**HTTP WEB CLIENT PROGRAM USING TCP SOCKETS**

Ex.No.: 312217205003

Date: P.G.ABINAYA

**PROGRAM**:

SocketClient.java

import java.io.IOException;

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

import java.net.InetAddress;

import java.net.Socket;

import java.net.UnknownHostException;

import java.util.\*;

import java.net.\*;

import java.awt.Desktop;

import java.io.\*;

public class SocketClient {

public static void main(String[] args) throws UnknownHostException, IOException, ClassNotFoundException, InterruptedException{

try{

InetAddress host = InetAddress.getLocalHost();

Socket socket = new Socket(host.getHostName(), 9876);

ObjectOutputStream oos = new ObjectOutputStream(socket.getOutputStream());

ObjectInputStream ois = null;

System.out.println("Client is running");

System.out.println("Sending request to Socket Server");

System.out.println("Enter the url");

Scanner a=new Scanner(System.in);

String s=a.nextLine();

oos.writeObject(s);

ois = new ObjectInputStream(socket.getInputStream());

String message = (String) ois.readObject();

System.out.println("Page downloaded by server "+message);

Desktop.getDesktop().browse(new URL("file:///C:/Users/intel/Desktop/overview/networks/page.html").toURI());

ois.close();

oos.close();

}

catch(Exception e)

{

System.out.println(e);

}

}

}

SocketServer.java

import java.io.IOException;

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

import java.lang.ClassNotFoundException;

import java.net.ServerSocket;

import java.net.Socket;

import java.util.\*;

import java.io.BufferedReader;

import java.io.BufferedWriter;

import java.io.FileWriter;

import java.io.IOException;

import java.io.InputStreamReader;

import java.net.URL;

public class SocketServer {

public static void main(String args[]) throws IOException, ClassNotFoundException{

ServerSocket server = new ServerSocket(9876);

System.out.println("Server is running");

do{

System.out.println("Waiting for the client request");

Socket socket = server.accept();

ObjectInputStream ois = new ObjectInputStream(socket.getInputStream());

String message = (String) ois.readObject();

System.out.println("Message Received: " + message);

ObjectOutputStream oos = new ObjectOutputStream(socket.getOutputStream());

download(message);

oos.writeObject(message);

ois.close();

oos.close();

socket.close();

if(message.equalsIgnoreCase("exit")) break;

}while(false);

System.out.println("Shutting down Socket server!!");

server.close();

}

public static void download(String urlString) throws IOException {

URL url = new URL(urlString);

try

{

BufferedReader reader = new BufferedReader(new InputStreamReader(url.openStream()));

BufferedWriter writer = new BufferedWriter(new FileWriter("page.html"));

{

String line;

while ((line = reader.readLine()) != null) {

writer.write(line);

}

System.out.println("Page downloaded.");

}

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**SAMPLE INPUT/OUTPUT:**







