

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light greenish-blue. They are set against a dark blue background with faint diagonal lines.

How to capture still images from HTML5 video player



How to capture still images from HTML5 video player

Extracting still images out of the video loaded into HTML5 video element requires two things:

1. HTML5 Video element with the video
2. Canvas that we'll use to draw our HTML5 Video element into

See [drawImage.html](#)



How to capture still images from HTML5 video player

Now we know how to draw video on canvas, but canvas is not an image, so how do we convert canvas into something like an image?

See [extract.html](#)



How to capture still images from HTML5 video player

“Tainted canvases may not be exported”

Because of security, you can't just take any video on any webpage and grab a screenshot out of it using canvas and drawImage, in order for it to work, your video and your canvas should be placed on the same domain, i.e. “same origin policy”

https://developer.mozilla.org/en-US/docs/Web/Security/Same-origin_policy



How to capture still images from HTML5 video player

Solving an issue with precise frame seek.

Sometimes you need to be really specific in terms of choosing some specific frame for image extraction. Seeking for the specific frame using `video.currentTime` might not suit your requirements.

`no-frame-jump.html`



How to capture still images from HTML5 video player

Solution: use `requestVideoFrameCallback`

This will trigger callback as soon as your video reaches next frame.

<https://developer.mozilla.org/en-US/docs/Web/API/HTMLVideoElement/requestVideoFrameCallback>

frame-jump.html



How to capture still images from HTML5 video player

Frequently drawing images extracted from the video on to the canvas makes canvas to behave like a video.

`canvas-as-video.html`



How to capture still images from HTML5 video player

Turning canvas into video stream using: `captureStream`

<https://developer.mozilla.org/en-US/docs/Web/API/HTMLMediaElement/captureStream>

`captureStream.html`



How to capture still images from HTML5 video player

Turning canvas into video stream using: `captureStream`

<https://developer.mozilla.org/en-US/docs/Web/API/HTMLMediaElement/captureStream>

Using this technique you can for instance, draw video on canvas, then draw subtitles on top of that video on the same canvas, then turn it into the live video stream, but now already with subtitles.

`captureStream.html`



How to capture still images from HTML5 video player

MediaRecorder API can be used to record canvas stream:

<https://developer.mozilla.org/en-US/docs/Web/API/MediaRecorder>

recordStream.html



How to capture still images from HTML5 video player

MediaRecorder API can be used to record canvas stream:

<https://developer.mozilla.org/en-US/docs/Web/API/MediaRecorder>

Using this technique you can for instance, draw video on canvas, then draw subtitles on top of that video on the same canvas, then turn it into the live video stream, record this stream and then download it. I.e. convert unsubtitled video into subtitled and allow user to download it.

`recordStream.html`



How to capture still images from HTML5 video player

<https://github.com/angrycoding/html5-canvas-fun>