

# TECHNOLOGY



## Coding Bootcamp

# TECHNOLOGY



## HTML



## Advanced HTML



# Learning Objectives

By the end of this lesson, you will be able to:

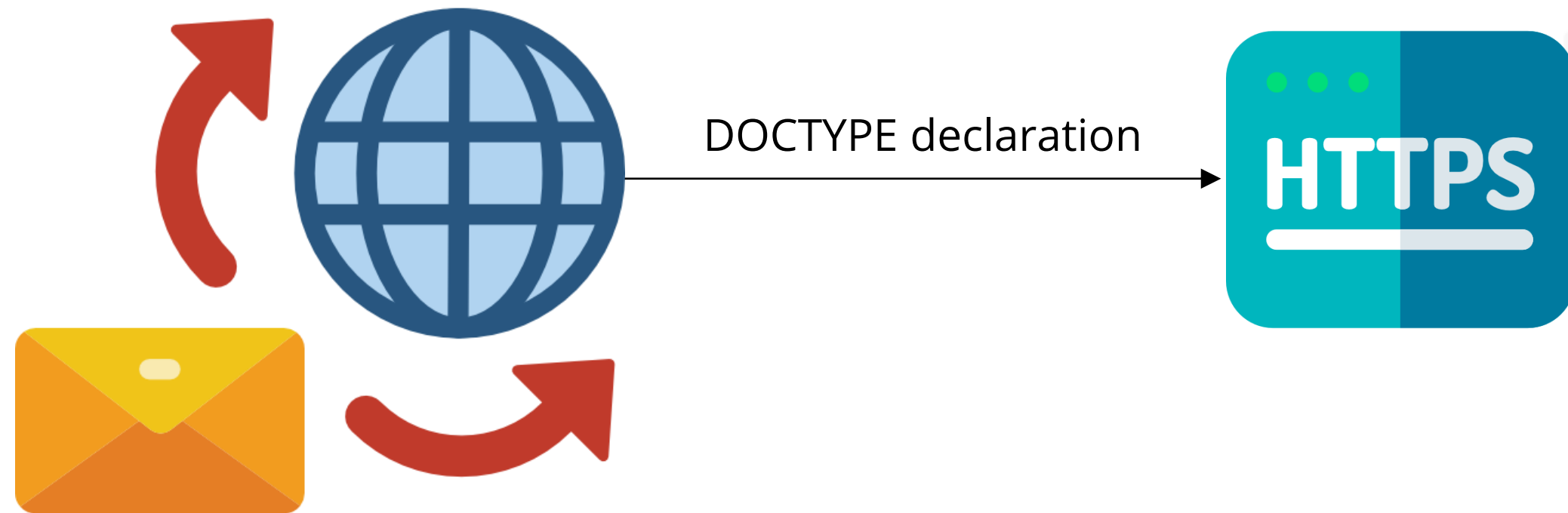
- 🕒 Analyze the concept of DOCTYPEs in HTML to develop web pages that are cross-browser compatible and optimized for performance
- 🕒 Define comments in HTML for enhancing code readability, documentation, debugging, collaboration, and maintenance
- 🕒 Analyze the need of using ID and class attributes to create more organized, efficient, and scalable web pages
- 🕒 Define the usage of block and inline elements in HTML to structure web content, manage layout, and ensure proper styling and behavior of web pages



## DOCTYPE

# DOCTYPE: Overview

All HTML documents begin with a DOCTYPE declaration.





# DOCTYPE: Benefits

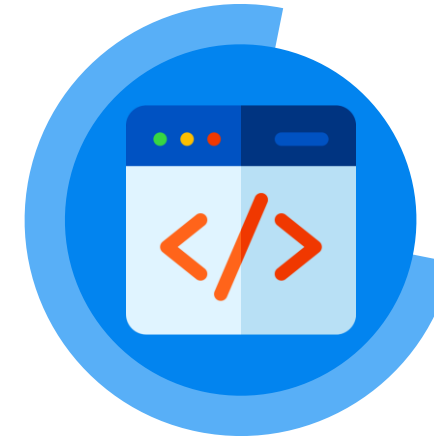
It acts as the first thing in the HTML document and offers several benefits, including:



It helps the browser render a web correctly.



It maintains a consistent rendering environment across different browsers.



It does not allow space before its declaration.

## Comments in HTML



# Comments in HTML

To create comments in HTML, a user must add the text between the special characters.



Comments make a code more meaningful and easier to understand.

# Comments in HTML

Comments are not visible to users in the browser window.

Comments can be seen in the source code of the web page.

```
<!-- start of introduction -->
<h1>John's Coffee Shop</h1>
<h2>The fresh brew</h2>
<!-- end of introduction -->

<!-- start of main text -->
<p>At our coffee shop you will get authentic
Indonesian coffee. </p>
<p>We are well known for our cold and hot
varieties of various coffees. </p>
<!-- end of main text -->
```

Comments indicate the start and end sections of the web page.

## ID Attributes



# ID Attributes

ID attributes are used to uniquely identify elements within an HTML document.



An ID attribute should be unique.



An ID attribute must have value starting with a letter or an underscore.

# ID Attributes: Example

```
<p>Learn to invest wisely</p>  
<p id="quote">Search the candle rather than  
cursing the darkness</p>  
<p>Success comes to those who are too busy  
looking for it</p>
```

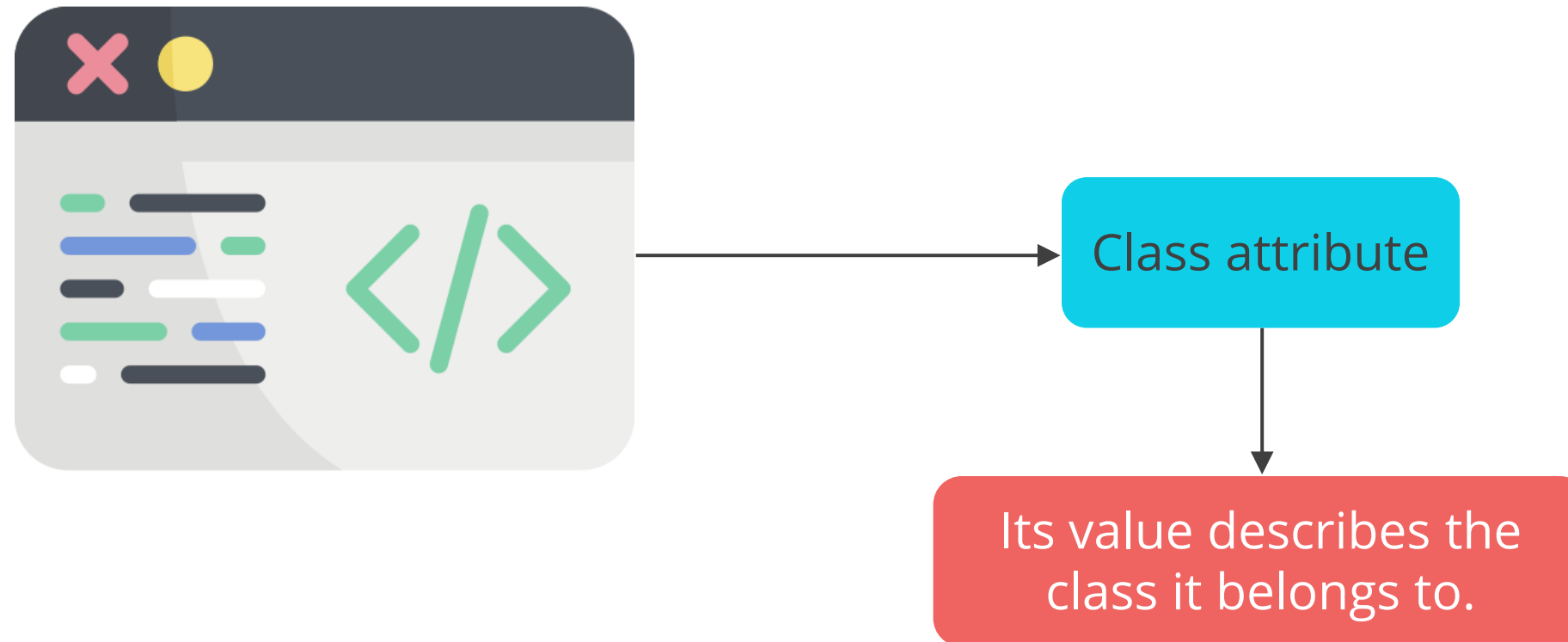


## Class Attributes



# Class Attributes: Overview

In HTML, class attributes are used to apply a specific style or behavior to multiple elements on a web page, distinguishing them from other elements.



# Class Attributes: Uses



## Distinguish

To distinguish between the links that refer to other web pages

## Highlight

To highlight paragraphs in the text



01

02

03

## Point

To point to some external sites



# Developing HTML File with ID, Class, Header, and Footer



## Problem Statement:

You have been asked to develop the HTML file with id, class header, and footer.

## Outcome:

By completing this task, you developed the HTML file with id, class header, and footer. You started by creating the index.html file, then added the necessary id, class, header, and footer elements in the HTML file. Finally, you viewed the results in your local browser.

**Note:** Refer to the demo document for detailed steps:  
01\_Developing\_HTML\_File\_with\_Id\_Class\_Header\_Footer

ASSISTED PRACTICE



# Assisted Practice: Guidelines

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Steps to be followed:

1. Create the index.html file
2. Add id, class, header, and footer in the HTML file
3. View the results in your local browser

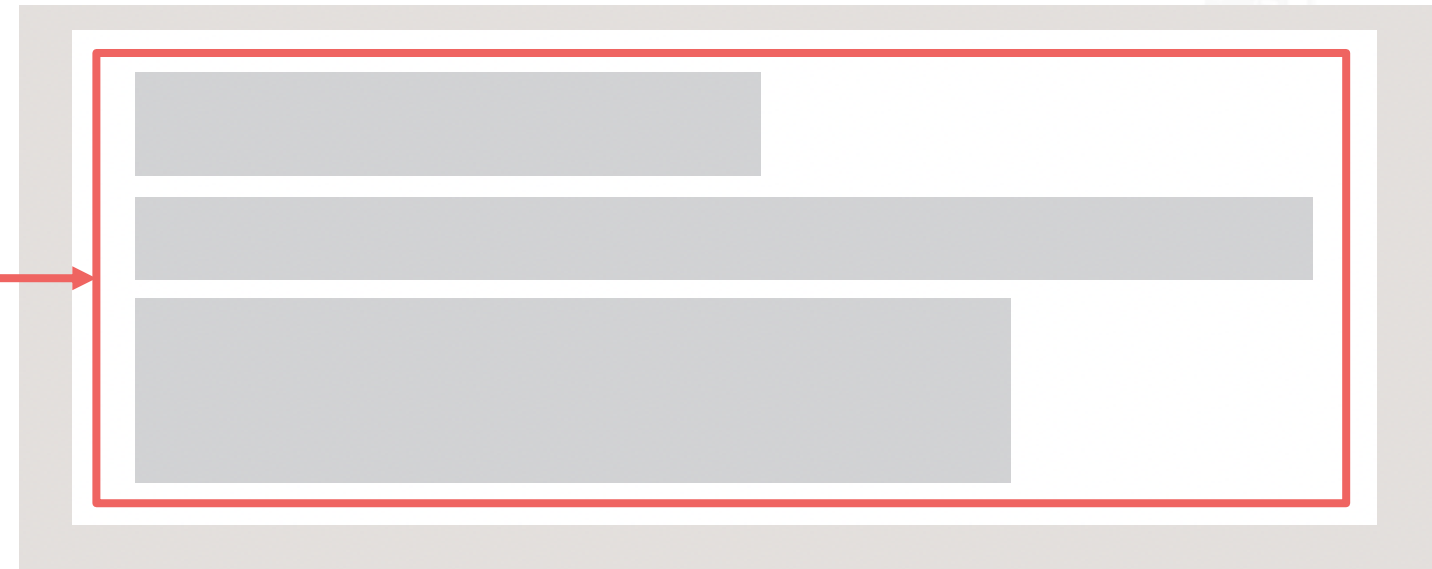


## Block and Inline Elements

# Block Elements

HTML elements can appear to start on a new line in the browser window.

These are known as block-level elements in a web page.



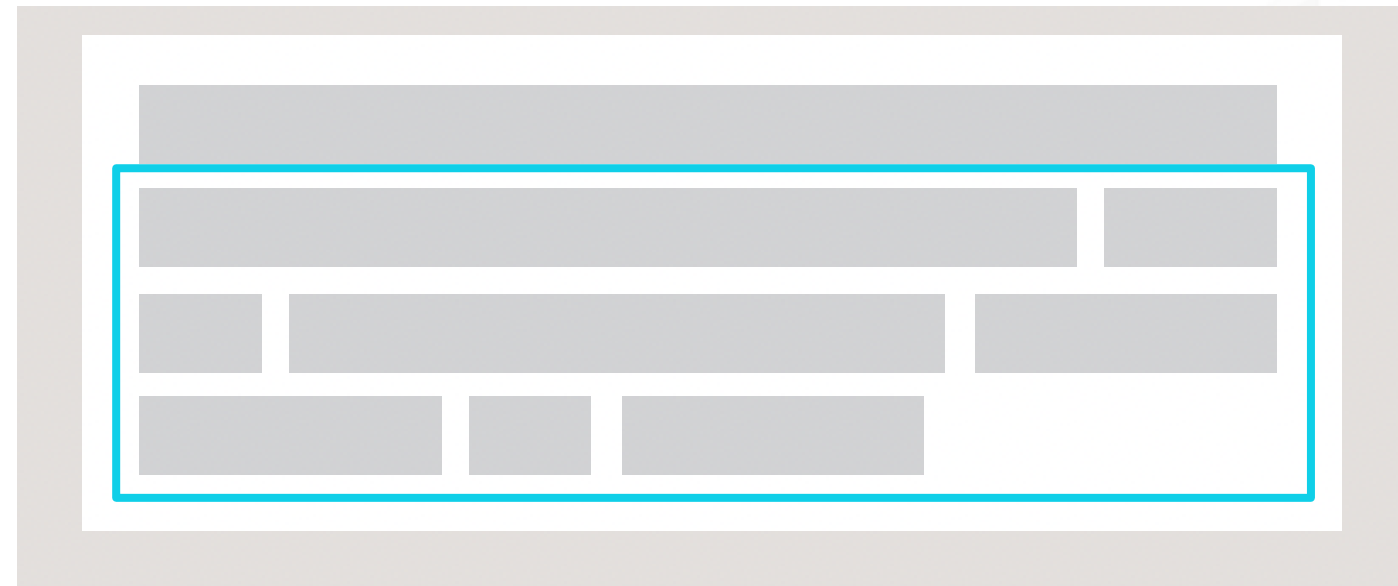
A few examples of block elements are `<h1>`, `<p>`, `<ul>`, and `<li>`.



# Inline Elements

HTML elements can appear to continue in the same line as their neighboring elements.

These are known as inline elements in a web page.



A few examples of inline elements include `<a>`, `<b>`, `<em>`, and `<img>`.

# Commonly Used Block Element: <div>

The **<div>** element is used to group a set of elements as a single block-level box.

Uses of **<div>** element are:



Makes the site's header



Gets reviews from users



# <div> Element

In a browser, the contents inside the **<div>** element are displayed on a new line.

A CSS style specifies the amount of space an element should occupy on the screen.

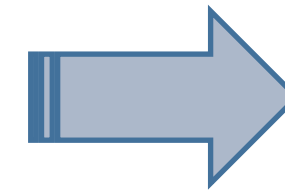


The CSS style changes the appearance of all the elements.

## <div> Element: Example

```
<div id="header">

<ul>
<li><a href="index.html">Dashboard</a></li>
<li><a href="profile.html">Profile</a></li>
<li><a
href="portfolio.html">Portfolio</a></li>
<li><a href="contact.html">Contact
Us</a></li>
</ul>
</div>
<!-- end of header -->
```



### Output

John Watson

- [Dashboard](#)
- [Profile](#)
- [Portfolio](#)
- [Contact Us](#)

## Information about Web Pages



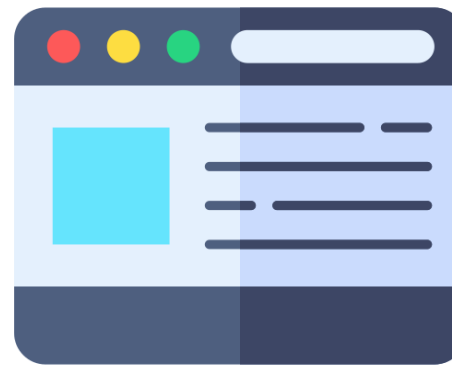
# <meta> Element

The **<meta>** element provides information about the web pages in HTML.

It is used to:



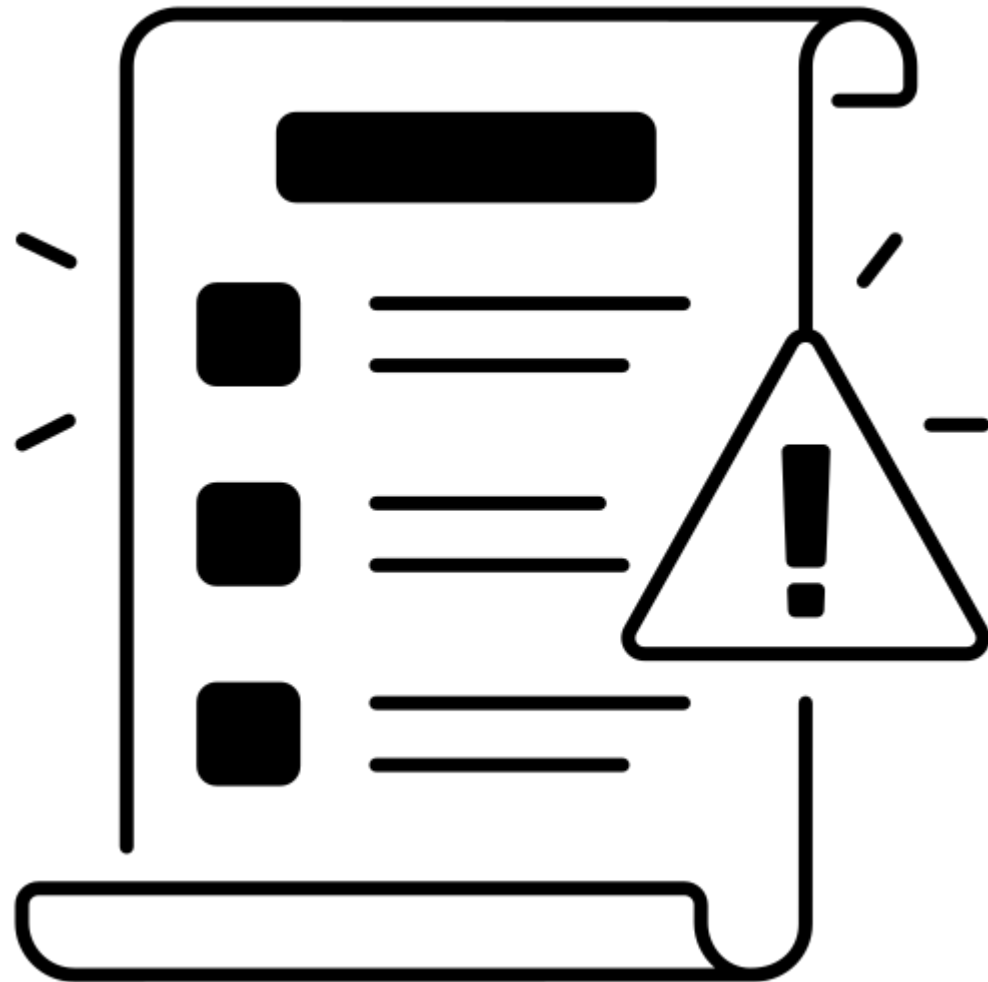
Provide essential  
information about the  
web page



Tell search engines  
about the page



## <meta> Element: Example



```
<!DOCTYPE html>
<html><head>
<title>Information About Your Pages</title>
<meta name="description"
content="Some content for your web page" />
<meta name="keywords"
content="code, html, tutorials" />
<meta name="robots"
content="nofollow" />
<meta http-equiv="author"
content="John Watson" />
<meta http-equiv="pragma"
content="no-cache" />
<meta http-equiv="expires"
content="Fri, 04 Apr 2021 23:59:59 IST" />
</head>
<body> </body> </html>
```

## Escape Characters

# Escape Characters

These are special sequences of characters that represent other characters in the HTML document. Here are some escape characters:

<	Less-than sign	&lt;	&#60;
>	Greater-than sign	&gt;	&amp;
&	Ampersand	&amp;	&#38;
"	Quotation mark	&quot;	&#34;
€	Euro sign	&euro;	&#8364;
©	Copyright symbol	&copy;	&#169;
®	Registered trademark	&reg;	&#174;
™	Trademark	&trade;	&#8482;

# Escape Characters

×	Multiplication sign	&times;	&#215;
÷	Division sign	&divide;	&#247;
‘	Left single quote	&lsquo;	&#8216;
’	Right single quote	&rsquo;	&#8217;
“	Left double quotes	&ldquo;	&#8220;
”	Right double quotes	&rdquo;	&#8221



## Video Attributes in HTML

# Video Attributes

The attributes of the **<video>** element in HTML are used to control video playback on web pages. It highlights three main attributes src, poster, and width and height.

src

www



It specifies the video path.

Poster



It specifies the image to show while the video is still downloading.

Width and height



It specifies the size of the video player in pixels.

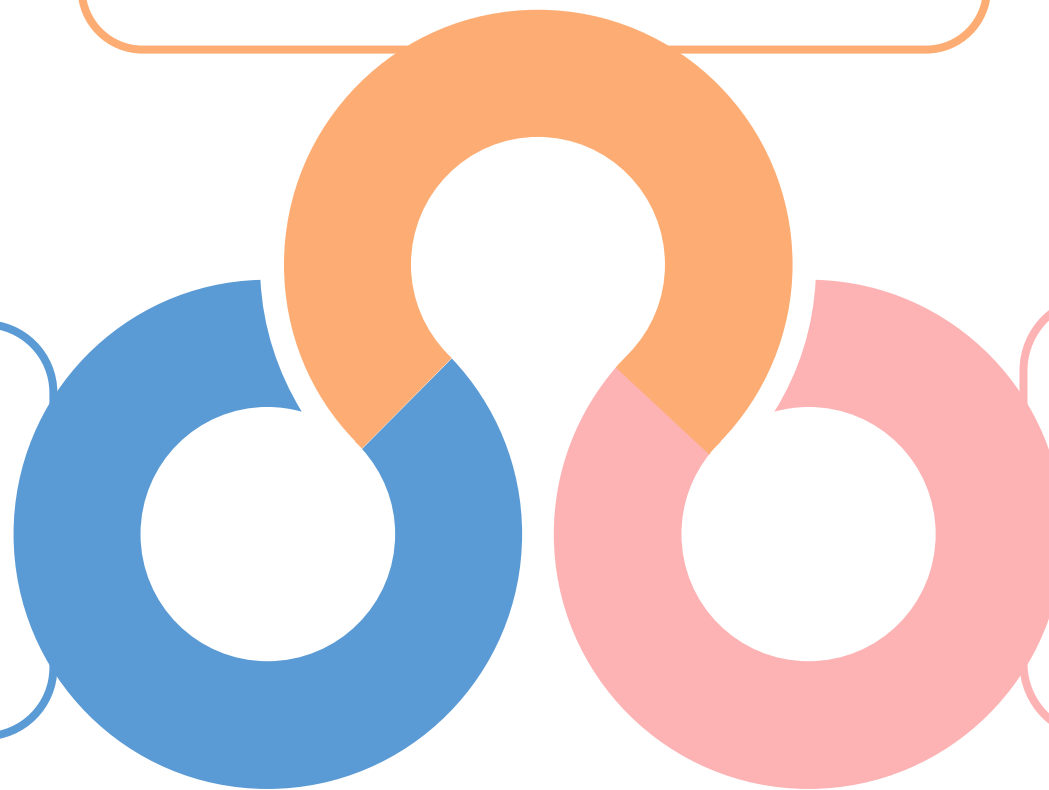
# Preload Attribute in Video Element

It indicates the browser what to do when the page loads. It has three possible values:

**Auto:** The browser should download the video when the page loads.

**None:** The browser should not load the video until the user presses play.

**Metadata:** The browser should collect information.



# Video Attributes: Example

```
<!DOCTYPE html>
<html>
<head>
<title>Adding HTML5 Video</title>
</head>
<body>
<video src="video/puppy.mp4"
poster="images/puppy.jpg"
width="400" height="300"
preload
controls
loop>
<p>A video of a puppy playing in the snow</p>
</video>
</body>
</html>
```



# Creating HTML Files with Nav, Section, Time, and Abbreviations



## Problem Statement:

You have been asked to develop the HTML file with nav, section, time, and abbreviations.

## Outcome:

By completing this task, you developed the HTML file with nav, section, time, and abbreviations. You began by creating the index.html file, then added the necessary code for nav, section, time, and abbreviations. Finally, you executed the file to see the results.

**Note:** Refer to the demo document for detailed steps:  
02\_Creating\_HTML\_Files\_With\_Nav\_Section\_Time\_Abbreviation

ASSISTED PRACTICE



# Assisted Practice: Guidelines

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Steps to be followed:

1. Create the index.html file
2. Add nav, section, time, and abbreviation code in the HTML file
3. Execute the file



## Key Takeaways

- All HTML documents begin with a DOCTYPE declaration.
- Comments are not visible to users in the browser window.
- In HTML, class attributes are used to apply a specific style or behavior to multiple elements on a web page, distinguishing them from other elements.
- The **<div>** element is used to group a set of elements as a single block-level box.
- The **<video>** element attributes allow controlling video playback.



# TECHNOLOGY

**Thank You**