—— Distributed Robot Attack Simulation — —

— Walk through —

Filesname

1. Board.java - initializes the board for robots
2. BootstrapServer.java - Bootstrap Server that kickstarts the network and defines the distributed topology
3. Constants.java - Port address and IP address
4. DateNLocation.java - timestamp class that maintains the location and the current time
5. Location.java - initializes the location points for robot on an x and y board
6. Message.java - messages exchanged between robots
7. RA.java - Ricarta Agarwala Algorithm to establish robot to robot communication
8. Rob.java - GUI
9. Robot.java - Creates the Robot
10. RobotListener.java - listener class for robots
11. ServerListener.java - listener class for server

Simple Compilation Steps

1. We need to download and install Xquartz, as we need to tunnel X Window securely over SSH bases session so that we run X program on a remote Linux/Unix server/ workstation and get back display to a laptop.
(Ref- http://www.cyberciti.biz/faq/apple-osx-mountain-lion-mavericks-install-xquartz-server/)
2. Let' s say we open 4 terminal windows – one for BootstrapServer program and three for Robot program.
3. ssh X11 forwarding syntax:
    ssh -X rituserid@RemoteserverNameHere

a. Terminal 1: BootstrapServer program: ssh –X <ritusrid>@glados.cs.rit.edu
b. Terminal 2: Robot program: ssh –X <ritusrid>@berry.cs.rit.edu
c. Terminal 3: second Robot program: ssh –X <ritusrid>@yes.cs.rit.edu
d. Terminal 4: third Robot program: ssh –X <ritusrid>@alabama.cs.rit.edu