Finishing Networking

2-7-2011

Opening Discussion

- Minute essay comments:
  - Networking options. Not all projects have to include it.
- Everything moved back.
- Solutions to the IcP.

Networked Code

- I want to write some networked code.
- Telnet based chat.
- Sending drawings over the network.

Try/Catch Error Handling

- To date, when things go wrong our programs just crash.
- You can use try/catch to try code that might fail and catch exceptions.
  - try {
    - ...
  - } catch {
    - case ...
  - }
- Finally block will always happen.

Throwing Exceptions

- You can also throw your own exceptions with “throw” keyword.
- You can make your own exceptions if they extend java.lang.Throwable.
  - Better to use existing exceptions if possible.
  - Make your exceptions informative.

RMI

- Makes life easier for large programs.
- Get hold of remote objects and just call methods on them.
- Steps:
  - Make trait that extends java.rmi.Remote. No data or method implementations allowed.
  - Make class that inherits from java.rmi.server.UnicastRemoteObject with the trait.
  - Run rmiregistry somewhere so it can see Scala libraries.
  - Using java.rmi.Naming to bind and lookup.

RMI Code

- With any time that remains we can write an example of code with RMI.
- It has a higher “start-up” cost for the programmer, but scales very easily after that.
- JVM only.
- Automatically introduces multithreading.

Minute Essay

- We leave networking now. What questions do you have about it?
- Everything on the schedule moved back one class.
- Chapter 18 now has instructions for CVS.