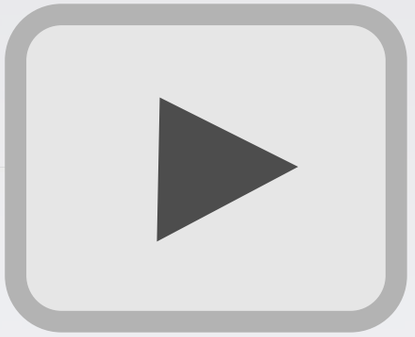
The Accessible Video Interface



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Slides, notes, code and questions

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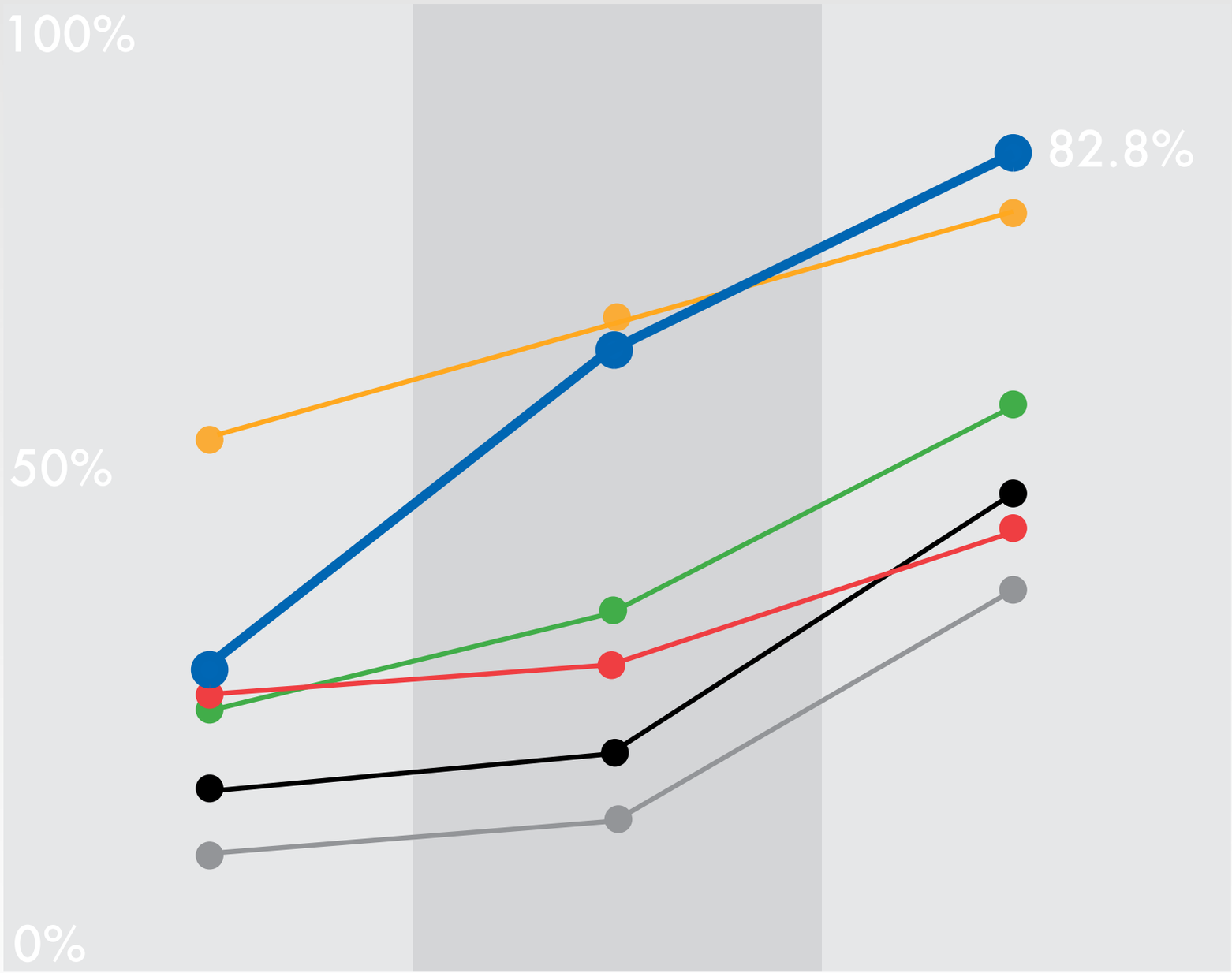
Internet killed the TV star

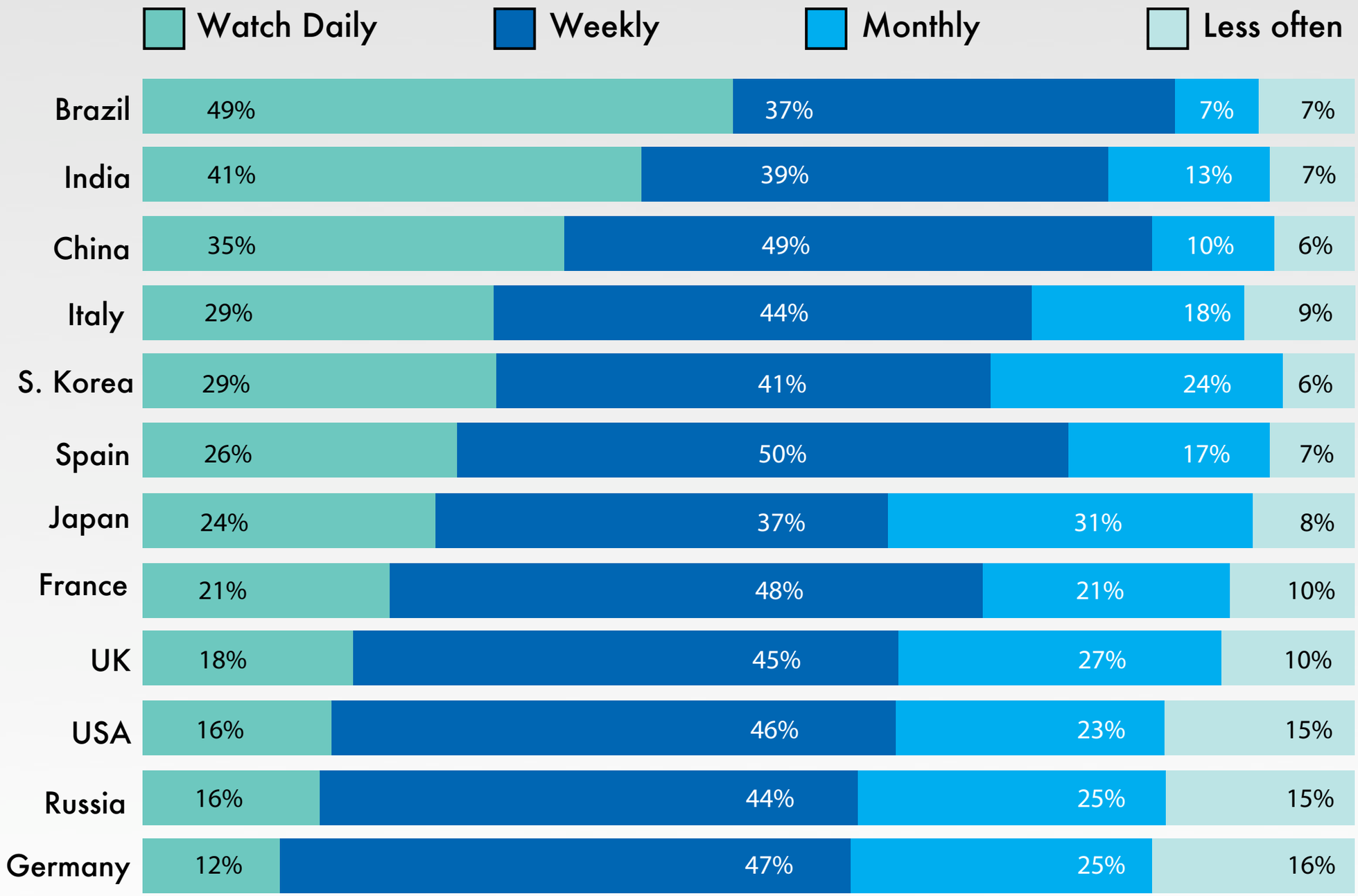
Internet killed the TV star



"Thinking about using the Internet, which of the following have you ever done?"

- Watch video clips online
- Read blogs
- Join a social network
- Download a podcast
- Start a blog
- Subscribe to an RSS feed

Internet killed the TV star



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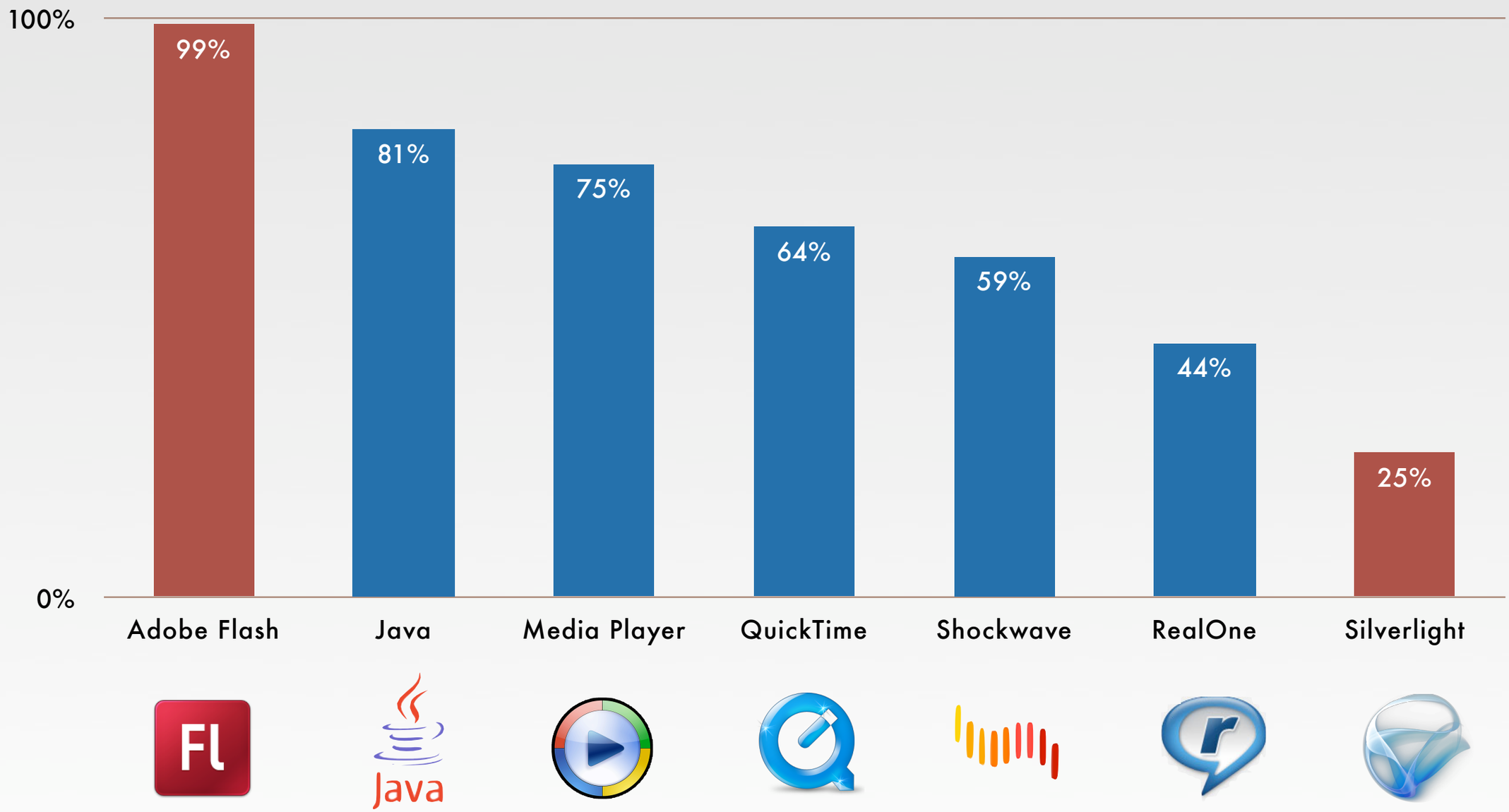

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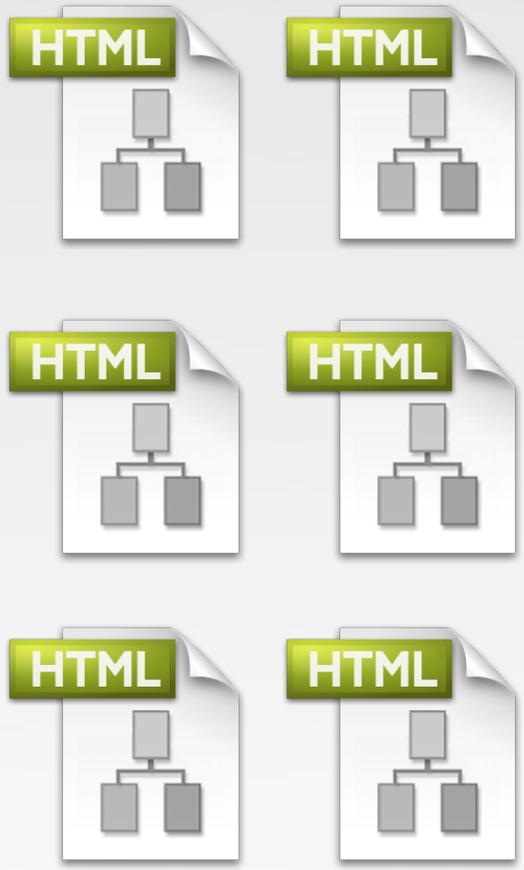
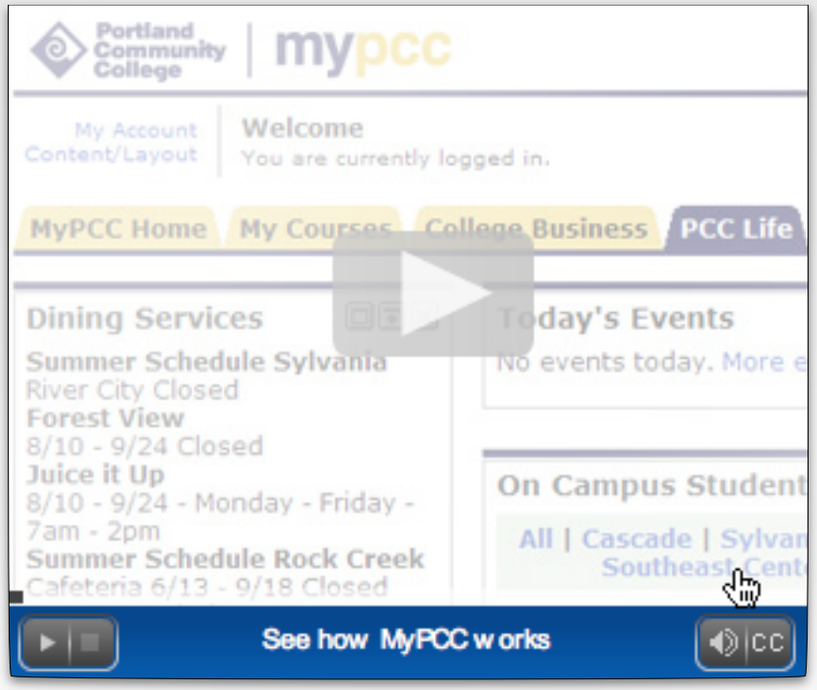




Requirements

Accessible

The degree to which a system can be used by the population.

Sustainable

The ability to maintain a system or process indefinitely.

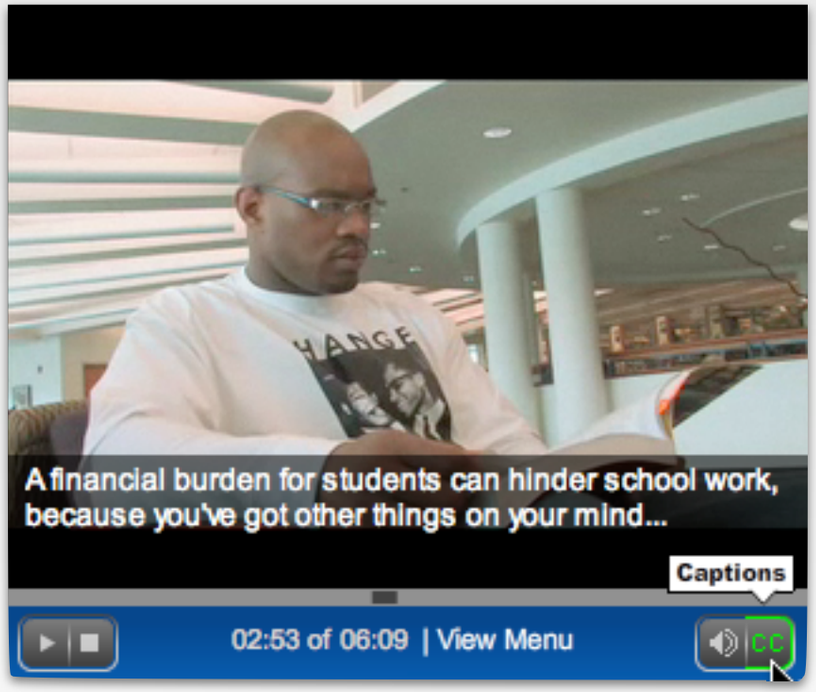
Customizable

The capacity to adapt the system to meet your changing needs.

Requirements: Options

Hosted Video

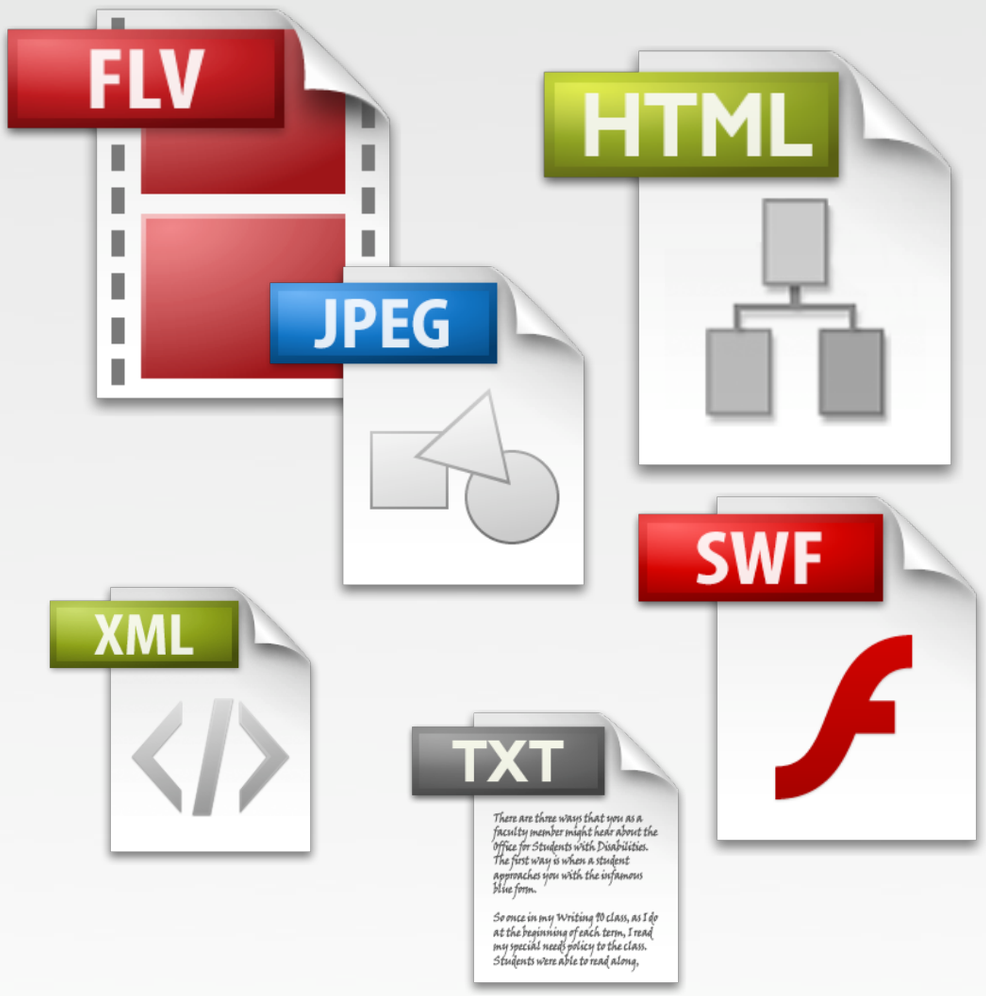
Custom Interface

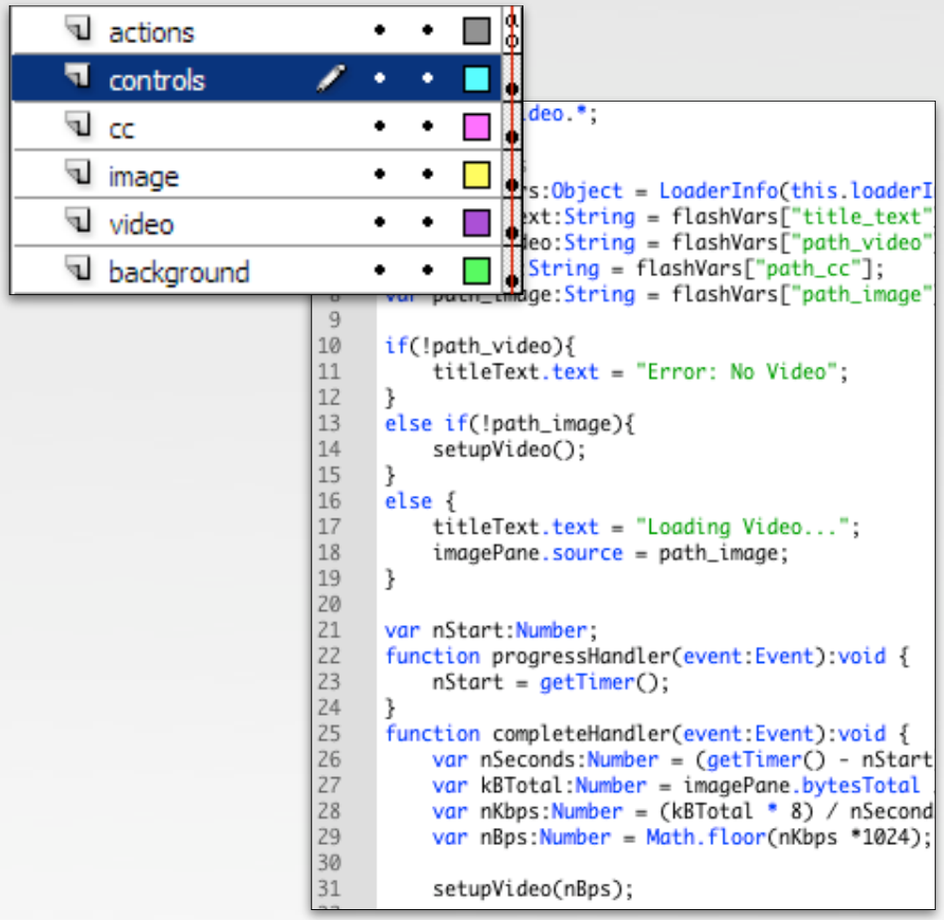


Requirements: Options

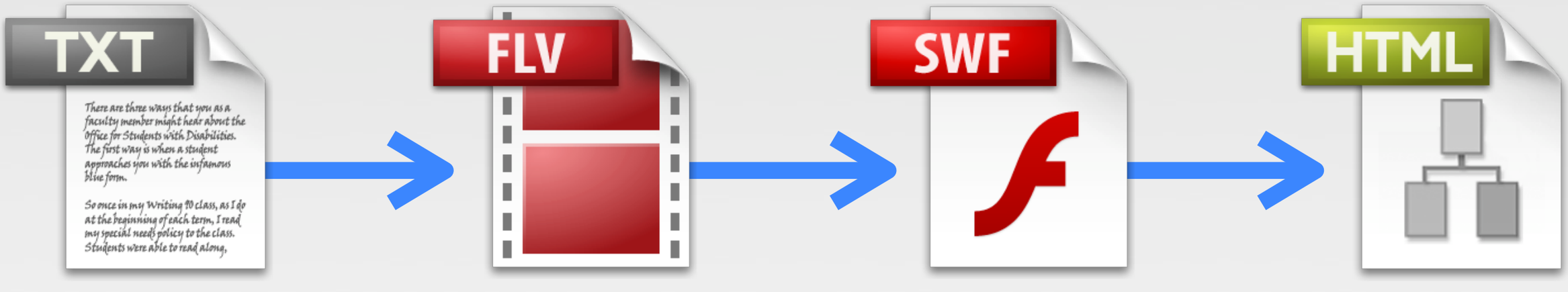
	Hosted Video	Custom Interface
Ease of use	High	Low
Accessible	Med	High
Sustainable	Med	High
Customizable	Low	High

Custom Interface: What's Involved?

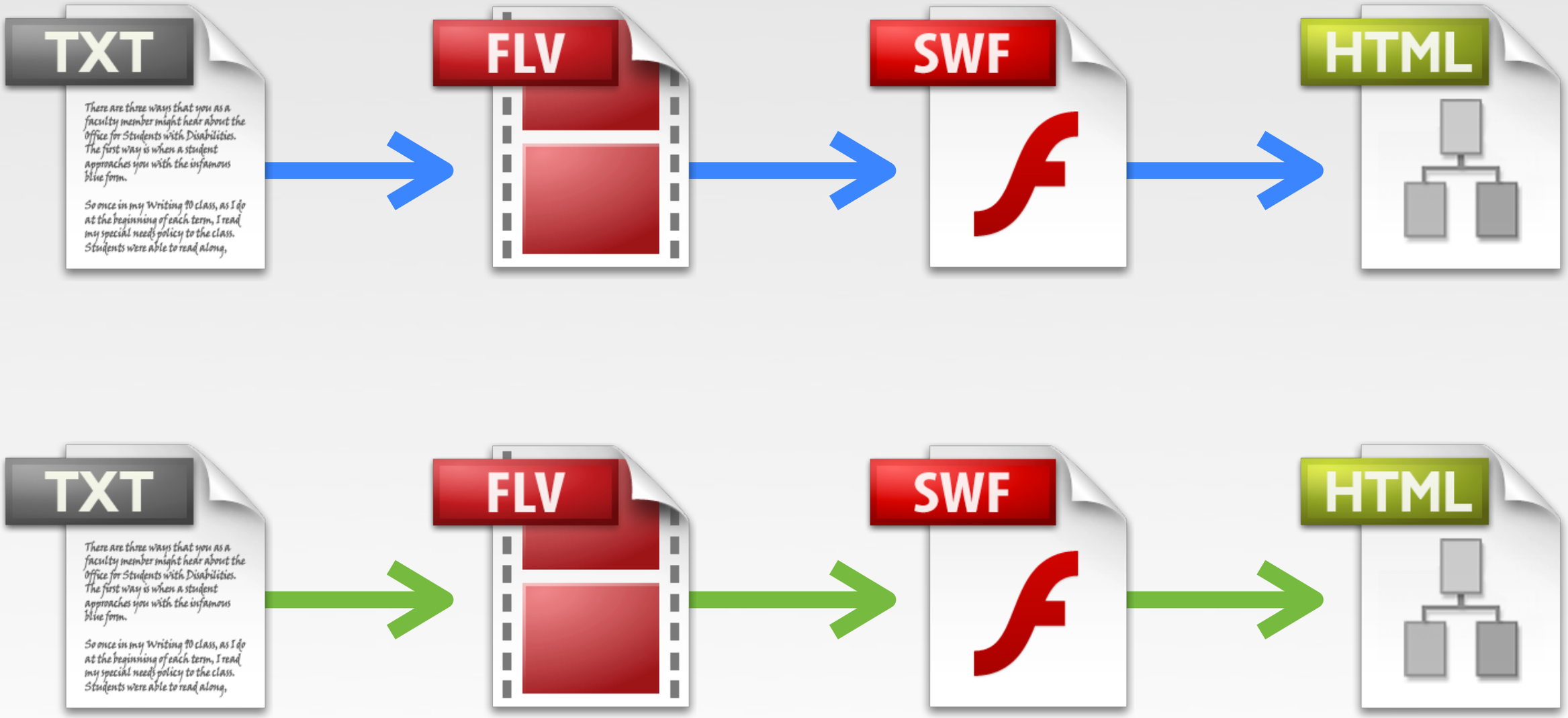




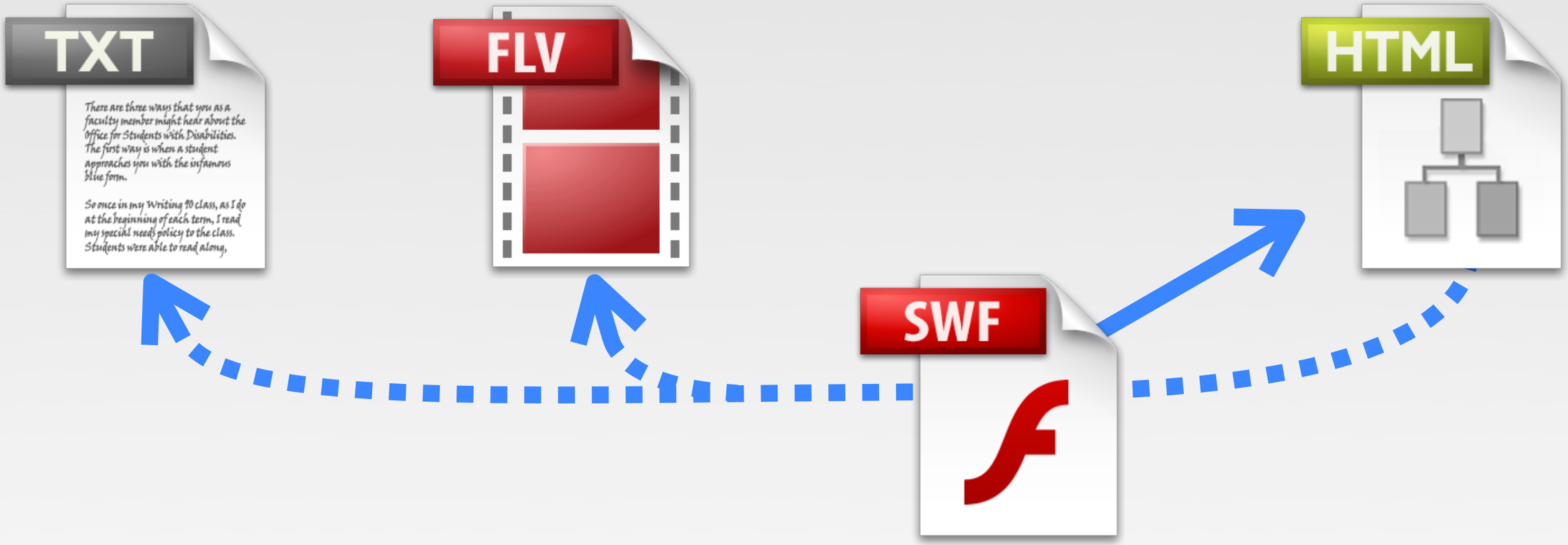
Gather the Pieces:



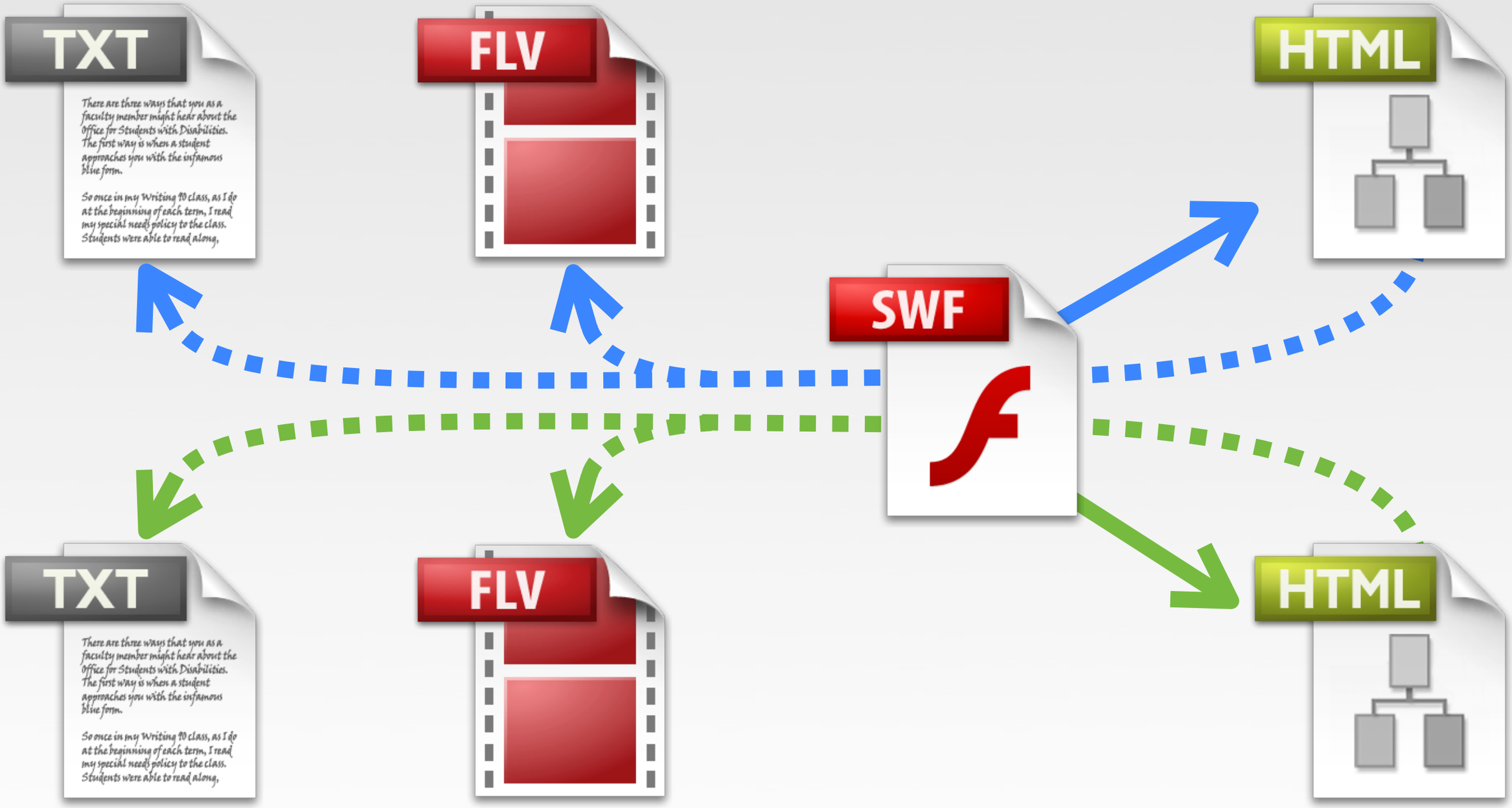
Gather the Pieces:



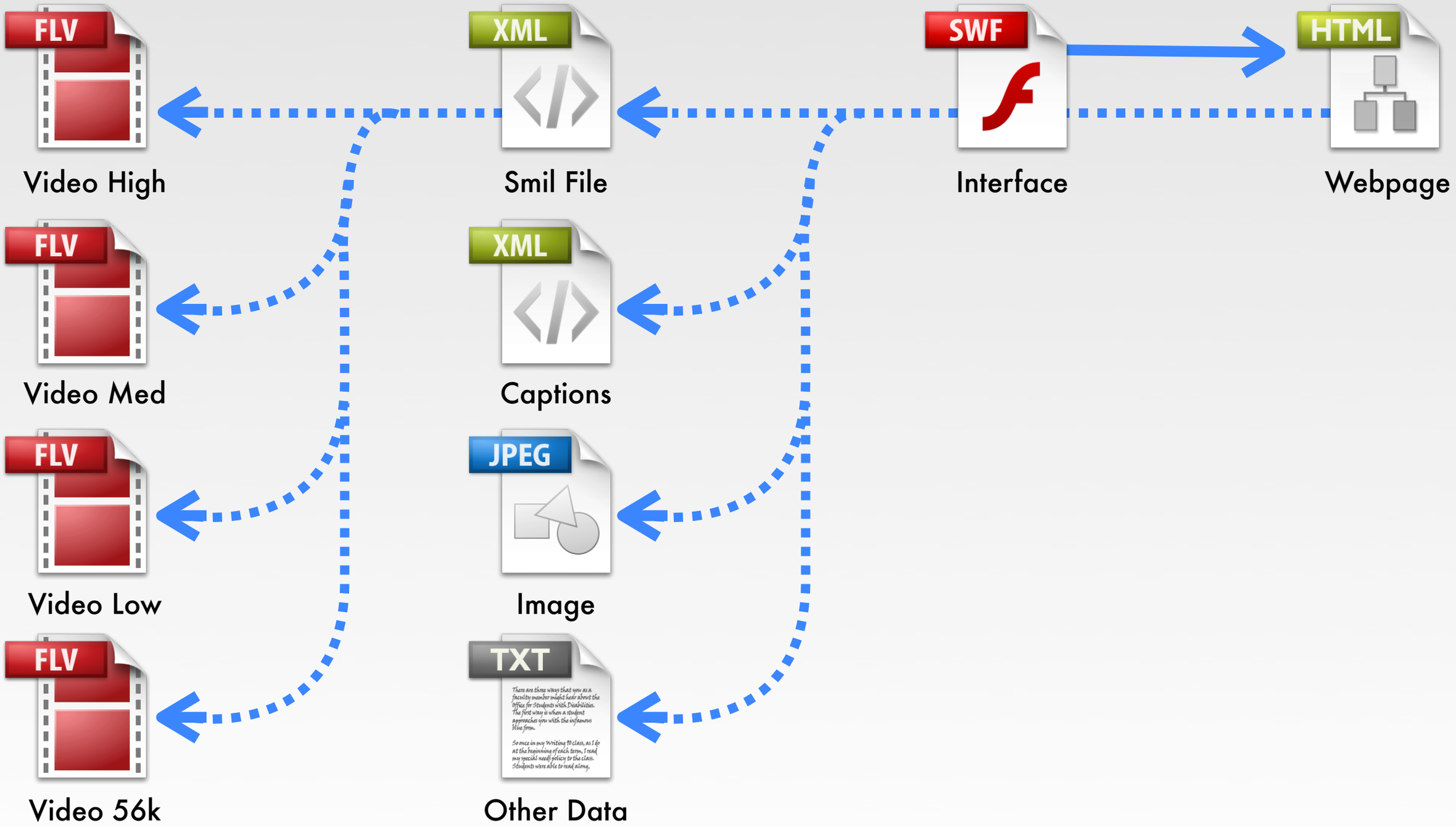
Gather the Pieces: Interface



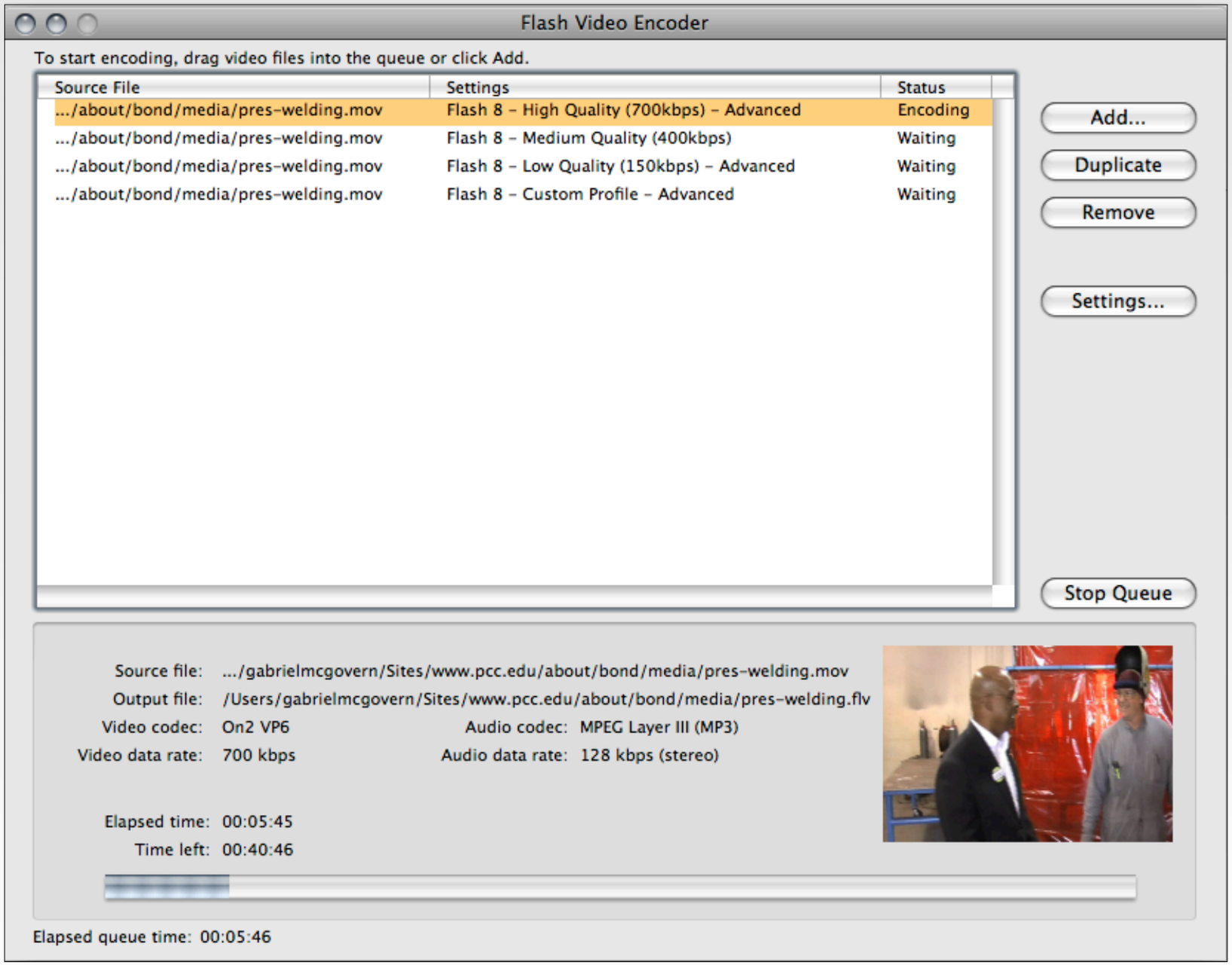
Gather the Pieces: Interface



Gather the Pieces: Interface



Gather the Pieces: Compress the Video

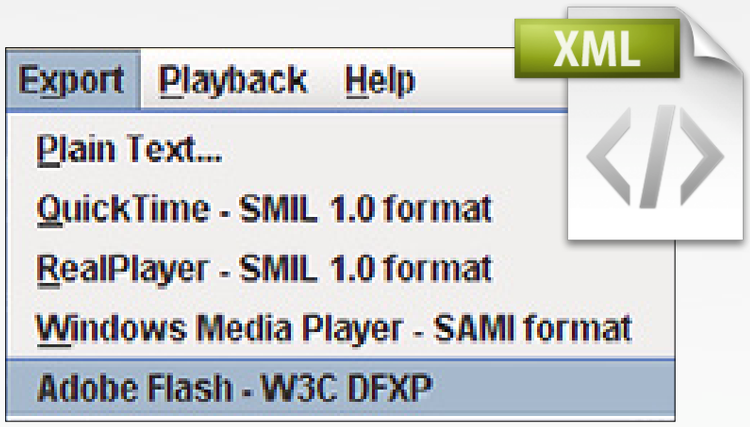


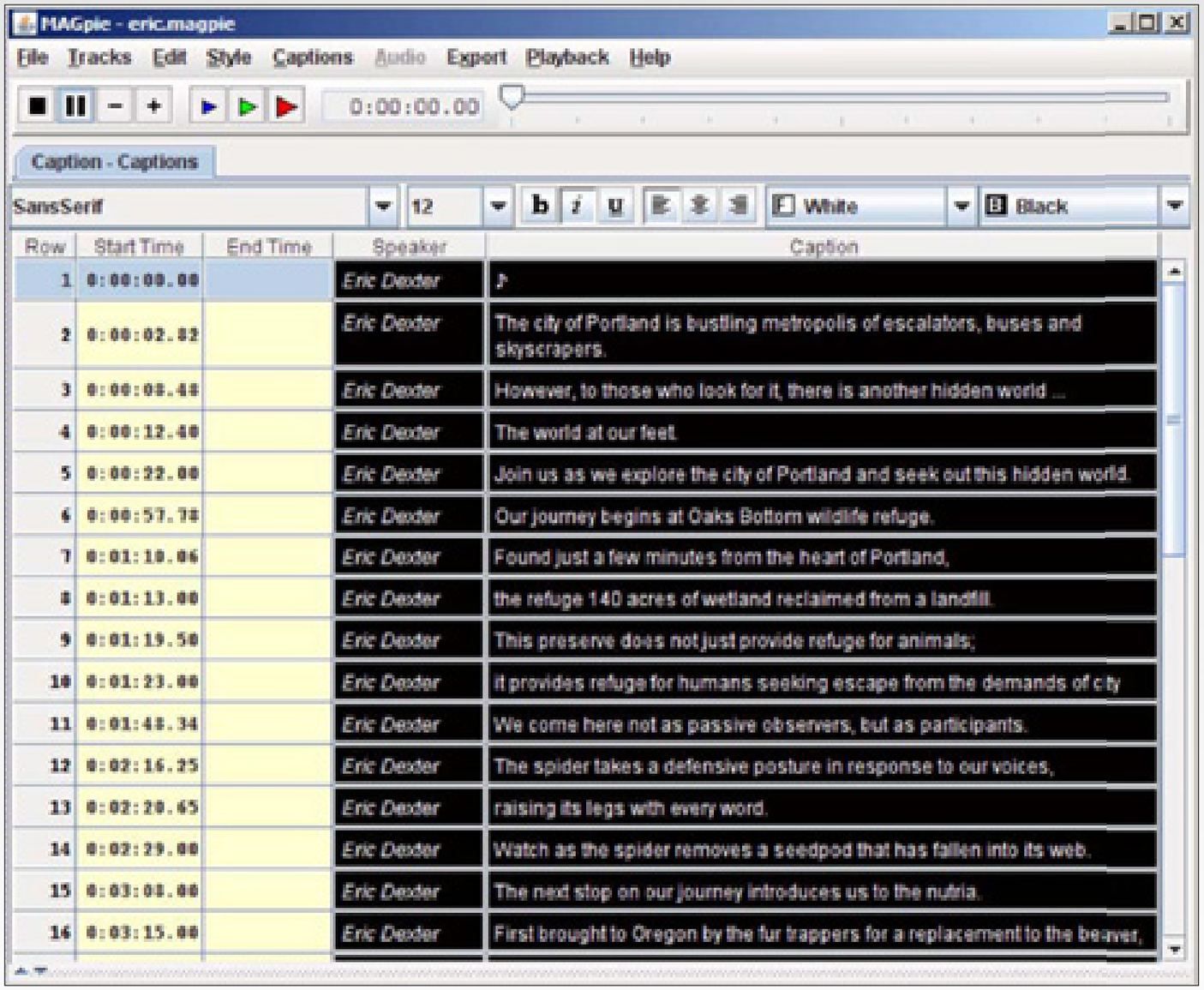
Gather the Pieces: Create the smil.xml

```
<smil>
    <head>
        <!-- path for progressive download -->
        <meta base="/resources/web/documentation/video/media/" />
        <layout>
            <root-layout width="320" height="240" />
        </layout>
    </head>
    <body>
    <switch>
        <!-- Show video: "base+src" When users connection is: "system-bitrate"-->
        <video src="eric-vp6-700kb.flv" system-bitrate="700000" />
        <video src="eric-vp6-400kb.flv" system-bitrate="400000" />
        <video src="eric-vp6-150kb.flv" system-bitrate="150000" />
        <!-- If connection is even slower, just use the following -->
        <ref src="dexter/eric-vp6-56kb.flv" />
    </switch>
    </body>
</smil>
```

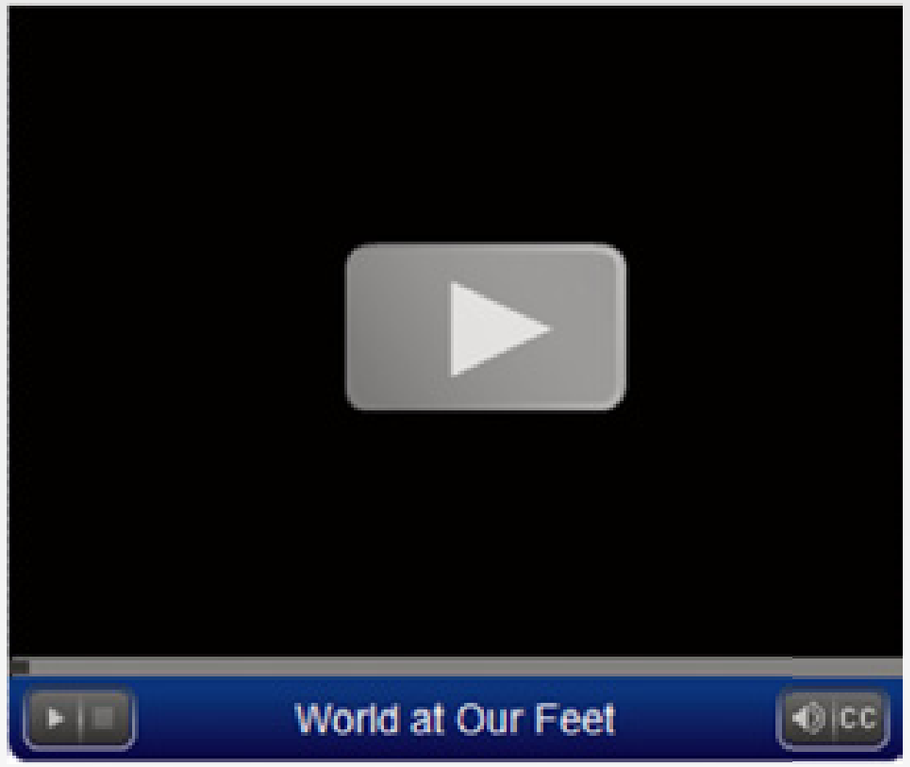
```
<!-- path for streaming -->
<meta base="rtmp://flash-r1.vitalstreamcdn.com/portlandpcc_vitalstream_com/_definst_/public/dexter/" />
```

Gather the Pieces: Now for the Captions

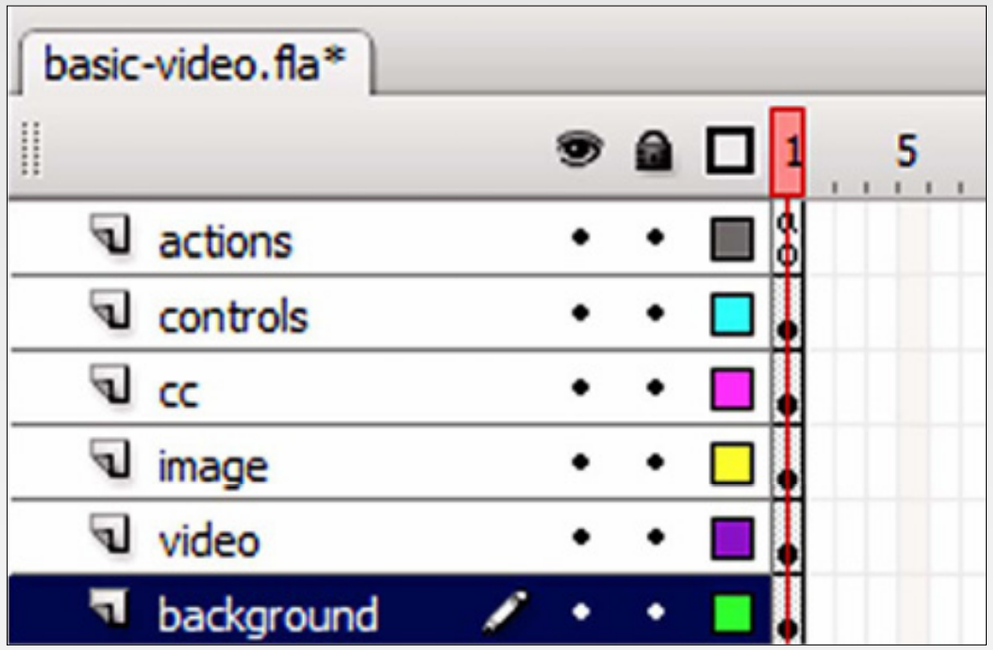


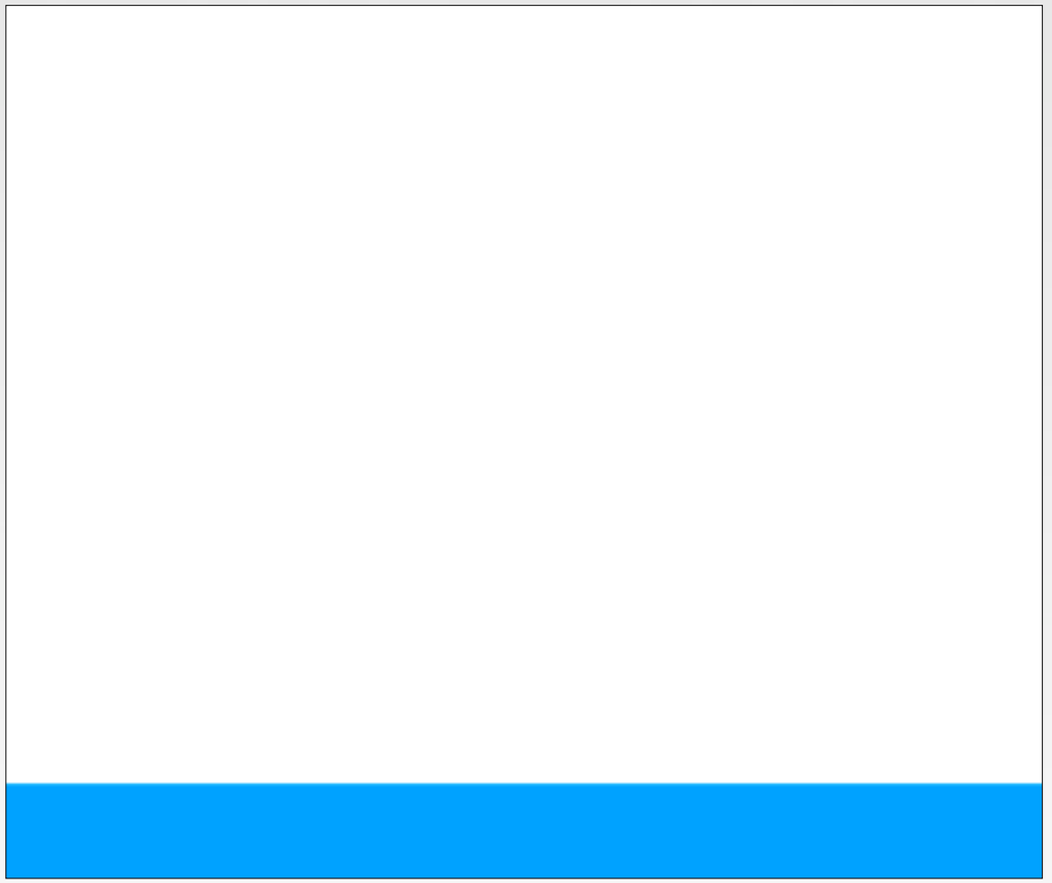


Gather the Pieces: Poster Image



Construct the Interface

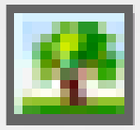




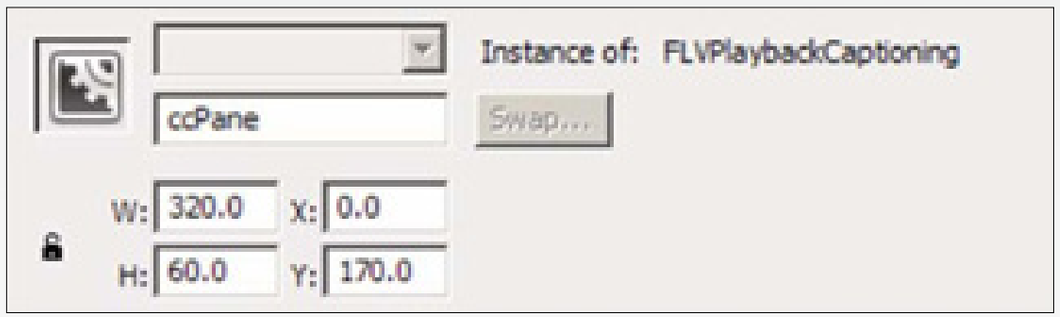
Construct the Interface: Components

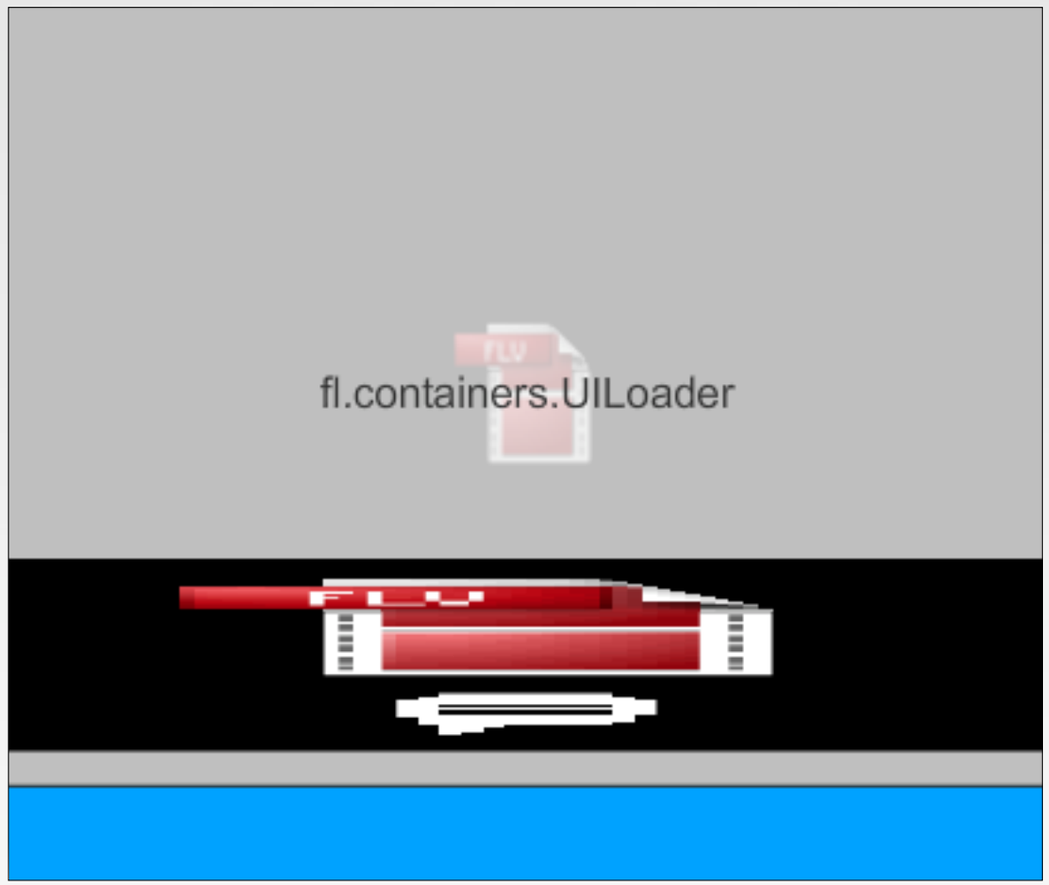
`FLVPlayback`

`FLVPlaybackCaptioning`

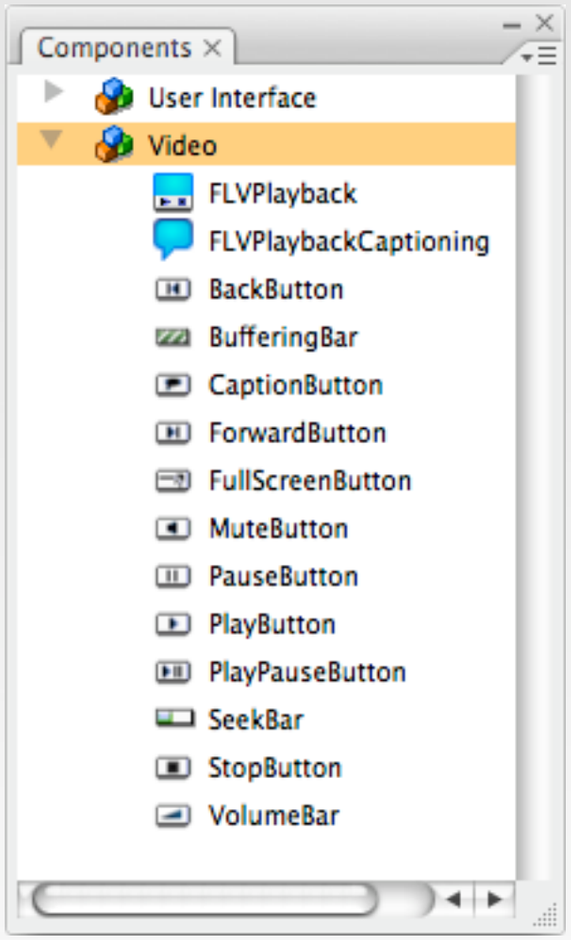


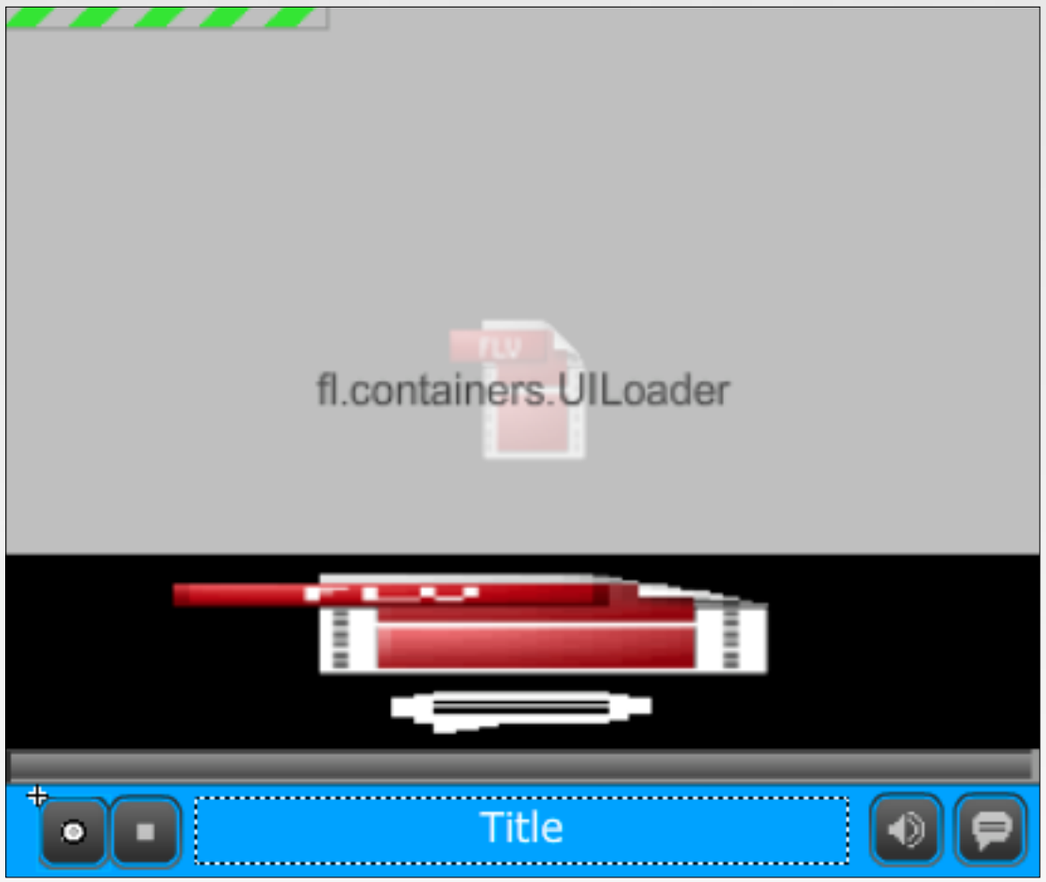
`UILoader`



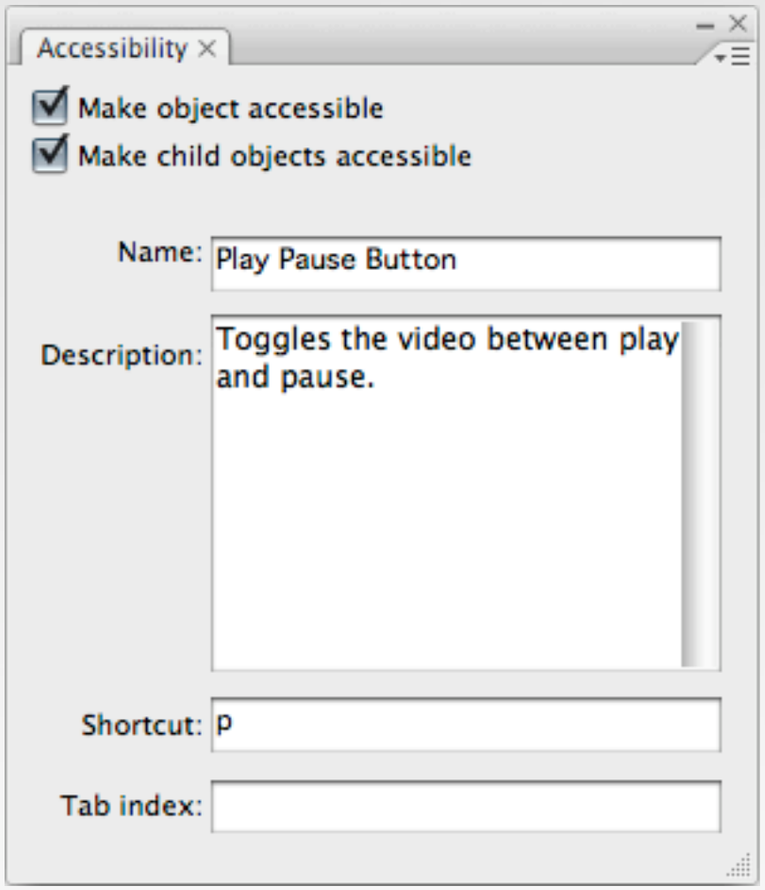


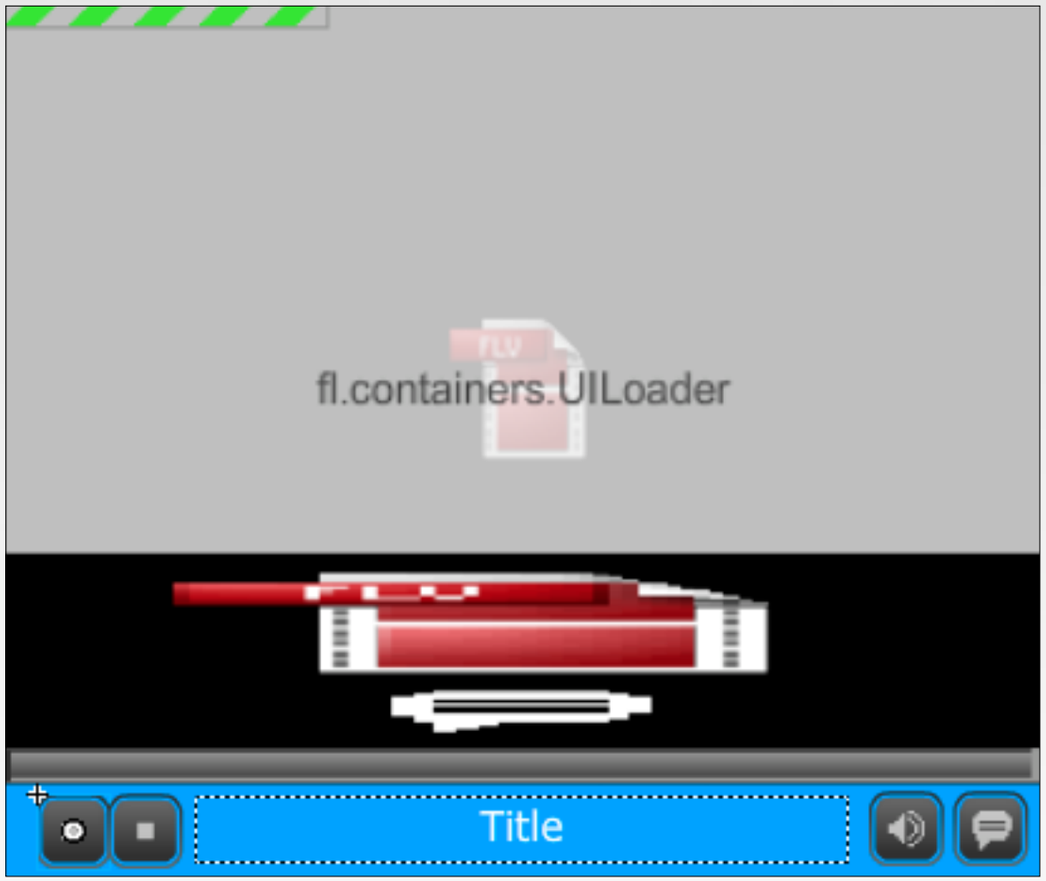
Construct the Interface: Add Controls





Construct the Interface: Accessibility Panel





Construct the Interface: ActionScript

For what the components can't do directly:

Read variables from the html.

Set up the video and handle video events.

Estimate the bandwidth.

Add the access key behaviors.

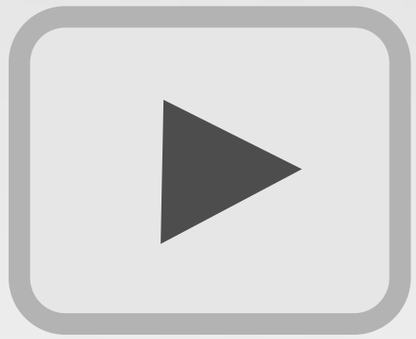
```
72  // Set up access keys
73  function keyPressed(event:KeyboardEvent):v
74      //trace("Key.getCode = " + event.charC
75      switch ( event.charCode ) {
76          case 101:
77              videoPane.stop();
78              break;
79          case 112:
80              if(videoPane.state == "playin
81                  videoPane.pause();
82              }
83              else{
84                  videoPane.play();
85              }
86              break;
87          case 114:
88              videoPane.seek(videoPane.play
89              break;
90      }
91  }
92  stage.addEventListener(KeyboardEvent.KEY_D
```

Beyond the basic

Share and share alike

www.gabrielmcgovern.com

The sample files, source code and more.



Special thanks to:

The National Center for Accessible Media

Geoff Stearns, the author of SWFObject

Robert Reinhardt for his quick help on the GoToAndPlay forum

Everyone on the PCC web team

Screenshots and data:

Chart data from 'Power to the PeoPle SoCIAl MeDIA trACKer' by www.universalmccann.com

www.youtube.com, tv.boingboing.net, www.comedycentral.com

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