%%MATLAB Server Configuration Script Using tcpip%%

%%This script is used to configure and start a server and to communicate with a client connected to the same WIFI network%%

clear all;

disp("MATLAB SERVER CONFIGURATION SCRIPT");

disp("NB: MAKE SURE THAT SERVER and CLIENT are connected to the same WiFI network");

serverIP=input("enter in quotation marks the IP address of the server(computer):");

if serverIP == "0"

serverIP='192.168.1.252'; %%if you enter 0 by default inserts this

end

port=input("enter server port(computer):");

if port==0

portQ=8080; %%if you enter 0 by default insert this

end

%Configuration server%

s = tcpserver(serverIP, port);

configureTerminator(s,"CR/LF");

while s.Connected==0

disp("Waiting to connect");

pause(2);

end

disp("Client Connected");

while true

%%LOCALIZATION SYSTEM CODE 3D%%

%%.........%%

% 3 COORDINATES x,y,z %

x = rand;

y=rand;

z=rand;

%%.....%%

%%END LOCALIZATION 3D%%

%CONVERT coordinates to strings to send them over TCP

x1=num2str(x);

y1=num2str(y);

z1=num2str(z);

rx=readline(s);

R=sprintf("Recognized activity: %s",rx);

disp(R);

T=sprintf("Sending coordinates... : x=%s,y=%s,z=%s", x1,y1,z1);

disp(T);

tx=sprintf("%s %s %s",x1,y1,z1);

write(s,tx);

end