From Processing 2 Java

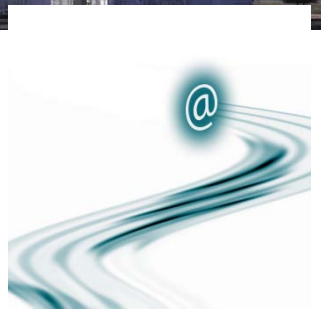
Networking

TU/e Technische Universiteit Eindhoven University of Technology

Where innovation starts

Communication

- **The process of conveying information from a sender to a receiver with the use of a medium in which the communicated information is understood by both sender and receiver.**



Protocols*

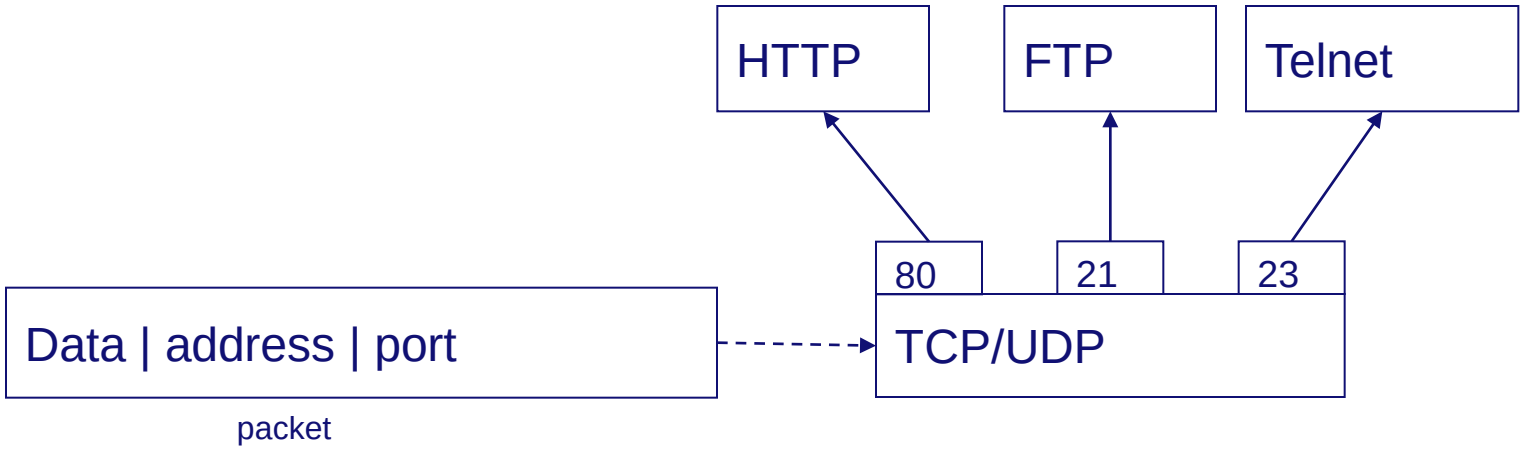
- **Most frequently used Internet protocol**
  - **TCP/IP = TCP + IP**

- **Other protocols (conform the ISO OSI layering):**
  - **Application layer (HTTP, FTP, TELNET)**
  - **Transport Layer (TCP, UDP)**
  - **Network Layer (IP, ARP)**
  - **Data Layer (Ethernet)**

*** Extremely Limited view !!!**

Addressing

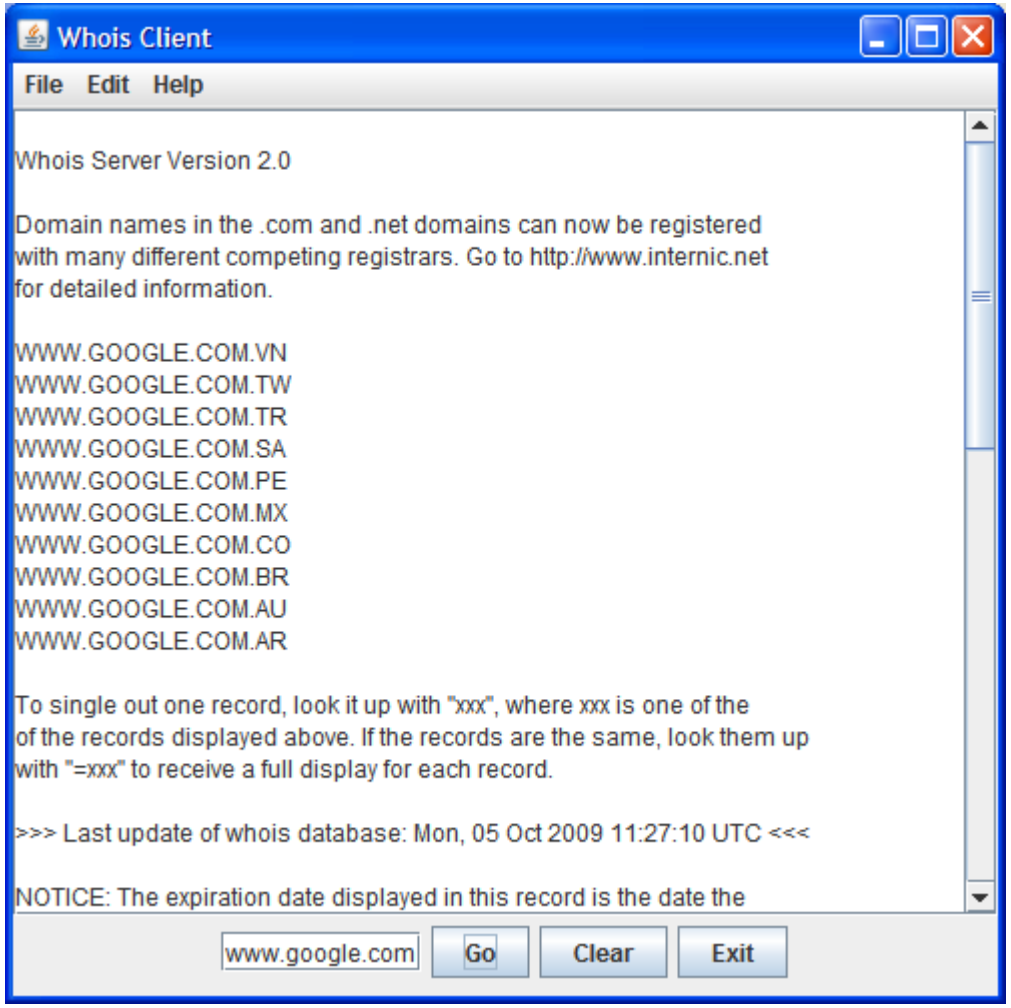
- **IP address**
  - **131.155.70.123 / somepc.tue.nl**
- **Port numbers**
  - **80, 21, 23…**



Example 1

- **WhoIs Client**

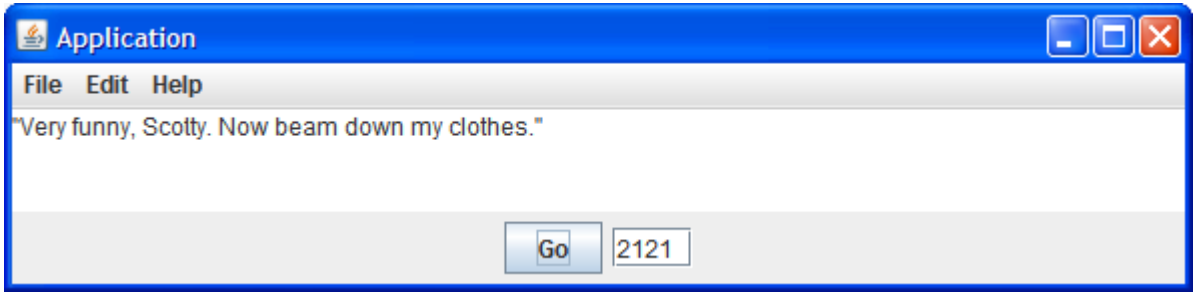
(show in Eclipse)



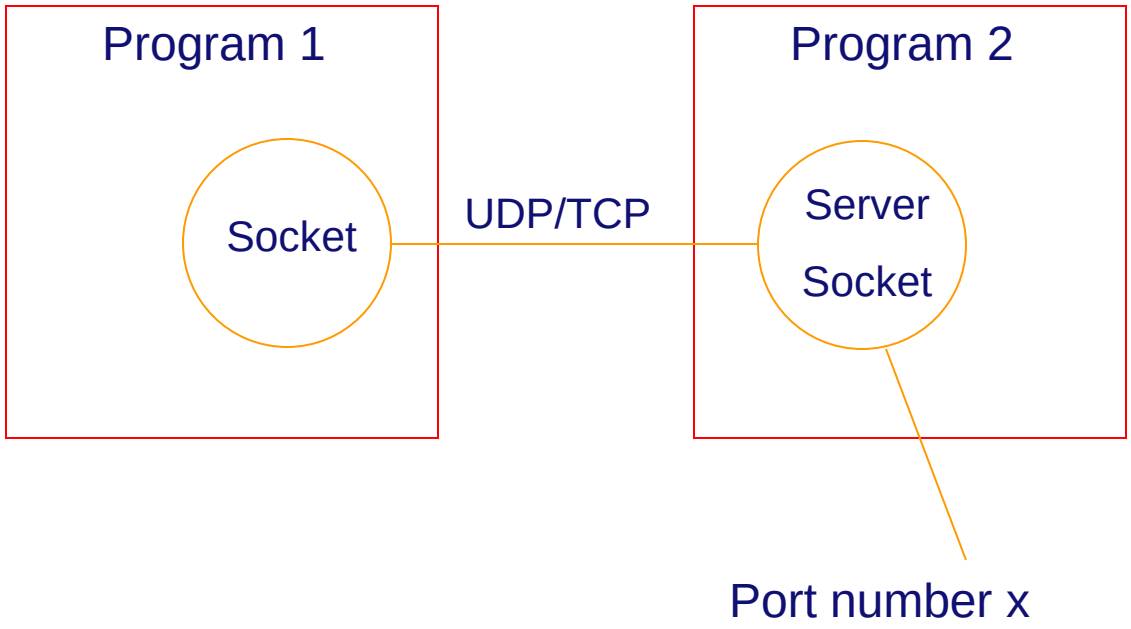
Example 2

- **Quote client**

  (show in Eclipse, start server first!!)



So…what happens?



And now…

- **Example Server/Client with robot in Eclipse**

Homework

1. **Use the examples to create 2 programs That allow you to control the robot from a distance. The programs have to communicate to each other using sockets.**

Links

- http://java.sun.com/developer/onlineTraining/Programming/BasicJava2/socket.html
- http://java.sun.com/docs/books/tutorial/networking/index.html