**Video Player JavaScript Documentation**

### Elements

- \*\*`video`\*\*: The video element in the HTML document. It is controlled by the script to play, pause, adjust volume, etc.

- \*\*`playPauseBtn`\*\*: Button to toggle between play and pause states.

- \*\*`isChecked`\*\*: Checkbox used to check if the video is playing or paused.

- \*\*`volumeUp`\*\*: Button to increase the volume.

- \*\*`volume`\*\*: Slider input to adjust the volume.

- \*\*`volumeDown`\*\*: Button to decrease the volume.

- \*\*`forward`\*\*: Button to skip forward in the video.

- \*\*`backward`\*\*: Button to rewind the video.

- \*\*`timeLine`\*\*: Slider input to scrub through the video.

- \*\*`videoSpeed`\*\*: Dropdown to adjust video playback speed.

- \*\*`loopVideo`\*\*: Checkbox to toggle video looping.

- \*\*`mute`\*\*: Checkbox to mute/unmute the video.

- \*\*`fullScreen`\*\*: Button to enter full-screen mode.

- \*\*`videoCurrentTime`\*\*: Display element showing the current playback time of the video.

- \*\*`videoDuration`\*\*: Display element showing the total duration of the video.

- \*\*`volumeImage`\*\*: Image element to show the volume or mute icon.

- \*\*`videoLable`\*\*: Label element to trigger play/pause functionality.

- \*\*`loopLabel`\*\*: Label element to indicate whether looping is enabled or not.

- \*\*`menu`\*\*: Button to toggle the visibility of the menu.

- \*\*`menuDiv`\*\*: Container for the menu items.

### Functions

#### `togglePlayPause()`

Toggles the play/pause state of the video. Updates the background image of `playPauseBtn` based on the current state of the video (playing or paused).

#### `toggleVolumeImage()`

Updates the `volumeImage` icon based on the current volume of the video. Changes the icon to indicate whether the video is muted or not.

#### `increaseVolume()`

Increases the video volume by 0.1 (capped at 1). Updates the volume slider and icon accordingly.

#### `decreaseVolume()`

Decreases the video volume by 0.1 (capped at 0). Updates the volume slider and icon accordingly.

#### `toggleMute()`

Toggles the mute state of the video. Updates the `volumeImage` icon based on whether the video is muted or not.

#### `toggleLoop()`

Toggles the loop state of the video. Updates the background color of `loopLabel` to indicate whether looping is enabled.

#### `formatTime(seconds)`

Formats a given time in seconds into a `MM:SS` format.

#### `updateTime()`

Updates the `videoCurrentTime` and `videoDuration` display elements with the current playback time and total duration of the video.

#### `updateSlider(slider)`

Updates the visual appearance of the given slider based on its current value. Changes the background gradient to reflect the slider's value.

#### `move(direction)`

Moves the video playback by 10 seconds in the specified direction (`'forward'` or `'backward'`).

### Event Listeners

- \*\*`videoLable` Click Event\*\*: Toggles play/pause state of the video.

- \*\*`playPauseBtn` Click Event\*\*: Toggles play/pause state of the video.

- \*\*`fullScreen` Click Event\*\*: Enters full-screen mode for the video.

- \*\*`volume` Input Event\*\*: Adjusts video volume based on slider input and updates the slider visual.

- \*\*`mute` Change Event\*\*: Toggles mute state of the video and updates the icon.

- \*\*`volumeUp` Click Event\*\*: Increases the video volume.

- \*\*`volumeDown` Click Event\*\*: Decreases the video volume.

- \*\*`loopVideo` Change Event\*\*: Toggles loop state of the video and updates the loop indicator.

- \*\*`videoSpeed` Change Event\*\*: Adjusts the playback speed of the video.

- \*\*`video` Timeupdate Event\*\*: Updates the time display, slider position, and slider appearance based on current video time.

- \*\*`timeLine` Input Event\*\*: Scrubs through the video based on the slider input.

- \*\*`backward` Click Event\*\*: Rewinds the video by 10 seconds.

- \*\*`forward` Click Event\*\*: Skips forward in the video by 10 seconds.

- \*\*`menu` Click Event\*\*: Toggles the visibility of the menu.

### Additional Notes

- \*\*Volume Range\*\*: Volume is adjusted between 0 and 1, with steps of 0.1.

- \*\*Full Screen\*\*: Uses the Fullscreen API to enter full-screen mode.

- \*\*Looping\*\*: Changes the loop state of the video and visually indicates looping status.

**Presentation:**

**Video Player JavaScript Code**

1. Introduction

Objective: Provide an overview of the JavaScript functionality for a custom video player.

Features: Play/Pause, Volume Control, Mute, Full-Screen, Looping, Playback Speed, Time Scrubbing, etc.

2. Key Components

HTML Elements:

Video Player Element

Control Buttons (Play/Pause, Volume, Full-Screen, etc.)

Display Elements (Current Time, Duration)

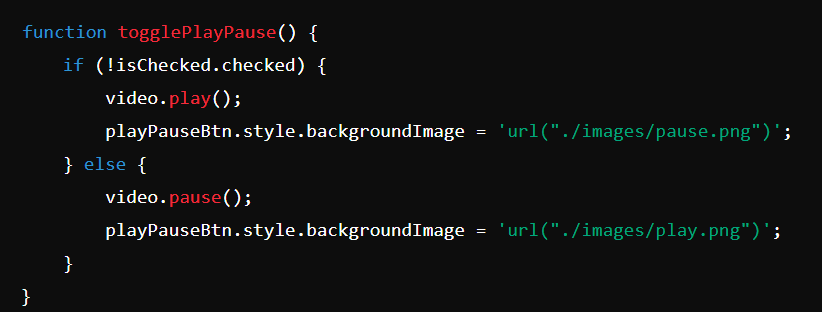
Sliders (Volume, Time Line)

Menu

3. Core Functions

Toggle Play/Pause

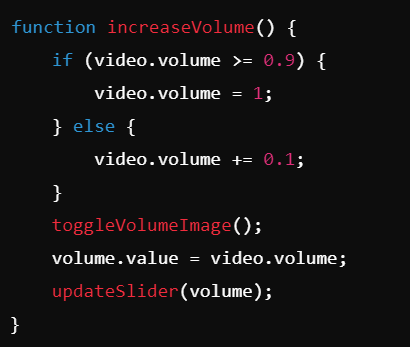
Description: Toggles between playing and pausing the video.

Implementation:

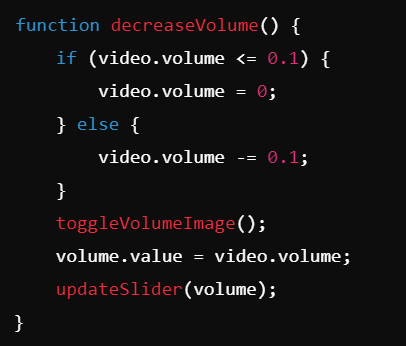
Volume Control

Description: Adjusts volume levels and updates volume icon.

Increase Volume:



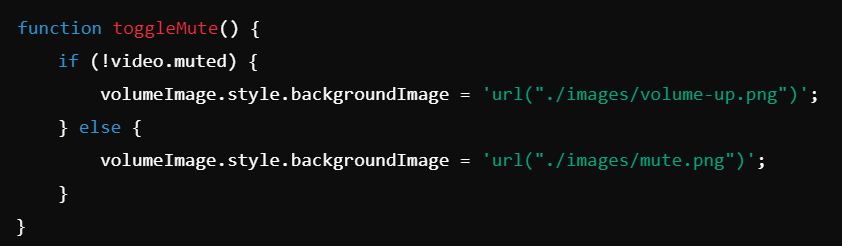
Decrease Volume:



Mute Toggle

Description: Mutes or unmutes the video and updates the icon.

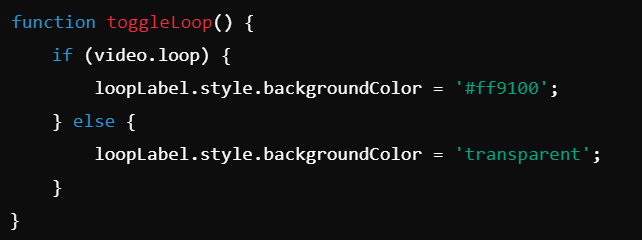
Implementation:



Looping

Description: Toggles video looping and updates the loop indicator.

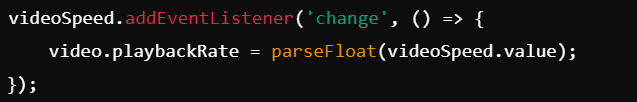
Implementation:



Playback Speed

Description: Adjusts video playback speed.

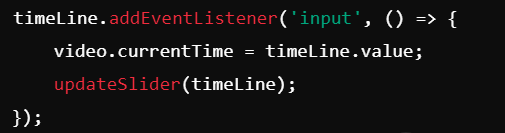
Implementation:



Time Scrubbing

Description: Allows user to scrub through the video using a slider.

Implementation:



4. Event Listeners

Play/Pause Button:

Toggles video playback and updates the button icon.

Volume Controls:

Adjusts volume and updates the icon.

Mute Toggle:

Mutes or unmutes the video and updates the icon.

Full-Screen Button:

Enters full-screen mode.

Loop Toggle:

Enables or disables looping.

Playback Speed:

Changes the playback rate.

Time Line Slider:

Updates the video playback time.

5. User Interface

Volume Control Slider

Play/Pause Button

Full-Screen Toggle

Mute Button

Loop Toggle

Playback Speed Dropdown

Time Line Scrubber

Current Time and Duration Display

6. Conclusion

Summary: Recap of the functionality and features of the custom video player.