


*Core Java Course
Java 1.1 Building User
Interface: Dialogs*


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Agenda

- ❖ Homework
- ❖ Dialog Box
- ❖ Modal and Modeless Dialogs
- ❖ File Dialogs
- ❖ Home Assignment


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Dialog Boxes

- ❖ **Dialog Box** - a form containing several UI components (buttons, text fields, choices) that gets activated in order to allow to process user input
- ❖ **Modal** Dialog Boxes prevent access to the remaining application windows until closed
 - Use modal dialog boxes when the application cannot continue until user input is received (File Open Dialog)
- ❖ **Modeless** Dialog Boxes allow to access other application windows, while active
 - Example: Find/Replace dialogs


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Dialog Class

- ❖ Dialog Boxes can be created using Dialog class
 - `Dialog(Frame parent, String title, boolean modalFlg);`
 - Dialog is Modal if `modalFlg == true` and Modeless if `modalFlg == false`
- ❖ **Creating Dialog Boxes**
 - Derive your own dialog subclass
 - In the constructor, set the name of the parent frame, dialog title, and `modalFlg` for the superclass
 - Add controls, event handlers, and set size


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Displaying a Dialog Box

- ❖ To display a dialog box for the first time
 - create dialog box object `db = new MyDlg(this)`
 - display dialog box using `db.show()` method
- ❖ To close a dialog box
 - call `setVisible(false)` method
 - or call `dispose()` method
- ❖ To re-display the same dialog box
 - make sure you use `setVisible(false)` above
 - call `db.show()` method again

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Displaying a Dialog Box (cont.)

- ❖ When the `show()` method is called on a Modeless dialog it returns immediately
- ❖ When the `show()` method is called on Modal dialog it returns only after the dialog is closed

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Exchanging Data with a Dialog Box

- ❖ Create an information exchange object class
- ❖ Add that object as a field to the dialog class
- ❖ Pass another exchange object to the dialog's constructor and initialize all the dialog fields using information stored in it
- ❖ If Ok button was pressed update internal exchange object with information entered by the user
- ❖ After dialog is closed access updated information through the exchange object in the dialog class
- ❖ DialogTest Code Example

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FileDialog Class

- ❖ FileDialog is used for entering and finding file names
- ❖ FileDialog is a subclass of Dialog Class, so all things said about the Dialog Class is applicable
- ❖ A File Dialog Box is always modal (presumably, further processing is impossible until file data is entered)

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FileDialog Class (cont.)

- ❖ FileDialog constructor
 - FileDialog(Frame parent, String title, int mode);
 - mode can be FileDialog.LOAD
 - or FileDialog.SAVE
- ❖ FileDialog methods
 - void setFilenameFilter(FilenameFilter filter);
 - void setDirectory(String dir);
 - void setFile(String file);
 - String getFile();

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FileDialog Class (cont.)

- ❖ FilenameFilter is an interface


```
public interface FilenameFilter
{
    public abstract boolean accept(File dir, String name);
}
```

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Homework Assignment

- ❖ Brake the ShapeBox user interface into two windows
 - the first window (original frame) would host shape drawings
 - the second (a modeless dialog box) would host select shape/resize/move controls
- ❖ Goal: to be able to change options and see drawing simultaneously

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