

## Homework Five- Using the Loader Class to Design a Web Site

Designing a site using the Loader class allows you to design large rich-media web sites without having unreasonable download times. You do this by “chunking”, designing so that instead of having one big movie that downloads all at once, you make several small movies that download at different times, and are stacked on top of one another or replace one another. The movie that loads first is called the base movie and all other movies stack on top of that like layers in Photoshop.

In this exercise, we will create an entire 12 “screen” web site from scratch by creating a base movie which uses the Loader class and new URL request method to load section movies. Within three “section” movies we will utilize a “goto” structure to navigate to various frames within each movie.

*Note: All concepts and ActionScript in this assignment are based on exercises in chapter 12 of the required textbook. If you have a hard time understanding the concepts, please review the chapter and see me in lab or office hours.*

Upon completion, you will have the following files:

lastname_firstname fla	section_two fla
main fla	section_three fla
section_one fla	

You will publish each of these into a folder that you either upload to your website or attach to an email to [jdiamond@santarosa.edu](mailto:jdiamond@santarosa.edu)

The final published folder will contain:

lastname_firstname.html	section_two.swf
lastname_firstname.swf	section_three.swf
main.swf	AC_RunActiveContent.js
section_one.swf	

**You can see a demo of this assignment [here](#)**

### ***Before you begin***

1. Your code must be letter perfect. One keystroke error can stop the movie from working.
2. All text fields must be static text fields unless otherwise indicated. While this is the default setting, Flash remembers your last text field setting and uses that for the next text field you create.
3. The names of your section swf, buttons, and labels must match. It is required by the parameters (event.target.name) that appear several times in the ActionScript. **Now let's get started.**

### **Create a new movie (this is your “base” movie)**

1. Create a new **ActionScript 3.0** movie. Save as lastname\_firstname.fl
2. Open the Movie Properties panel and set the dimensions to 780 x 540, choose a background color and close the panel. Leave the fps at 12.
3. Name layer one **actions**.
4. Create two new layers and name them **nav bar** and **background**.

### **Create the mcMain Movie Clip**

1. Select Insert> New Symbol> Create New Symbol> Movie Clip and name it mcMain.
2. Within this movie clip, create a background that includes an area for a banner, logo, navigation, web address, and unique content area. See screen shot here. Notice

only the web address at the top, the navigation on the left, and the home and contact us button areas have content in them. These will be built out in subsequent steps. The remaining areas will be populated



from content in your main and section movies that you will build later in this project.

3. In the Library drag mcMain on to the background layer of the main timeline and lock the layer.

### **Create the mcNav Movie Clip**

1. Select Insert>New Symbol>Create New Symbol>Movie Clip>Name> mcNav.
2. Name the top layer of the mcNav movie clip **actions** and add frames to 40.
3. Create two additional layers and name them from top to bottom, **labels** and **buttons**.
4. In the **labels** layer, create keyframes on frames 10, 20, 30, and a frame on frame 40.
5. With the label layer selected, create frame labels in the Property Inspector:
  - a. Frame 0- start
  - b. Frame 10- section\_one
  - c. Frame 20- section\_two
  - d. Frame 30- section\_three

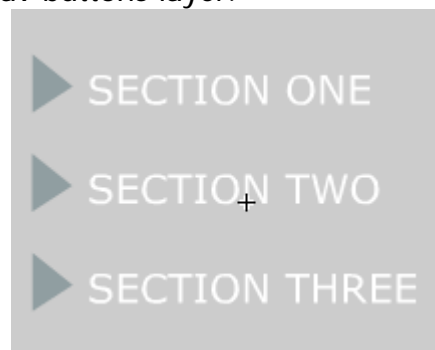
## Create buttons that will nest inside mcNav

1. Select Insert> New Symbol> Create Button>btnSectionOne.
2. Create three layers: **arrow**, **text**, and **hit**.
3. On the **arrow** layer create a small triangle.
4. Select the text tool and **make sure it is set to Static Text for this and all text fields in this project**. On the **text** layer write “section one” in a color that will contrast with the nav region background color of the mcMain movie clip.
5. Insert a keyframe on the over state of the **text** layer and change the text color of “section one”.
6. Insert a frame on the down state of the **text** layer.
7. Select the **hit** layer, draw a rectangle over the text and drag the keyframe to the hit state. It should be only over the hit state. Your button timeline should look like the one here.
8. In the Library select the btnSectionOne, right-click and choose Duplicate two times and rename them btnSectionTwo and btnSectionThree.
9. Edit both symbols and change the text to section two and section three accordingly. Make sure to change the text in both the Up and Over states.



## Bring the buttons into mcNav and complete mcNav

1. Double-click on mcNav in the Library and drag one instance each of btnSectionOne, btnSectionTwo, and btnSectionThree from the Library onto the center of the stage in frame one of the mcNav buttons layer.
2. Assign instance names to the buttons: section\_one, section\_two, and section\_three.
3. Your mcNav stage should look similar to this.
4. Add keyframes to frames 10, 20, and 30 of the button layer.
5. Click on frame 10 of the mcNav timeline, select the **section\_one** button, and in the Property Inspector, choose Tint from the Color menu and change the color of that instance only.
6. Click on frame 20 of the mcNav timeline, select the **section\_two** button, and in the Property Inspector, choose Tint from the Color menu and change the color of that instance only.
7. Click on frame 30 of the mcNav timeline, select the **section\_three** button, and in the Property Inspector, choose Tint from the Color menu and change the color of that instance only.
8. Click on the keyframe in frame 1 of the **actions** layer. Open up the



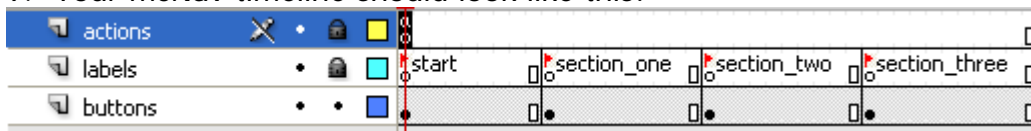
ActionScript (AS) editor and place the lines of ActionScript on the following page:

```
stop();

function buttonClick(event:MouseEvent):void {
    gotoAndStop(event.target.name);
    section_one.enabled = true;
    section_two.enabled = true;
    section_three.enabled = true;
    event.target.enabled = false;
    this.parent.myLoader.load(new URLRequest(event.target.name + ".swf"));
}

section_one.addEventListener(MouseEvent.CLICK, buttonClick);
section_two.addEventListener(MouseEvent.CLICK, buttonClick);
section_three.addEventListener(MouseEvent.CLICK, buttonClick);
```

9. Your mcNav timeline should look like this:



### **Complete the Main Timeline and Test Movie**

1. From the Library drag an instance of the mcNav symbol on to the nav bar layer of the main timeline.
2. Select the keyframe on the Actions layer, right-click and select Actions.
3. With the Actions panel open write the script here:

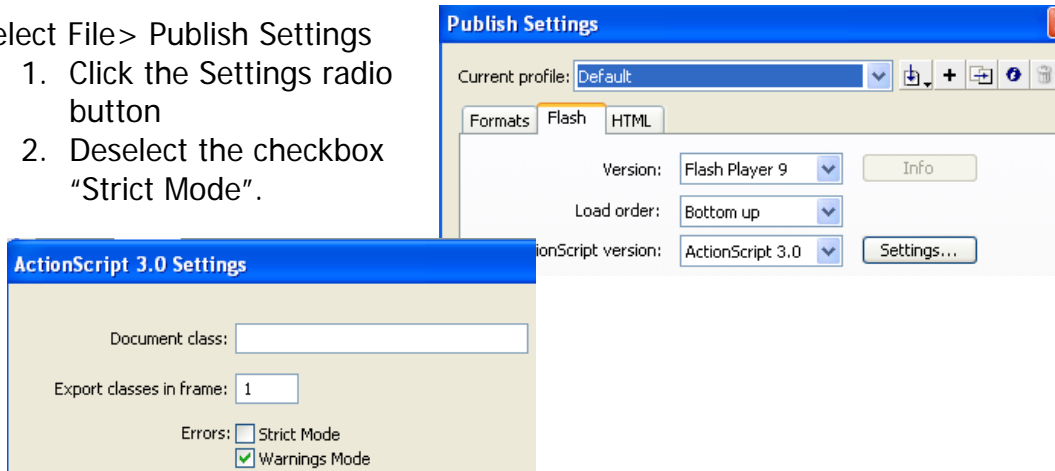
```
1 var myLoader:Loader = new Loader();
2 myLoader.load(new URLRequest("main.swf"));
3 addChild(myLoader);
```

4. Select File> Import> Open External Library and navigate to the Loader\_final.fla file inside the Loader folder of Flash CS3 Professional HOT chapter 12 exercise files (CD).
5. Drag a copy of mcHome and mcContact onto the nav bar layer and position them near the bottom of the screen.
6. Double-click on the instance of mcContact on the nav bar layer of the stage.
7. Right-click on frame one of the actions layer and select Actions
8. Change the email address to your email address and remove , **"\_blank"** in line three and close the Actions panel.
9. Save your file and TEST YOUR MOVIE. It will only work though when you turn off strict mode(see below). *Note: Ignore "Error #2044: Unhandled IOErrorEvent.: text=Error #2035: URL Not Found." This is because you haven't yet built main.swf*

### **Turn off Strict Mode**

If you get compiler errors that you cannot figure out, turning off strict mode will make things easier. This will not fix keystroke errors but does deal with the error "1119: Access of possibly undefined property myLoader through a reference with static type flash.display:DisplayObjectContainer."

- Select File > Publish Settings
1. Click the Settings radio button
  2. Deselect the checkbox "Strict Mode".



### ***Designing the “main” and “section” movies***

In an actual site, creating content is of course one of the largest tasks. In building out this structure however, it is very simple.

1. With your lastname\_firstname.fla still open save the file as main.fla
2. Right-click on frame one of the actions layer and delete the existing script.
3. Replace it with the following script that utilizes the “goto” method to navigate within each section. We will make this functional in subsequent steps.

```

1  stop();
2
3  function goBack(event:MouseEvent):void {
4      if (currentFrame == 1) {
5          gotoAndStop(totalFrames);
6      } else {
7          prevFrame();
8      }
9  }
10
11 function goForward(event:MouseEvent):void {
12     if (currentFrame == totalFrames) {
13         gotoAndStop(1);
14     } else {
15         nextFrame();
16     }
17 }
18 back_btn.addEventListener(MouseEvent.CLICK, goBack);
19 next_btn.addEventListener(MouseEvent.CLICK, goForward);

```

4. Delete the nav bar layer from the main timeline

### ***Creating the content and navigation controls for the movie***

1. Add two layers above background- **banner/logo/buttons** and **content**
2. Create a banner and logo that is unique to this movie and place them in the top areas (see screenshot)

**Main St. logo**

**Welcome to Main Street**

The purpose of this is like departments in a department store. While the name of the store may be Macy's (for example), each department may have a logo or welcome message of its own. This becomes an indicator to the user where they are within your website.

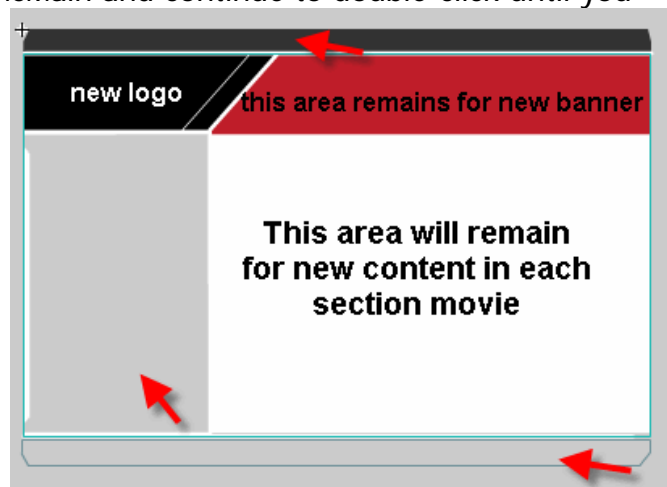
3. On this same layer, place a back and forward button that you either create or use by accessing File> Import> Open External Library> slideshow\_Final fla and drag both btnBack and btnNext.
4. Name the btnBack instance back\_btn.
5. Name the btnNext instance next\_btn.
6. Lock the banner/logo/buttons layer
7. With the frame one of the content layer selected select the text tool and write "This is screen one of the Main movie".
8. Hit the F6 key twice to add two new keyframes.
9. On frame two change the text to "This is screen two of the Main movie".
10. On frame three change the text to "This is screen three of the Main movie".

Obviously, when creating a large website each of these screens would be populated with images, catalog items, etc. but for now we have created a functional structure.

### ***Removing some elements from the mcMain background.***

Our final step in modifying our main and section movies is to remove some navigational elements from the mcMain background so they do not cover up the base movie (lastname\_firstname fla) that is located under the section movies.

1. In the Library double-click on mcMain and continue to double-click until you remove the left sidebar, the bottom bar and the top bar color shapes (see red arrows in image here). The remaining sections, logo, banner and main content area are all that is left of the color shapes from the original mcMain.
2. Go back to the main timeline and your movie should look something like this. Notice the grey area. This is the color of the background of the stage and indicates that there is no content



here. These areas will be populated by the base movie and will show through all section movies.

3. Now test your movie by selecting Control> Test Movie. You should have a fully navigational section movie. **Save your movie.**
4. Open your base movie (lastname\_firstname.fla) select Control>Test Movie. You should see your navigation on your left and your main movie complete with main content, banner and logo. It should look similar to this screen shot. Close your base movie.
5. From this point, it is easy to create the section\_one, two, and three movies
6. Create your remaining section movies
7. With main.fla open save it as section\_one.fla
8. Unlock the banner/logo/button layer, change the logo and banner and re-lock the layer.
9. Select the content layer and change the content on frames one two and three to say "This is screen one of the Section One movie", etc.
10. Save and publish your section\_one.fla file.
11. Then save as section\_two.fla and repeat steps 2 and 3 above.
12. Then save as section\_three.fla and repeat steps 2 and 3 above.



### **Testing your final product**

1. Open your base movie (lastname\_firstname.fla) and select Control> Test Movie. You should have a fully functional website with a total of 12 different screen views reflecting the content inside your main and section movies that are being loaded on top of this base movie.

The final project expands upon these same concepts and adds a pre-loader, a password entry page and sound/video files.

1. Some ideas for movies include:
  - Idea 1- Create a tutorial for first-time readers. Illustrate the letters A, B, and C. Give an illustration and an appropriate sound that announces the letter and/or the name of the object when you click on that letter/illustration.
  - Idea 2- Create an animated resume.
  - Idea 3- Create an online tutorial.
  - Idea 4- Create an online gallery.

## 2. Design Assessment Rubric

- a. Typography: Titles, subheadings, and text should be displayed in sizes that reflect the content hierarchy.
- b. Images/Sounds: All images and sounds should be appropriate to the content of the site. Images should be displayed with appropriate resolution.
- c. Layout: The layout should follow a consistent pattern
- d. Hyperlinks: ALL should function correctly.
- e. Navigation: The site should be easy to navigate so that information can be found easily.
- f. Make sure that you spell check your work.
- g. With menus, back button must send user to the menu rather than an opening animation repeatedly.
- h. All branches of a menu must be functioning.

**No submissions will be accepted past the due date.**

Bring in to class on the final day or email all the working files to me. *Subject: Your name Flash A Final Project*