The <audio> element

INTRODUCTION

HTML5 audio is composed of several layers:

- The <audio> element is useful for embedding an audio player into a Web page. It is dedicated for <u>streamed audio</u>. It is very similar to the <video> element, both in its use and in its API.
- The "Web Audio API" is designed for musical applications and for adding sound effects to games. This pure JavaScript API supports manipulation of sound samples (loops, etc.), music synthesis and sound generation (oscillators, etc.). It also comes with a set of predefined sound processing modules (reverb, delay, etc.).

This course will focus on the <audio> element. Check for the HTML5-part 2 course, available on W3Cx, which cover the Web Audio API and other advanced parts of HTML5.

The attributes, event set and JavaScript API of the <audio>element are just a "reduced" version of the ones from the<video> element, and here we will only address the differences and peculiarities.

THE <AUDIO> ELEMENT, BASIC USAGE

The most simple basic example

Online example from JS Bin

Press play to stream the neigh of a horse:



As you can see, the code is very similar to the basic <video>element usage.

```
<html lang="en">
    <body>
      <audio controls="controls">
           <sourcesrc="https://dl.dropboxusercontent.com/u/1631516/horse.ogg"</pre>
                   type="audio/ogg" />
          <sourcesrc="https://dl.dropboxusercontent.com/u/1631516/horse.mp3"</pre>
                   type="audio/mp3" />
          Your browser does not support the audio element.
          Download the audio/video in
     <a href="https://dl.dropboxusercontent.com/u/1631516/horse.ogg">OGG</a>
11.
     or <ahref="https://dl.dropboxusercontent.com/u/1631516/horse.mp3">MP3</a>
12.
         format.
     </audio>
    </body>
    </html>
```

In this example, just as for the <video> element, we used thecontrols attribute in order to render the play/stop, time, volume and progress widgets.

Notice the other similarities: between the <audio>...</audio> tags, we added a text message that is displayed if the Web browser doesn't support the <audio> element, and we used several <source>...</source> elements that link to different audio formats for the same file. The browser will use the first format it recognizes.

Lines 8 - 12: we suggest downloading the audio files if the browser does not support the <audio> element. This is also good practice!

KNOWLEDGE CHECK 2.2.2 (NOT GRADED)

HTML5 comes with several ways of handling audio - what are they?		
	HTML5 can use flash players	
	The WebAudio API	
	The <music> element</music>	
	The <audio> element</audio>	
	The JavaScript sound.js library	
Note: Make sure you select all of the correct options—there may be more than one!		