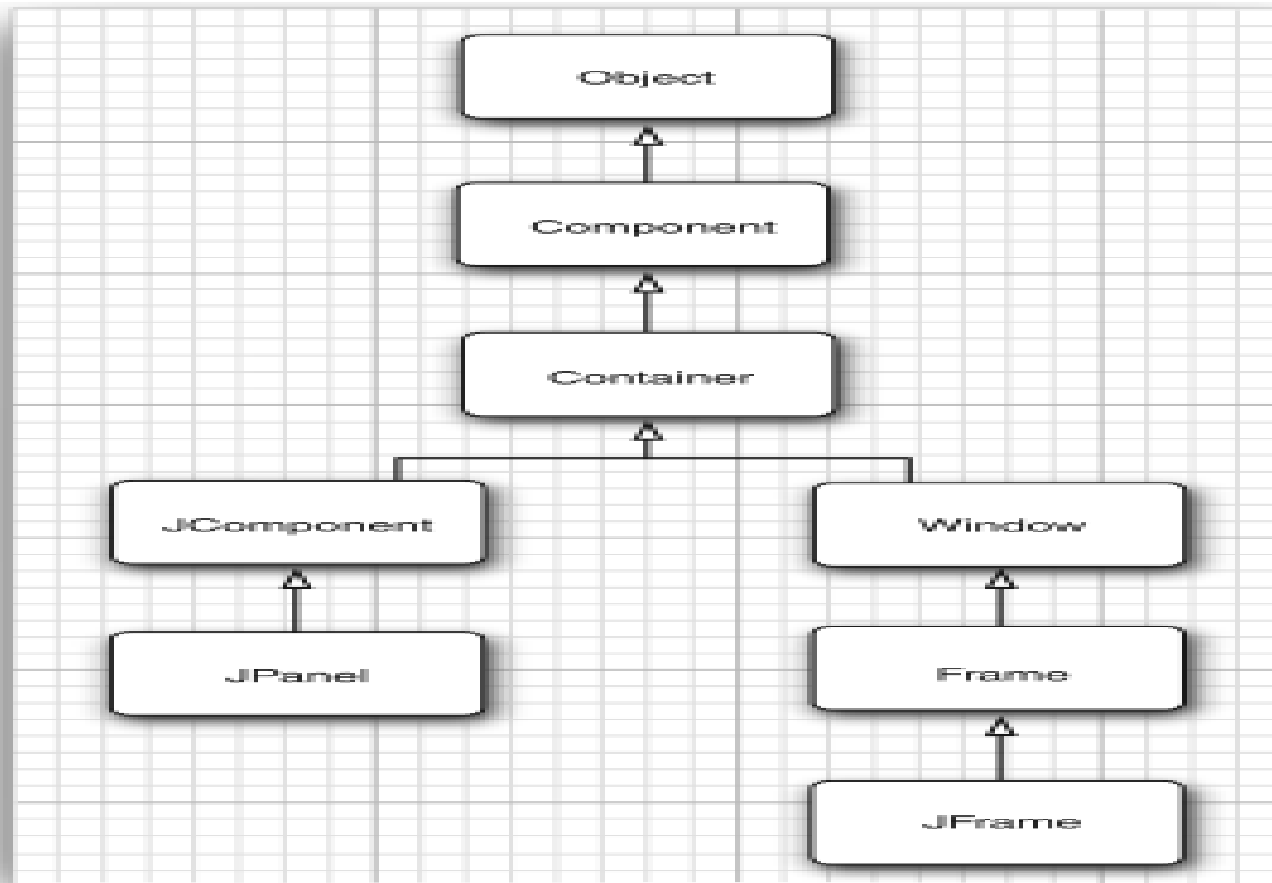


Inheritance hierarchy for the frame and component classes in AWT and Swing



Creating a frame

- A top-level window (that is, a window that is not contained inside another window) is called a frame in Java.
- The AWT library has a class, called `Frame`, for this top level.
- The Swing version of this class is called `JFrame` and extends the `Frame` class.

Positioning a frame

- The setLocation and setBounds methods for setting the position of the frame
- The setIconImage method, which tells the windowing system which icon to display in the title bar, task switcher window, and so on
- The setTitle method for changing the text in the title bar
- The setResizable method, which takes a boolean to determine if a frame will be resizable by the user

Frame Properties

- `public String getTitle()`
- `public void setTitle(String title)`

Displaying information in a Component

- four panes are layered in a JFrame.
- The root pane, layered pane, and glass pane are of no interest to us;
- they are required to organize the menu bar and content pane and to implement the look-and-feel.
- The part that most concerns Swing programmers is the content pane.
- When designing a frame, you add components into the content pane, using code such as the following:

- Container contentPane =
frame.getContentPane();
- Component c = . . . ;
- contentPane.add(c);

Internal structure of a JFrame

