



2/22/2007





Opening Discussion

- Do you have any questions about the assignment?
- What are the GUI libraries in Java?
- Briefly describe how you set up a GUI in Java.
- How is inheritance significant to the GUI libraries?
Why is this?





- Based on what you learned last class and in your reading, I want you to write a GUI with the following setup. You can start with what we did in class last time.
- I want a JTree on the left side of the frame, a panel in the middle, and on the right I want you to set up a GUI that might be used for setting properties on a rectangle. At the least I'd like to set a width, height, and color.
- Give your frame a menu bar. For now you can just add a “File” menu and have an “Exit” selection in it.



- So far we have only talked about how we set up our GUIs. They don't really do anything though because we have learned how to make them interact with the user.
- In Java 1.1 the method of dealing with “events” in GUIs was changed to use event listeners. These are classes that sit around and wait for something to happen. When it happens the listeners are notified.
- This is very different from the way you got user input in C. It has to be because the C model doesn't make sense. The C model only handles one source of input and blocks.

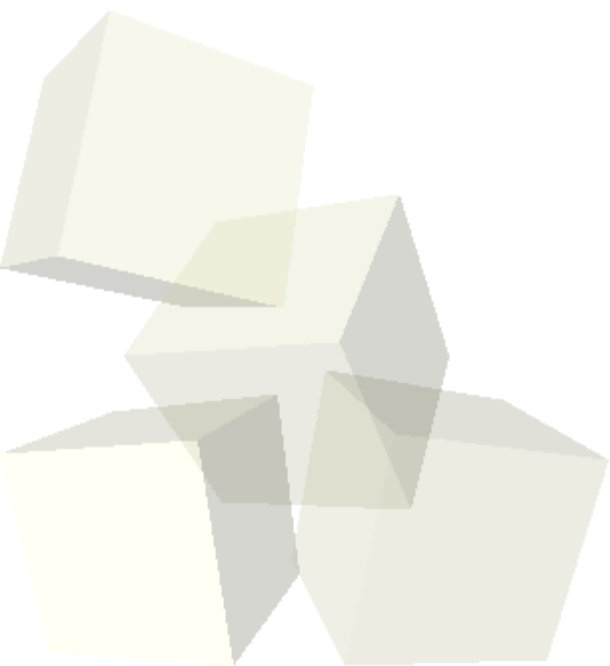


Listeners and Events

- The foundations of event handling in Java are listeners and events. Each component has appropriate add methods that let you add listeners for the various things that component can do.
- The simplest example is a button where basically all you can do is click it. To have Java tell us about the click on a button we would use an ActionListener.
- The ActionListener has a method, actionPerformed, that is passed an ActionEvent. This tells us information about the event.
- Let's go look in java.awt.event at some listeners and events.



- Now we want to make our GUIs somewhat interactive. Let's go in together and do what we can to make this GUI more usable.





- How are listeners and inner classes linked? It is no coincidence that inner classes were introduced at the same time that the current event model was.
- Remember to turn in the code for assignment #3 today.
- I should be around for my normal office hours this afternoon.

