

Valuable points from Lesson 6

Adobe Flash CS5 Professional Classroom in a Book

You are expected to understand and know how to use/do each of these tasks in Flash CS5, unless otherwise noted below. If you run out of time during lab, then complete the lesson on your own. If you find any of the tasks to be confusing or unclear, please ask about them either during lab or during my office hours.

Lesson 6: Making Buttons

1. Read what the author says about “interactivity” on page 196. Do you agree with him that simple buttons add interactivity?
2. What is a “nonlinear navigation” (p. 196)? How is it related to the actions of the playhead and the Timeline?
3. **Buttons:** What are the four button states? What does each one of the four states *do*? (p. 197)
4. On pp. 197–198, the author invites us to start making a brand-new button symbol—by beginning with **Insert** menu > New Symbol. I personally find this method to cause more difficulty than starting a new symbol on a new layer on the Stage, with all other layers locked (of course). Therefore, this is how *I* would do Steps 1–5 on pp. 197–198:
 - a. Create a new layer in the Timeline.
 - b. Drag the thumbnail from the Library to the Stage (author’s Step 4).
 - c. Select the thumbnail graphic (click it once) and **Convert to Symbol**.
 - d. Name the symbol and select Button (author’s Step 2).
 - e. Double-click the symbol to go into Symbol Editing Mode (with our friend the blue arrow at upper left).
 - f. Then continue with author’s Step 6 (p. 198).

You may do it the author’s way, or my way; I don’t mind. But **TAKE NOTE** that the author’s Step 5 (**set X and Y to 0**) is hugely, massively, *immensely* IMPORTANT *in his method*, and you will suffer a LOT if you miss that step.

5. **Create a new Button Symbol**—use all four states *correctly*.
6. Note that when you set the **X** and **Y** for the first button, if you are following the author’s instructions, it is *very important* that you *do* set 0 for both coordinates! (p. 198, Step 5)
7. Page 198, Step 6: A *faster* way to do it is right-click the Hit **frame** (*below* the word “Hit”) and select “Insert Frame” from the pop-up menu.
8. **Create and use layers** within a Button Symbol. Although the book doesn’t tell you to do it, please *name each layer* in your button symbol (pages 198–199). It’s just better for you when you come back to the Flash project later. NOTE: The author is showing you how to create a rather sophisticated button here. **NOT EVERY BUTTON needs to have layers!** We will go over some SIMPLER button constructions in lecture.
9. Page 198, Step 8: A *faster* way to do it is right-click the Over **frame** (*below* the word “Over”) and select “Insert Blank Keyframe” from the pop-up menu.

10. Page 199, Step 12: A *faster* way to do it is right-click the Down **frame** (*below* the word “Down”) and select “Insert Blank Keyframe” from the pop-up menu.
11. **Add a sound effect** to the Down state of a button (p. 200, Steps 13–14). NOTE that when you drag and drop the sound, you are dropping it *on the Stage* (*not* on the frame).
12. Page 201, Step 15: Here is where you can click the blue arrow—you *must* exit from Symbol Editing Mode.
13. Page 201: How to make an “invisible button”; for a tutorial, see <http://flashjournalism.com/tips/invisiblebutton.htm>
14. **Page 202: How (and why) to duplicate a Button Symbol.** This is awesomely useful and practical. However, it *does* depend on your having built the *first* button very carefully so that all the following steps work properly. NOTE that “duplicate” works differently from “copy” with symbols in Flash. A duplicate is fully *independent* of the original.
15. Pages 202–204: How to **swap a bitmap** (photo or other image) inside any Symbol. This is especially useful when you have *duplicated* something. (It’s not really useful in any other case.)
16. Page 205: Use of **the Align panel** to distribute the buttons in an evenly spaced row, with equal spacing between buttons. I use the Align panel all the time—it is a great help, and much easier than using guides or grids!
17. Page 206, Step 7: Definitely do TEST YOUR MOVIE now. I want you to see that although you have four beautiful buttons that show a difference when you roll over them and make a SOUND when you click (which maybe you cannot hear on the lab computers, because they do not have speakers), they don’t *make anything happen* yet. That’s coming up!
18. **Page 207: How to name each of the button instances.** This is ESSENTIAL for ActionScript to work. A button without an instance name cannot be used by ActionScript. Step 3 on this page provides *a very important tip*.

The “Naming Rules” (page 208) are *all very good*, so please pay attention to them.

Lesson 6: ActionScript and Frame Labels

You must pay close attention to the section about ActionScript. You don’t need to memorize the terms, but as you use ActionScript throughout this course and afterward, you should *refer to this section* to increase your understanding of what you are doing when you write and use ActionScript. (Page 209 is particularly useful!)

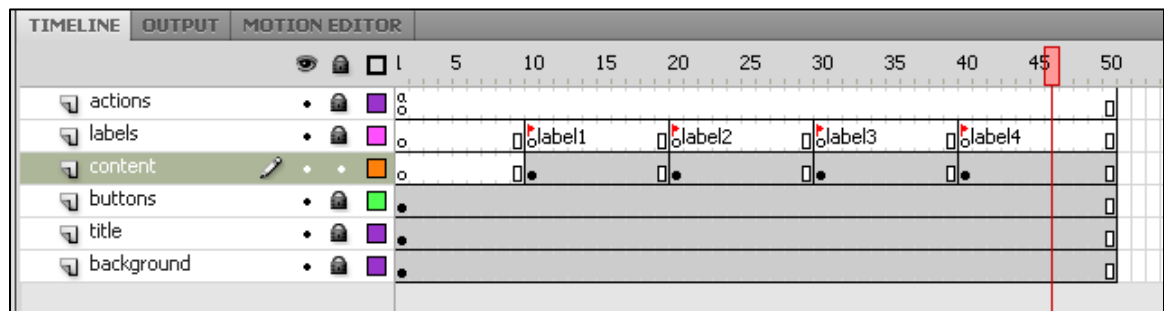
1. Page 209: The note in the margin is important.
2. Pages 209–210: The **list of ActionScript terms** will be useful for you to refer to in the future.
3. Pages 210–211: Syntax is unforgiving, so you need to get it right. One thing to note that the author does not emphasize is the use of SPACES. When ActionScript needs a space, it’s got to be there. If you add a space where none

is needed, ActionScript will not work. Also, the quotation marks work exactly like quotation marks in CSS: **You must use “straight” quotes always, and never “curly” quotes!**

4. Page 211: **Actions panel:** Use of the Actions panel.
5. Page 213: Adding a `stop()`; action on the Timeline. You already know this. But hey, why are we adding it in Frame 1 this time? Don’t worry—*that is correct*. The author explains why here, above Step 1.
6. **Page 214: Create an `EventListener` for a button.**
7. **Page 215: Create a `function` to go with your Listener.** See also http://www.flashjournalism.com/tutorials/buttons_as3_tutorial.html
8. Page 216: Copy and paste, then edit, to create Listeners and functions for each one of the buttons. Be careful as you edit. The buttons will not work if you have typos in this script.
9. Page 217: The “destination keyframes” correspond to the functions that you have already written for each button. One function goes with one destination. There is a different function for each button. This might not make sense to you yet, but it should become clear as the lesson progresses.
10. Pages 219–220: When the author is putting all the “content” into a single layer, I think *he’s making a mistake*. He is going to correct this later in the lesson, but if I were doing it, I would have done this a bit differently.
11. **Page 220: Frame labels are very important;** *much better* to use than frame numbers when jumping around on the Timeline. A frame label **MUST** go on a **keyframe**.

Here is where the author is really taking *a bad shortcut*. A proper Flash developer makes *a new layer* and names it “labels.” She then makes keyframes in that layer and creates the labels *there*, not sharing the keyframes with anything else.

Thus a proper “labels” layer is all white, like this:



It’s also really stupid to name the labels like this: *label1*, *label2*, etc. What do those mean? They are not at all helpful to *you*, the developer. Labels should have meaning. However, make sure that the labels you write *perfectly match* the labels in the button functions! Otherwise, the buttons won’t work.

After you've done all the label stuff (including editing all your **functions**), SAVE and TEST your movie. Click all your buttons.

Lesson 6: A Different Button

Page 223: I strongly recommend that you double-click the “Main Menu” button that the author has provided. Go into Symbol Editing Mode and **see how it was made**. What is one Layer 2? (Use the eyeball to hide/view the layers.) What is in Up, Over, Down, Hit? This button is a good example for you.

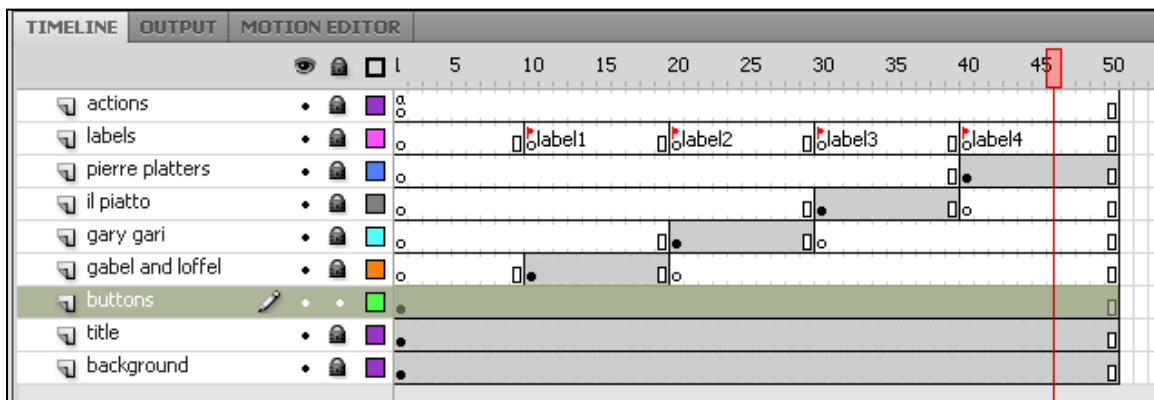
Pages 223–225: **I do not recommend that you use the Code Snippets**. You will never learn how ActionScript works if you depend on this crutch. If you don't learn how ActionScript works, you will not be able to create original work in Flash.

However, *please do* work through this section in the lesson.

Lesson 6: Putting Motion into Each Segment of the Package

Follow the author's instructions (pp. 226–230), but here's where *my* workflow would have produced a better structure in the Timeline.

On page 3 in this handout I showed you how *a typical Flash developer* would handle the frame labels. Below is how a typical Flash developer would have set up the four content segments of this package in the first place:



Please go ahead and follow the author's instructions for pages 226–230 to complete the lesson, but recognize that he has allowed you to take some steps in this project that are NOT best professional practice.

Page 228: What is the difference between *gotoAndStop()*; and *gotoAndPlay()*; —in a function? You must understand this!

Lesson 6: Additional Material

You may stop on page 230 (at “Animated Buttons”) if your brain is tired.

On page 233, make sure you understand numbers 1, 2, 3, 4 and 5.

Mouse Events: page 215 (useful)

Common ActionScript Commands: page 216 (all of these are used very frequently in Flash)

For a wonderful explanation of **Flash AS3 Events** and the things associated with them (such as the EventListener), see—

<http://active.tutsplus.com/tutorials/actionscript/a-close-look-at-the-actionscript-30-event-framework/>

My **ActionScript tutorial** for buttons, EventListeners, and functions:

http://www.flashjournalism.com/tutorials/buttons_as3_tutorial.html