



## Session 11

# HTML5 Video





## Session Overview

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In this session, you will be able to:

- Use the *video* element in HTML5
- Use various attributes in the *video* element
- Convert video files in the required format
- Classify browsers that support the *video* element

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## Video Element in HTML5

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- The `<video>` element is a new feature added in HTML5.
- The user can use the `<video>` element for embedding the video content on the Web page.
- The easiest way to specify the video is by using the `src` attribute, which gives the URL of the video file to be used.
- Suppose, if the browser does not support the `<video>` element, then the content between the start and end tag is displayed on the browser.

# Video Element in HTML5

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*<video> Element*

## Video Tag Attributes

- The HTML5 specification provides a list of attributes that can be used with the `<video>` element.

Video Attributes	Description
<code>autoplay</code>	It specifies that the browser will start playing the video once it is ready.
<code>muted</code>	It allows to mute the video initially, if the attribute exists.
<code>controls</code>	It allows displaying the controls of the video, if the attribute exists.
<code>loop</code>	It specifies the browser to repeat playing the existing video once more after it gets finished. It accepts a boolean value.
<code>preload</code>	It specifies whether the video should be loaded when the page is loaded.
<code>src</code>	It specifies the location of the video file to be embedded.

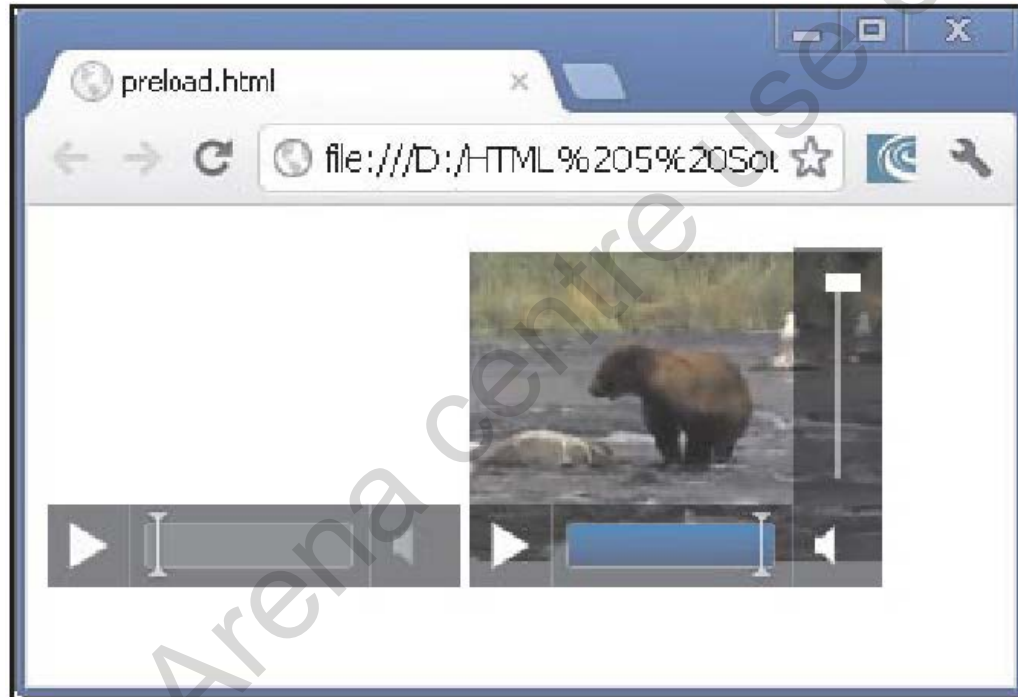
***`<video>` Tag Attributes***

## Preloading the Video

- The `<video>` element comprises a `preload` attribute that allows the browser to download or buffer the video while the Web page containing the video is being downloaded.
- If the video is preloaded, then it decreases the initial delay once the user has started the playback.
- The `preload` attribute has the following values:
  - `none`: This value allows the browser to load only the page. The video will not be downloaded while the page is being loaded.
  - `metadata`: This value allows the browser to load the metadata when the page is being loaded.
  - `auto`: This is the default behavior as it allows the browser to download the video when the page is loaded.

## Preloading the Video

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*Effect of None and Metadata Values*





## Setting the Video Size

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- The user can specify the size of video with the height and width attributes of the `<video>` element.
- If these attributes are not provided, then the browser sets the size with the key dimensions of the video to be embedded.
- This will result in changing the page layout as the Web page is adjusted to accommodate the video.

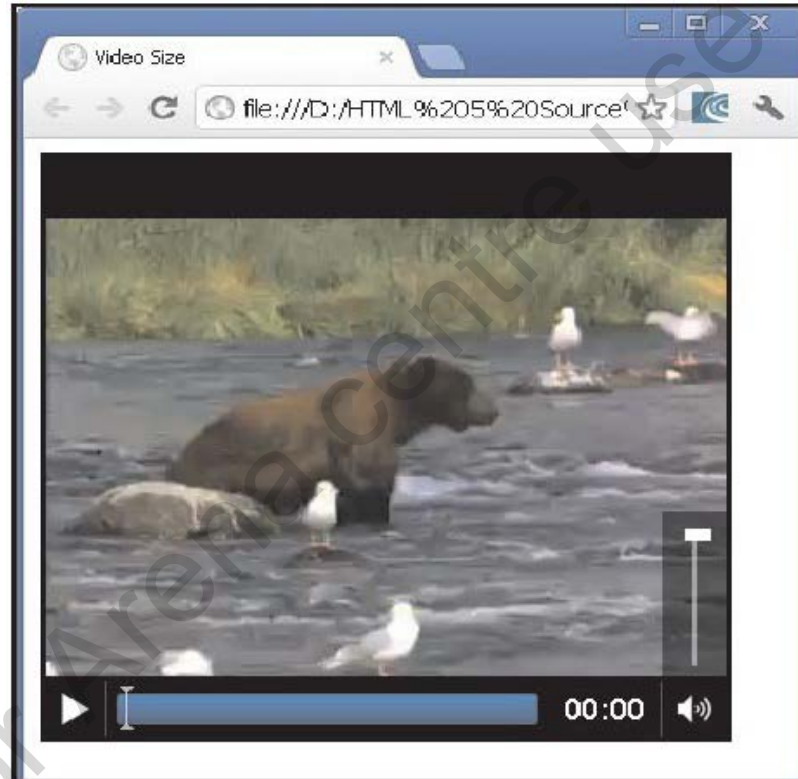
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## Setting the Video Size

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*Width, Height, and Style Effects*



## Converting Video Files

- The following are some of the video formats supported by browsers:
  - Ogg/Theora: This is an open source, royalty-free, and patent-free format available. This format is supported by browsers such as Opera, Chrome, and Firefox.
  - WebM: This is another royalty-free and patent-free format sponsored by Google. This format is supported by browsers such as Opera, Chrome, and Firefox.
  - H.264/MP4: H.264 or MP4 formats are supported by iPhone and Google Android devices. A simple way to encode H.264 format is by using the HandBrake.
  - Micro Video Controller: This converter creates all files that the user requires for HTML5 `<video>` element and works on cross browser.





## Accessibility for Video Elements

Following is a list of browsers and their respective accessibility support to the `<video>` elements:

- Firefox: It cannot interact with individual controls.
- Opera: It offers only keyboard support.
- Internet Explorer 9 (IE 9): It does not allow individual controls to interact with the keyboard.





## Non-Supporting Browsers

- Browsers such as Firefox, IE9, Chrome, Opera, and Safari support the `<video>` elements.
- Internet Explorer 8 and earlier versions do not support it.

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## Summary

- The user can use the `<video>` element for embedding the video content on the Web page.
- Various attributes of the HTML5 specification includes autoplay, muted, controls, loop, preload, height, width, and src.
- Formats such as Ogg and WebM are royalty-free and patent-free formats and are supported by Opera, Chrome, and Firefox.
- In case of Micro Video Controller, it creates all files that the user requires for HTML5 `<video>` element and works on cross browser.
- Browsers such as Firefox, IE9, Chrome, Opera, and Safari support the `<video>` elements whereas; Internet Explorer 8 and earlier versions do not support it.

