# What are the differences between HTML5 and HTML?

**Answer:** Following are the various differences between HTML and HTML5:

**1. Attributes**

Attributes of Async, charset, and ping are available in HTML5. The same is not available in HTML.

**1. Doctype Declaration**

HTML features a long and complicated doctype declaration. The same is simple and easy in HTML5.

**2. Drag-and-Drop**

While HTML5 provides support for the drag-and-drop effect, HTML has no provision for it.

**3. Drawing Geometric Shapes**

There is no way of drawing shapes like circles, rectangles, and triangles in HTML. The same can be drawn in HTML5.

**4. High-level Video and Audio Support**

High-level audio and video support isn't a part of the HTML specifications. HTML5 offers out-of-the-box high-level audio and video support.

**5. In-text Use**

MathML and SVG can be used in text in HTML5. The same is not possible in HTML.

**6. JavaScript Support**

HTML doesn't provide support for running J.S. within the web browser. HTML5 allows JavaScript to run in the background using Web Workers.

**7. Mobile-ready**

HTML is not mobile-ready. HTML5 specifications involve emphasis on mobile-friendliness.

**8. Storage**

There is no persistent storage option available in HTML. Only browser cache is used as temporary storage. HTML5 allows permanent storage with an application cache, Web SQL database, and web storage.

**9. Vector Graphics**

HTML5 provides support for Canvas, SVG, and other virtual vector graphics. Implementing vector graphics in HTML is only possible using third-party plugins like Silverlight and VML.

# Explain the various new tags introduced by HTML5 in Media Elements.

**Answer:** HTML5 introduces the following five new tags in Media Elements:

1. <audio>: Eliminates the need for additional plugins for playing audio content like audio streams and music.
2. <embed>: Embeds an external application or content
3. <source>: Adds multimedia resources like audio, picture, and video.
4. <track>: Adds caption files or subtitles while the multimedia file is playing.
5. <video>: Adds video content like embedded video content, movie clips, and videos.

What is a <meta> tag in HTML5?

**Answer:** The <meta> tag offers metadata about the HTML5 document. This metadata is machine-parsable. Typically, meta elements are used for specifying:

* Author name
* Keywords
* Page description

The metadata supplied by the <meta> tag is used by:

* Web browsers to know how to display content or reload a web page
* Search engines to know about keywords on a web page
* Other web services

#### What do you understand by <!DOCTYPE>? Name the types of DOCTYPE available in HTML5.

**Answer:**Every HTML5 web page starts with the <!DOCTYPE> declaration. It lets the web browser understand the information that it must display. The DOCTYPE declaration is concise and case-insensitive in HTML5. HTML5 provides support for only one DOCTYPE:

<!DOCTYPE html>

#### Question: What will happen if the doctype is not specified in an HTML web page?

**Answer:**If the doctype is not specified in an HTML web page, then the web browser will be unable to interpret the new HTML5-specific tags.

#### Please explain the Geolocation API in HTML5. How will you create a Geolocation object?

<!DOCTYPEhtml>  
  
<**html**>  
<**body**>  
<**p**>Click the My Location button to know your location.</**p**>  
<**button** onClick="getLocation()"> My Location </**button**>  
<**p** id="location"></**p**>  
<**script**>  
**var** x = document.getElementById("location");  
**function** **getLocation**()  
{  
**if** (navigator.geolocation)  
{  
navigator.geolocation.getCurrentPosition(showPosition);  
}  
**else** {  
x.innerHTML = "Geolocation is not supported by this browser.";  
}  
}  
**function** **showPosition** (position) {  
x.innerHTML = “Latitude: " + position.coords.latitude + "<br>Longitude: " + position.coords.longitude;  
}  
</**script**>  
</**body**>  
</**html**>

Please explain the new form input types in HTML5.

**Answer:** The HTML5 introduces the following 14 new form input types:

1. Color - Select multiple colors using type = "color"
2. Date - Pick a date by using type = "date."
3. Datetime - Combination of date and time. Pick a date and time by using type = "datetime"
4. Datetime-local - Doesn't include the timezone. Pick a date and time by using type = "datetime-local."
5. Email - Enter one or more email addresses using type = "email."
6. Month - Pick a month by using type = "month."
7. Number - Inserts a numerical value with additional attributes like min and max. Enter one or many numerical values using type = "number."
8. Search - Allows searching queries by inputting text. Enter one or many search queries by using type = "search."
9. Tel - Allows different phone numbers. Each phone number is validated by the client-side. Enter a phone number by using type = "tel."
10. Placeholder - Displays a short hint in the input fields before entering a value. Write a short hint in the input field using type = "placeholder."
11. Range - Inserts a numerical value within a specific range. Enter a numerical value within a range using type = "range."
12. Time - Pick a time by using type = "time."
13. Url - URL input type used for the web address. Use one or more attributes using type = "url"
14. Week - Pick a week by using type = "week."

Briefly explain various page structure elements in HTML5.

**Answer:** Following are the various page structure elements available in HTML5:

* <article> - Represents a set of information on a web page
* <aside> - Represents the sidebar of a web page
* <footer> - Represents the footer section of a web page
* <header> - Represents the header section of a web page
* <nav> - Represents the navigational elements of a web page
* <section> - Represents the set of instructions used inside an article block for defining the basic structure of a web page

**What are the useful API in HTML5?**

**Answer:**Some of the useful APIs in HTML5 are:

* **Fetch:** Fetch has made Http requests easier than it was with XMLHttpRequest.
* **Battery status:** checks the battery status of the device.
* **Geolocation:** tells the device location.
* **Clipboard:**copy the contents to the clipboard.
* **Forms:** new types have been added for validation and rendering.
* **Drag and drop:** easily drag and drop items in the app.
* **Screen orientation:** Checks the device’s screen orientation.
* **Web audio:**Process audio on the client-side.
* **Internalization:** International formatting and string comparison.
* **Web sockets:** real-time communication between server and client.