**DwBP - 8 - Using the iframe Player Implementation**

In the last two tasks, we've written code to meet a couple of use cases where we use the advanced, also called in-page embed, player implementation. This is where the video-js tag and the associated script are together on the HTML page. In this lesson, we're going to use the Standard, or iframe, player implementation. We're going to see what it looks like and discover the advantages and a few disadvantages of using the iframe.

Our use case this time is very similar to something we've done earlier with the Advanced code, and that is we're going to write code to change the video that's playing in the player based upon the clicking a button.

Let’s look at the solution so we know exactly what we are trying to accomplish in this task. The change video button will work whether the first video is started or not. In this case the videos are NOT autoplay. The functionality is the same as task 2, but this time using a different player implementation.

Let's go into the Media module and see how we can get the Standard, also called iframe, player implementation code. In the media module pick a video to publish by clicking on it. Now click Publish and Embed and Web Player. Pick a player to use, then scroll down to the code section.

The Standard code is shown by default. Change any settings, and when we click on the code it is automatically copied to the clipboard. That’s what is involved getting the Standard code.

In task 4 solution we see the Standard player code and a button.

Let’s take a close look at the script block. In this use case the solution is more a JavaScript exercise, not really a Brightcove Player exercise, which can occasionally happen when doing Brightcove Player development.

The high-level solution to the problem is we are going to programmatically **replace** the query string that contains the video ID which determines the video that is loaded into the player. When we do this, the browser will automatically reload the player with the new video contained in the player.

Here is an animation that will make the code easier to understand. In each segment, a line of code from the function will be shown across the top in red, and the results of the code shown below.

First we need a variable to contain the iframe tag so we can alter it. We do that by using JavaScript’s getElementsByTagName method. Our focus should be on the src attribute, as that is what will be manipulated. Note that the quite long address to the player has been replaced by an ellipses, simply to save on screen real estate.

This line of code simply assigns the value of the src attribute to a variable called theSrc. The variable contains the path to the player. Followed by a question mark, which defines the query string, then the ID of the video to be loaded into the player.

The query string is going to be replaced, so this code strips off the query string, using JavaScript’s substring method. We extract the substring starting at the zeroth character, up to, but not including, the location of the question mark.

Here a simple assignment is made to a variable named newVideo. This is the new querystring containing the ID of the new video we want in the player. This will replace the querystring stripped off by the previous line of code.

Now we will build a new value for the src attribute. It consists of the source without a querystring, then added to it the new querystring, which contains the new video ID.

The last step is to assign the new source value to the iframe tag. All the code in essence replaces one querystring with another, thus switching the video in the player.

The browser will know to reload the player once the source has changed. We, thankfully, do not have to force that to happen.

We’ve already seen this works correctly, so let’s move onto a review.

We will take a couple minutes now that we're somewhat familiar with the iframe implementation to talk about some details.

First of all, the advantages of the iframe player.

Number one, there will be no collisions with existing JavaScript and/or CSS that is also on the HTML page. It's possible if we haven't handled our JavaScript in an elegant manner we could have conflicts simply by using the same variable name in two different ways. That cannot happen when using an iframe player.

Another nice thing about the iframe implementation is that it travels nicely to social media apps. So, if we want to share a video in Facebook or on Twitter, it will use the iframe implementation.

There are some times when we have to be careful about using the iframe implementation.

One of those is when code in the containing page needs to listen for, or act upon, player events. For instance, in an earlier task we wanted something to happen, like display some text in the HTML page based upon the loadstart event. That we can't do with an iframe implementation directly, we would have to use something called a plugin to make that happen. BTW, plugins are a great tool, and the next topic in this course

Another area in which to use caution when using the iframe player implementation is when we want to affect our player based on styles from the containing page, we won't be able to do that without some tricky JavaScript.

Lastly, there may be times where it simply won't fit our application logic. For instance, let's say at the end of a video we want to change the HTML page we're on. Well, if we have that logic in the iframe, the page will change, but all that will change is the content in the iframe. We'll be in the new page just in the iframe, and all the existing, surrounding HTML page will be the same.

We see there are good things and bad things about using the iframe player. So how to decide which player implementation to use? Here are some guidelines:

The general rule of thumb is that if we are going to do development around the player, like we are doing in this course, we should use the Advanced implementation. If we are not going to alter the player with code, and/or using the player in social media, then we should use the Standard implementation.

Great, we have accomplished another task. What we've done is changed the video in an iframe player implementation.

In the next video, we're going to use a great feature of Brightcove player call plugins. This provides a best practice way to add functionality to our player.

Hope to see you there. Thank for watching!!