Opening Discussion

- Solutions to the IcP.
- Questions about the assignment?
- Minute essay comments:
  - Suggestions all went into the assignment.
  - Usefulness of matrices.
Menus

- The frame has a MenuBar.
- Contents of a MenuBar should be Menus.
- Menus can hold the following:
  - MenuItem
  - Menu
  - CheckMenuItem
  - RadioMenuItem
  - Separator
Interactive GUIs

- Last time we learned how to build a GUI with components.
- Our GUI wasn't interactive though.
- Buttons and MenuItems are easy because we give them an Action.
- Simple read model of console apps is insufficient.
- Need a way to deal with input from many sources.
The basic model employed by scala.swing is Publishers and Reactors.

A Reactor can listenTo events from a Publisher.

Events are in scala.swing.event.

To stop listening, set yourself to be deafTo.

The Publisher can be the component or an object in the component.
Scala has a construct called a partial function. It is a function that only works on some inputs.

The brief syntax for them is like a match with no match. So it has curly braces with cases in them:

```
{  
  case 1 => doOption1()  
  case 2 => doOption2()  
  ...  
}
```
Events/reactions

- When a Reactor is listening to a Publisher, it needs to define reactions.
- You can add PartialFunctions into the reactions of the Reactor.
- They should respond to the events you are interested in.
  - reactions += {
    - case e:ActionEvent => ...
    - case e:SelectionChanged => ...
  }

Let's use this new knowledge to make it so that we are really editing our Pokemon.
Questions?

Interclass Problem:
  
  Try to make your calculator (or whatever you wrote for today) work. At the very least put in some interactions. (Like clicking buttons changes the display.)