

Navigation and the Greensocks AS3 Library – Bring the Funk

Oh Actionsript! How long have your tormented me with promise of fame, wealth and sweet animation across all platforms. How even now your grip on the rich user interface is slipping to HTML 5 and Jquery in all their sexiness. I still love you Flash and it' s going to be some time till all the new "fancy" standards compliant solutions can do this.

We won't be getting into true OPP as much as we'll be getting our feet wet with basic Actionsript and controlling our animation though a simple global navigation utilizing basic AS3 and eventually automate the process through tweenMax tweening engine.

* *When in doubt in this singalong, reference the full working, bug-free file, as3-nav-example-final fla*

GOALS

- Acquire an introduction to Actionsript 3.0
- A simple hello to the TweenMax engine
- Set up an intro animation sequence (just a simple one)
- Build a functioning Global Navigation to move between 3 separate Movie Clips that represent 3 sections of our site. Each section should fade in and out

RESOURCES/TUTORIALS

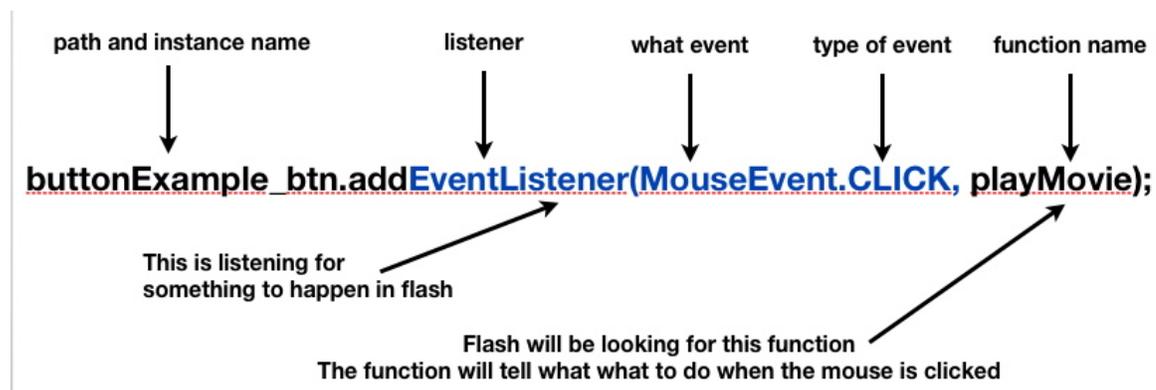
- <http://greensock.com/tweenmax>
- <http://greensock.com/as/greensock-as3.zip>
- <http://greensock.com/get-started-tweening>
- <http://snorkl.tv/category/greensock-tweenlite-tweenmax>
- <http://active.tutsplus.com/sessions/greensock-tweening-platform>

INSTANCE NAME

An instance name is a unique name that you assign to Buttons and Movie Clips in the Properties Panel to talk to them with Actionsript. Here we have the example of a button with the instance name of buttonExample_btn. Please take note of the extension _btn. That will allow flash to give you the proper code hints when you starting working with this specific symbol in Actionsript.

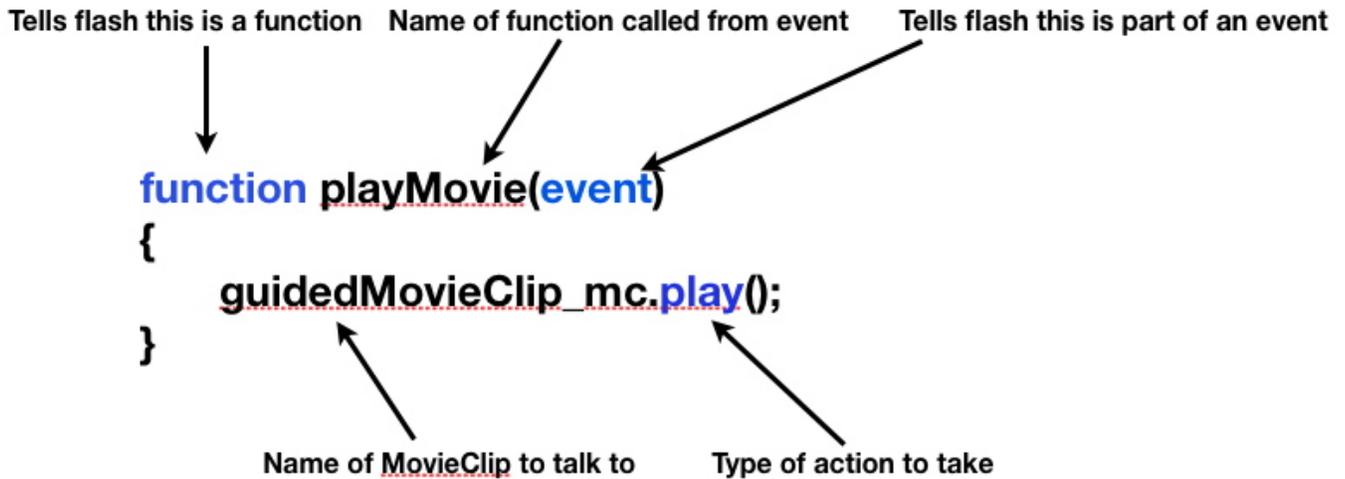
EVENT LISTENERS

Event listeners simply listen for events to happen (like a mouse click) and then tell another bit of Actionsript called an EventHandler/Function to do something, say fade in (or out) your Movie Clip. In this example below buttonExample_btn is our instance name of the button. After a user clicks on that button it will ask the function name playMovie to run.



FUNCTIONS

Functions let you reuse blocks of code. This can save you a lot of time by centralizing the code so that everything can be edited in a single location. It's to a good idea refer to the target of your event without specifying its name, you wish to reuse that listener function with more than one object.



INTRODUCTION TO AS3 AND THE GREENSOCKS PLATFORM – THE CODE

Ok, here's where it gets dirty. There's several ways to go about animating in/out each movie clip. We could go on and on about the various merits of each but I'm not going to. Let's just start with a widely uses set of Actionsript tools from Greensock, TweenMax. This engine gives use a huge leg up in dialing with animation sequences, effects and all around norm pains of Actionsript. I urge you to get to know these sets of tools closely.

WHAT WE'RE GOING TO DO

- Set up TweenMax
- Add event button instance name
- Add eventListner
- Add Functions
- Make our global navigation work!

STEPS

1. Download the AS3 set from Greensock. <http://greensock.com/as/greensock-as3.zip>
2. Download tutorial [AS3 Navigation Introduction ZIP](#) package from blog.
3. Place the "com" folder in AS3 Navigation introduction > fla > folder right next to your .fla file
4. Open the starter fla and open your Actions Window Window > Actions >
5. Let's import the desired Actionsript from Greensocks. Copy/paste this code into your Actions Window.

```
import com.greensock.TweenMax;
import com.greensock.easing.*;
```

- Now let's set the alpha for each Movie Clip on the stage to 0 so we can animate each in as we wish, start with a clean plate.

```
//////////Initial FLA Movie Clip setup//////////
```

```
//autoAlpha to 0 sets visibility and alpha to off; autoAlpha:0 tells flash that any buttons should be invisible and if rolled over not active
```

```
TweenMax.to(portfolio_mc, 0, {autoAlpha:0});  
TweenMax.to(about_mc, 0, {autoAlpha:0});  
TweenMax.to(home_mc, 0, {autoAlpha:0});
```

- Into sequence time (it's like Hammer time but different). Here's where we will animate in our two elements, home_mc and globalNav_mc. We'll be fading in home_mc and physically moving the globalNav_mc. Play close attention to the comments in the Actionscript.
- Add the following Actionscript below the last bit we added:

```
// After the site has loaded this is the sequence of events we want to happen.
```

```
// 1. Fade in home_mc and then wait 3 seconds and move up globalNav_mc
```

```
TweenMax.to(home_mc, 2, {autoAlpha:1});
```

```
//2. Move up the menu so it's visible on the stage.
```

```
new TweenMax(globalNav_mc, 2, {x:276, y:555, delay:3, ease:Quad.easeOut})
```

- Go ahead and publish this mother and take a look (command+return). What you got son? Oh, a fade in of home_mc and globalNav_mc moving on up. Nice. If your answer is no, you may need a drink, go back and look at the working FLA file.

Nav not animating to the proper place? Move it to where you wish it to end up (with your selection tool V) and get the x and y coordinates, copy/paste those into the above globalNav_mc TweenMax like.

- Let's build on our success and add code to make our button work. First we'll add [eventListeners](#), one for each button.

```
//Now we will set up our buttons so we can fade in/out our other sections,  
portfolio_mc, about_mc, home_mc
```

```
// The first thing we'll do is set up "eventListeners" this is simply listening for  
thing to happen on the stage, in our case a mouse clicking a specific button
```

```
globalNav_mc.globalNavPortfolio_btn.addEventListener(MouseEvent.CLICK,portfolio);  
globalNav_mc.globalNavAbout_btn.addEventListener(MouseEvent.CLICK,about);  
globalNav_mc.globalNavHome_btn.addEventListener(MouseEvent.CLICK,home);
```

11. Now we'll need something for the eventListeners to do. Here's where we'll add in a function. Let's start simple and get the hang of it.

```
function portfolio(event){  
  
  trace("Portfolio Clicked! Sweet frog juice it's working!")  
  
};
```

12. Now try it, Command+return and then click the portfolio button. Ah ha! Let's add some read code to that same function. Just type over what you just did with this:

```
function portfolio(event)  
{  
  //set our home_mc to fade out if visible  
  TweenMax.to(home_mc, 1, {autoAlpha:0});  
  
  //set our portfolio_mc to fade in over one second  
  TweenMax.to(portfolio_mc, 1, {autoAlpha:1});  
  
  //set our about_mc to fade out if visible  
  TweenMax.to(about_mc, 1, {autoAlpha:0});  
  
};
```

13. Command+return and then click the portfolio button. Oh Snap. Again, take a close look at the comments above each line of code.

14. So now that we got one working, let's just rinse and repeat for the other 2 buttons that will be needing functions. **Now don't forget you'll need to change the alpha property for each new function block of code.** The section you want to fade in should have a 1 second duration and a setting of autoAlpha:1.

```
function about(event)
{
//set our home_mc to fade out if visible
TweenMax.to(home_mc, 1, {autoAlpha:0});

//set our portfolio_mc to fade out if visible
TweenMax.to(portfolio_mc, 1, {autoAlpha:0});

//set our about_mc to fade in if NOT visible
TweenMax.to(about_mc, 1, {autoAlpha:1});

};

function home(event)
{
//set our home_mc to fade in if NOT visible
TweenMax.to(home_mc, 1, {autoAlpha:1});

//set our portfolio_mc to fade out if visible
TweenMax.to(portfolio_mc, 1, {autoAlpha:0});

//set our about_mc to fade in if NOT visible
TweenMax.to(about_mc, 1, {autoAlpha:0});

};
```

15. Once again, Command+Return to publish your movie. Try clicking on each nav button to fade/in out your desired section. Whew! Don't worry, it gets way harder!