

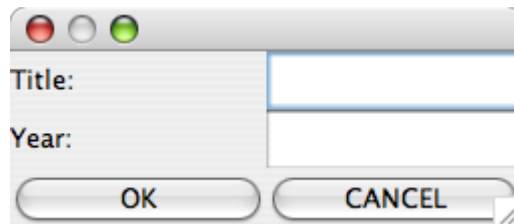
Lab Exercise #6  
*Dialog Boxes*  
Computer Science 2334

Group #: \_\_\_\_\_ Section #: \_\_\_\_\_  
Members: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Learning Objectives:*

- Understand how to create a dialog box based on the *JDialog* class.
- Understand the interface provided by the dialog class that allows the class using the dialog to know what operations a user performed.
- Understand how a data model is used to transfer information between the dialog and the main program.

The program you will work with implements a simple inventory system for a movie collection. The user can add and remove movies from the collection. For this exercise, you will complete the functionality of adding a new movie to the collection by completing the implementation of a dialog box.



*Instructions:*

This lab exercise requires a laptop with an Internet connection. Once you have completed the exercises in this document, your group will submit it for grading. All group members should legibly write their names at the top of this lab handout.

***Make sure you read this handout and look at all of the source code posted on the class website for this lab exercise before you begin working.***

1. Review the source code posted on the class website. Pay close attention to the *MovieGUI* and *MovieDialog* classes. The *Movie* class is the data model for the dialog and you will use methods provided in this class to complete the *MovieDialog* class.
  
2. Read through the source code of the *MovieDialog* class and note the comments provided in the source code that give hints as to what needs to be done in the program.

3. Create *JLabels* and *JTextFields* for all of the information stored in the *Movie* class. These components should be added to the *MovieDialog* by calling *add* method of the dialog as shown in the constructor of *MovieDialog*. Note that the code for these components will be similar to the existing code for the OK and CANCEL buttons.

Which components will be referenced to by variables local to the constructor instead of class variables and why?

6. Complete the *actionPerformed()* method of the *MovieDialog* class. If the user clicks on the OK button, this method should save all of the data they entered into the data model of the dialog by using mutator methods provided by the data model. The title "Test" and the year "123" have been provided for testing purposes only -- you will need to use the actual data provided by the user. The data entered for the year of the movie should be an integer, so you will need to use the *parseInt()* method of *Integer* to convert the value input by the user from a *String* to an *int*.

Note that if the user clicks on OK or CANCEL the method will save the user's choice in the *closeOption* class variable, that indicates how they closed the dialog. Finally, the method will call the *dispose()* method of *JDialog*.

7. Compile the lab assignment with your modified *MovieDialog* class. You will not need to modify any class other than the *MovieDialog* class. Make sure that you can enter and remove movies from the inventory using your code.

8. Submit the project archive following the steps given in the **Submission Instructions** by 9:00pm.

9. Turn in this lab handout to your lab instructor.