



CMPE2000 - ICA09 - JQuery Slideshow

In this exercise you will tweak our SlideShow ica to incorporate some basic jQuery functionality.

Breaking tradition (and to save work), you may start by using netbeans to make a copy of your ica07 folder, then rename the elements appropriately (remember your link for your javascript file).

A screenshot of a web-based application titled "ICA08 - jQuery SlideShow". The main content area displays a space-themed image featuring a Star Trek USS Enterprise and a futuristic flying vehicle. A quote at the top right reads: "EVERY MAN HAS A DREAM, MINE IS TO WALK AMONG THE STARS. WES GILBERT, FARID FASSARD, ANDY POELASTIBUS". At the bottom, there is a toolbar with various controls: a play/pause button, a counter "A Dream : [0]", a dropdown menu "Transition : Fade In / Fade Out", and three radio buttons for "300ms", "900ms", and "2000ms". There is also a copyright notice: "© Copyright 2017 by Λανσεζών Last Modified:10/28/2017 22:00:54".

Start by finding the URL of the Google CDN for the newest version of jQuery - this can be found on the jQuery download page, look down for the CDN area and find the Google address. Now add a script reference to your jQuery library prior to your ica08.js file inclusion.

We will start by changing all getElementById() calls to use standard jQuery selector syntax. Remember to use the prop() method for get and set of these element properties (ie. prop("src")). You should use the val() method for accessing the [Start/Stop] button text rather than the prop() method.

Now since we are using jQuery, remove the body tag onload event assignment. Instead, use the .ready() method of the jQuery document selector. Place your initialization code into the

anonymous function body and everything should work as it did in ica07.

Now remove all your onclick bindings from your buttons, ensuring that all “firing” elements are

appropriately ID'd for selectability. In your ready() handler, bind all your buttons to their appropriate handlers. Include at least 1 handler as an explicit separate function - the rest may all be defined as anonymous functions.

To take better advantage of some of the features of jQuery, let's animate our slideshow a bit. Our showPic() method is (should be) the only place where the src of our image is manipulated, and will be where we will include some basic animation.

Prior to setting the src attribute of your image selector, we want to fadeOut() the current image. This interesting thing here is that an effect call (fade, slide, etc), is an asynchronous (non-blocking) call, if we fade out - set our source - and fade in, we get exactly what an asynchronous setup would be expected to do - It will start the fadeOut sequence, immediately setting our src attribute (thereby changing our image) and then immediately start our fadeIn sequence... hmm.. To mitigate this, we need to ensure the fadeOut completes prior to our src change and fade in,..

You will remember that the fadeOut() method allows for an anonymous callback method to fire upon completion of the fadeOut. This is exactly what we want. Incorporate the anonymous callback of fadeOut(), and in the body set the source and invoke fadeIn(). We now get the fadeOut() completion prior to the altering of the src and fadeIn() starting.

You will have to tweak your initial show of your page so the first image fades in like the transition in your next/previous operations.

Completion to here :Mark : 80%

For added interest (and full marks but optional), you will include a way to allow the user to select the transition effect used. Perhaps radio buttons or a select dropdown. This can be interrogated in your transition handling to invoke the selected effect. And allow the user to specify the slideshow + transition times in a text box/radio/dropdown. Or just think of an interesting enhancement that you consider to be appropriate.

One extra thing to consider. If a transition time is included, the time to move from one pic to another is actually the sum of the transition times... but your timer interval might not be long enough depending on the transition time chosen - so alter your timer interval to always allow for the current transition times and an additional 500ms for viewing the image.

The 300/900/2000 transition times represent "total" (in + out) time, therefore your transition time values for each operation should be half of the total time value.

You may handle transition time changes during an active slideshow either by :

- disabling/re-enabling the time selection during a slideshow OR
- stopping and restarting the timer with the new appropriate transition time value.

Signoff :	
	jQuery selectors wherever possible
	Startup correct with first image
	Back and Next buttons transition properly, wrapping where appropriate
	Auto slideshow button and image iteration correct
	Enhancement of Transition and Time selection with interval adjustment