

Streams and Networking

2-8-2012

Opening Discussion

- Do you have any questions about the quiz?
- Minute essay comments:
 - You can stream text.
 - Decorating.

Saving Drawings

- I want to start off by writing code to save our drawings.

Networking

- These days, a computer loses a lot of its value if it isn't networked.
- We need to learn how to allow our programs to talk to other computers.
- This can happen in a lot of different ways from just reading information off the machine to having a “dialog” to exchange information.
- Most things we want are in the `java.net` package.

Sockets

- Computers communicate over sockets. They come in two main flavors.
 - TCP – This is the default. Does handshaking to determine if messages get through. Reliable, but slower.
 - UDP – Throw packets out and hope the other side gets them. Fast, but code has to deal with possible dropped packets.
- One machine acts as a server and waits on a port. Other machines, clients, can connect to that port.

Sockets and Streams

- Sockets in Java communicate through streams. So any code you wrote for file streams can be converted to networking with little to no effort.
- Let's write a simple telnet based chat room first.
- After that we can add either chat or sending drawings to our main program.

Minute Essay

- How is your project going to be networked? Have you thought of any way that the code style we described here could be challenging to use?
- Next class is IcP #3. Try to add multithreading and/or networking to your code.