ABSTRACT:

ONLINE LOCATION TRACKER WILL DISPLAY USER THE CURRENT LOCATION AS IP ADDRESS, CITY, COUNTRY, LATITUDE AND LONGITUDE WITH RESPECT TO THE PUBLIC IP ADDRESS OF THE USER PROVIDED THAT THE USER MUST BE CONNECTED WITH INTERNET. THE SYSTEM USES GSON AND JSON LIBRARY. JSON PARSER EXTRACTS INFORMATIONS FROM WEB SERVER AND WILL RETURN AS A STRING. WHEN CLIENT REQUESTS THE SERVER, SERVER THEN GETS THE LOCATION STRING AND PROVIDE TO THE CLIENT.

TECHNOLOGIES USED:

1.UDP

2.JAVA

3.JSON OBJECT

4.GEO LOCATION TRACKER

PROGRAM:

CLIENT.JAVA:

package gps;

import java.io.\*;

import java.net.\*;

public class Client {

public static void main(String[] args) {

try

{

System.out.println("Ask For The Location:");

byte[] receiveData = new byte[1024];

byte[] sendData = new byte[1024];

BufferedReader inFromUser = new BufferedReader(new InputStreamReader(System.in));

DatagramSocket clientSocket = new DatagramSocket();

InetAddress IPAddress = InetAddress.getByName("localhost");

String sentence = inFromUser.readLine();

sendData = sentence.getBytes();

DatagramPacket sendPacket = new DatagramPacket(sendData , sendData.length , IPAddress , 9876);

clientSocket.send(sendPacket);

DatagramPacket receivePacket = new DatagramPacket(receiveData , receiveData.length);

clientSocket.receive(receivePacket);

String modifiedSentence = new String(receivePacket.getData());

System.out.println("FROM SERVER :\n" + modifiedSentence);

clientSocket.close();

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

SERVER.JAVA:

package gps;

import java.io.\*;

import java.net.\*;

import java.util.\*;

import gps.GPS;

public class Server {

public static void main(String[] args) {

try

{

DatagramSocket serverSocket = new DatagramSocket(9876);

byte[] receiveData = new byte[1024];

byte[] sendData = new byte[1024];

while(true)

{

DatagramPacket receivePacket = new DatagramPacket(receiveData , receiveData.length);

serverSocket.receive(receivePacket);

String sentence = new String(receivePacket.getData());

System.out.println("Received: " + sentence);

InetAddress IPAddress = receivePacket.getAddress();

int port = receivePacket.getPort();

//String capitalizedSentence = sentence.toUpperCase();

GPS g = new GPS();

String loc = g.setLocation();

sendData = loc.getBytes();

DatagramPacket sendPacket = new DatagramPacket(sendData , sendData.length , IPAddress , port);

serverSocket.send(sendPacket);

//serverSocket.close();

}

}

catch (Exception e) {

e.printStackTrace();

}

}

}

GPS.JAVA:

package gps;

import java.net.\*;

import java.lang.\*;

import org.json.JSONArray;

import org.json.JSONObject;

import java.net.\*;

import java.io.\*;

public class GPS {

public String setLocation() {

try

{

URL URL = new URL("http://www.geoplugin.net/json.gp");

HttpURLConnection Conn = (HttpURLConnection)URL.openConnection();

InputStream InStream = Conn.getInputStream();

InputStreamReader Isr = new InputStreamReader(InStream);

BufferedReader Br = new BufferedReader(Isr);

String line = "", data = "";

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

data += line;

}

//System.out.println(data);

//System.out.println(ipAddr);

//String latlon = ("http://www.geoplugin.net/json.gp");

JSONObject json = new JSONObject(data);

String ip = json.getString("geoplugin\_request");

String city = json.getString("geoplugin\_city");

String country = json.getString("geoplugin\_countryName");

String lat = json.getString("geoplugin\_latitude") ;

String lon = json.getString("geoplugin\_longitude") ;

String link;

link = "http://www.latlong.net/c/?lat="+lat+"&long="+lon;

java.awt.Desktop.getDesktop().browse(java.net.URI.create(link));

String location = "IPAddress:";

location = location.concat(ip+"\nCity:");

location = location.concat(city+"\nCountry:");

location = location.concat(country+"\nLatitude:");

location = location.concat(lat+"\nLongitude:");

location = location.concat(lon);

return location;

//JSONArray jArray = object.getJSONArray("latlon");

/\*for (int i = 0; i < jArray.length(); i++)

{

String lat = jArray.getJSONObject(i).getString("lat");

String lon = jArray.getJSONObject(i).getString("lon");

}\*/

}

catch (Exception e)

{

e.printStackTrace();

}

return null;

}

}

OUTPUT:



