Recitation 12
4-21-2014
Today

- TCP Revision
- TCP threaded server exercise
- PA5 Discussion
TCP Operation

Server Side:

1. Create socket
2. Bind Socket to port. This is the port used for incoming connection requests.
3. Listen to incoming connection requests
4. Accept connection and assign a port number to it.
5. Use/Create worker thread to handle communication with client (if server is multi-threaded)
TCP Operation

Client Side:
1. Create socket
2. Connect to server (need to specify address and port)
3. Read/write to server
Communication Process

Client

socket()

bind()

connect()

write()

read()

close()

socket()

bind()

listen()

accept()

block until connection from client

read()

process request

write()

close()
Exercise

• Modify the given code so that:
  • Server creates *a* thread to serve a client
  • Server never ends: keeps on accepting requests until killed using `ctrl-c` or `kill <pid>`
PA5 Discussion
Questions?