CISC 110 Lab 1

In each of Labs 1-6, you will be completing the first portion of your assignment for that week. Once you finish your lab, you will show your work to your TA for 1% of your final mark. Then you can continue working on the rest of your assignment. Some of you may be able to finish your assignment within the lab time, but there is no rush. Your full assignment is due at the start of your next lab; you show your work to your TA for 2% of your final mark (for a total of 3% for each lab/assignment). You are also required to post your assignment in your CISC 110 folder on the Web, so that we can view everyone's assignments.

In this lab, you will be completing the first portion of Assignment 1. You will do this by following the steps in Tutorial 4 in Chapter 1 of your text, with some variations. As will be the case for all of your assignments, you will create two files: the Flash file that contains your multimedia elements and the ActionScript file that contains your ActionScript program.

In your assignment, you will create a tree that grows leaves and then falls (for full description, see the Assignment 1 description). Two buttons will allow the user to determine when the tree grows leaves and when it falls and will display messages in a dynamic text field. In the lab portion, you will create the two buttons, but only make them display the messages. You will also create another text field that will just be a static title.

1. Create a new folder called `Assign1` in your CISC 110 folder. Then create a new ActionScript 3.0 file called `Assign1.fla` and save it in your `Assign1` folder (`Create New | ActionScript 3.0`).
2. Add the Title "Interactive Tree" to the top of the stage, following the steps in *Tutorial 4, Part II, Task 1*, p.36 of Chapter 1 in your text, but with the different title.
3. Add a *Dynamic Text Field for Displaying Messages*, following the steps in *Part II, Task 2*, p. 38. Place the 2nd text field directly under the title to provide more room for the tree. Remember to specify the instance name of the text field as "Output", with a capital O, in Step 3. The ActionScript program will reference this text field by this instance name. In addition, with the Properties Inspector open, select `Embed` and then under `Character Ranges`, select `Uppercase`, `Lowercase`, `Numerals, and Punctuation`. All fonts you use for dynamic text fields must be embedded or they may not display properly. It's best to embed fonts for all text fields, so they will display properly on any computer no matter what font definitions that computer has.

NOTICE that the text tells you to save your file after each step has been successfully completed. ALWAYS do this in your assignments, so that you have a working version to return to if things go very wrong in the next step. ALSO, often save a version in a separate file, so that you have files called V1, V2, etc., multiple versions so that you can return to any one of them if needed.

4. Skip Task 3 and complete *Task 4: The Interactive Buttons*, p. 40.
5. Add the buttons on the stage and give them instance names, so that our ActionScript code will work with them, following the relevant portion of *Part III*, p. 41. Use upper-case and lower-case exactly as shown. Ignore the instructions that refer to the Betty graphic. Place one button on each side of the title to give more room for your tree.
6. Complete *Part IV: Specifying the Document Class*, p. 42, but call the class `Assign1`. This tells your Flash file (`.fla`) to link to your ActionScript file (`.as`).
7. Complete *Part V: The Anatomy of an ActionScript 3.0 Program, Task 1*, p. 44, but call your .as file `Assign1.as`
8. Open the file `bettyApp.as` from Chapter 1, p. 45 of the text, which is one of the source files you downloaded in Lab 0. Alternatively, you can download this one file from the CISC 110 website under Lab 1. Copy and paste all of the code from `bettyApp.as` into your `Assign1.as` file.

Do not be intimidated by all of this code that you don't understand and don't worry if when you read the brief explanation of it in the text, it is overwhelming and confusing! Think of this code as a template. By the end of the course, you will understand everything in this template, but for now you will use the template and only change small parts, as described below. The advantage of working with a template that you don't understand is that your very first program can use buttons and do something interesting.

9. Make the following changes to your `Assign1.as` file. In the two places in the program code where `bettyApp` appears, change that to `Assign1`. Also, change the messages `"Hello World"` and `"Goodbye World"` to `"Hello Tree"` and `"Goodbye Tree"`. Save your changes to your .as file before you run your movie or you will be running the old version.
10. Run your movie and try out the buttons. You're done!

Once you finish your lab, you may leave if you wish, but it's recommended to stay and work on the rest of your assignment in order to be able to ask the TA questions. Also ask questions of each other and share your knowledge!

Lab 1 Marking Scheme (1% of final mark)

Marked out of 5:

2 marks: Two text fields, one static one for the title and one dynamic one, named `Output`, for the messages

1 mark: ActionScript file, bettyAp.as, modified to be called Assign1.as (file name change and two name changes within file)

2 marks: Two buttons, one that causes the message "Hello Tree" to be displayed and one that causes the message "Goodbye Tree" to be displayed