Server Side Code

package clientserver;

import java.io.\*;

import java.net.\*;

import java.util.ArrayList;

public class ChatServer {

static ArrayList<String> userNames = new ArrayList<String>();

static ArrayList<PrintWriter> printWriters = new ArrayList<PrintWriter>();

public static void main(String[] args) throws Exception{

// TODO Auto-generated method stub

System.out.println("Waiting for clients...");

ServerSocket ss = new ServerSocket(9806);

while (true)

{

Socket soc = ss.accept();

System.out.println("Connection established");

ConversationHandler handler = new ConversationHandler(soc);

handler.start();

//ss.close();

}

}

}

class ConversationHandler extends Thread

{

Socket socket;

BufferedReader in;

PrintWriter out;

String name;

PrintWriter pw;

static FileWriter fw;

static BufferedWriter bw;

public ConversationHandler(Socket socket) throws IOException {

this.socket = socket;

fw = new FileWriter("C:\\Users\\Abhishek\\Desktop\\ChatServer-Logs.txt",true);

bw = new BufferedWriter(fw);

pw = new PrintWriter(bw,true);

}

public void run()

{

try

{

in = new BufferedReader(new InputStreamReader(socket.getInputStream()));

out = new PrintWriter(socket.getOutputStream(), true);

int count = 0;

while (true)

{

if(count > 0)

{

out.println("NAMEALREADYEXISTS");

// socket.close();

}

else

{

out.println("NAMEREQUIRED");

// socket.close();

}

name = in.readLine();

if (name == null)

{

return;

}

if (!ChatServer.userNames.contains(name))

{

ChatServer.userNames.add(name);

break;

}

count++;

}

out.println("NAMEACCEPTED"+name);

ChatServer.printWriters.add(out);

while (true)

{

String message = in.readLine();

if (message == null)

{

return;

}

pw.println(name + ": " + message);

for (PrintWriter writer : ChatServer.printWriters) {

writer.println(name + ": " + message);

writer.flush();

}

}

}

catch (Exception e)

{

System.out.println(e);

}

}

}