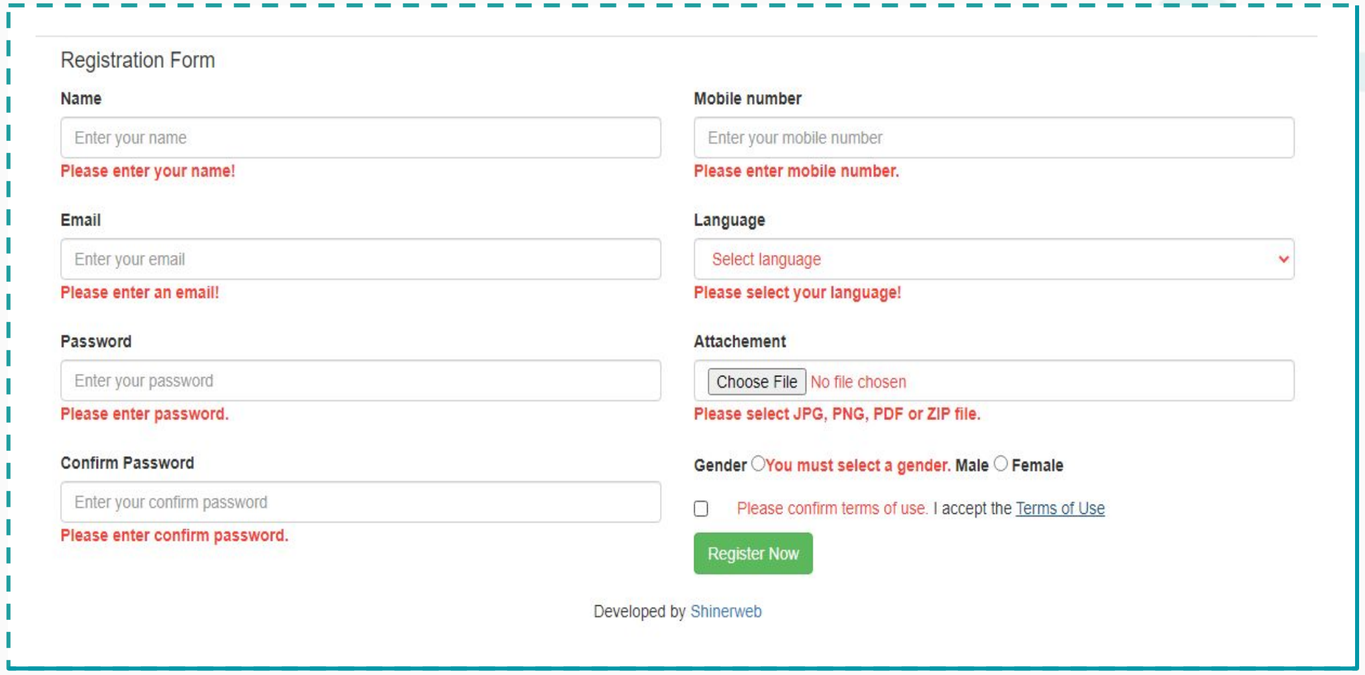
Form Validation

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.

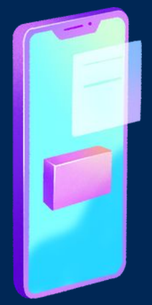


Form Validation

Form Validation

- required
- pattern
- min and max
- type="email"

Time to Reflect



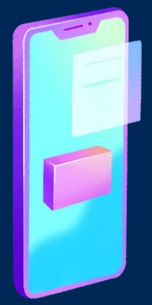
Gamify Your Training

KWL Strategy

k	W	L
What I know	**What I want to learn**	**What I learned**

Time to Reflect

Q&A



Gamify Your Training

Assignment