using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Net;

using System.Web;

using System.IO;

using System.Security.Cryptography;

using System.Security.Cryptography.X509Certificates;

namespace esms\_client

{

public class SMSHttpPostClient

{

///

/// Method for sending single SMS.

///

/// Registered user name

/// Valid login password

/// Sender ID

/// valid Single Mobile Number

/// Message Content

/// Department generate key by login to services portal

// Method for sending single SMS.

public String sendSingleSMS(String username, String password, String senderid, String mobileNo, String message, String secureKey, String templateid, String templateid)

{

//Latest Generated Secure Key

Stream dataStream;

System.Net.ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12; //forcing .Net framework to use TLSv1.2

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("https://msdgweb.mgov.gov.in/esms/sendsmsrequestDLT");

request.ProtocolVersion = HttpVersion.Version10;

request.KeepAlive = false;

request.ServicePoint.ConnectionLimit = 1;

//((HttpWebRequest)request).UserAgent = ".NET Framework Example Client";

((HttpWebRequest)request).UserAgent = "Mozilla/4.0 (compatible; MSIE 5.0; Windows 98; DigExt)";

request.Method = "POST";

System.Net.ServicePointManager.CertificatePolicy = new MyPolicy();

String encryptedPassword = encryptedPasswod(password);

String NewsecureKey = hashGenerator(username.Trim(), senderid.Trim(), message.Trim(), secureKey.Trim());

String smsservicetype = "singlemsg"; //For single message.

String query = "username=" + HttpUtility.UrlEncode(username.Trim()) +

"&password=" + HttpUtility.UrlEncode(encryptedPassword) +

"&smsservicetype=" + HttpUtility.UrlEncode(smsservicetype) +

"&content=" + HttpUtility.UrlEncode(message.Trim()) +

"&mobileno=" + HttpUtility.UrlEncode(mobileNo) +

"&senderid=" + HttpUtility.UrlEncode(senderid.Trim()) +

"&key=" + HttpUtility.UrlEncode(NewsecureKey.Trim()) +

"&templateid=" + HttpUtility.UrlEncode(templateid.Trim());

byte[] byteArray = Encoding.ASCII.GetBytes(query);

request.ContentType = "application/x-www-form-urlencoded";

request.ContentLength = byteArray.Length;

dataStream = request.GetRequestStream();

dataStream.Write(byteArray, 0, byteArray.Length);

dataStream.Close();

WebResponse response = request.GetResponse();

String Status = ((HttpWebResponse)response).StatusDescription;

dataStream = response.GetResponseStream();

StreamReader reader = new StreamReader(dataStream);

String responseFromServer = reader.ReadToEnd();

reader.Close();

dataStream.Close();

response.Close();

return responseFromServer;

}

///

/// Method for sending bulk SMS.

///

/// Registered user name

/// Valid login password

/// Sender ID

/// valid Mobile Numbers

/// Message Content

/// Department generate key by login to services portal

// method for sending bulk SMS

public String sendBulkSMS(String username, String password, String senderid, String mobileNos, String message,String secureKey, String templateid)

{

Stream dataStream;

System.Net.ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12; //forcing .Net framework to use TLSv1.2

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("https://msdgweb.mgov.gov.in/esms/sendsmsrequestDLT");

request.ProtocolVersion = HttpVersion.Version10;

request.KeepAlive = false;

request.ServicePoint.ConnectionLimit = 1;

//((HttpWebRequest)request).UserAgent = ".NET Framework Example Client";

((HttpWebRequest)request).UserAgent = "Mozilla/4.0 (compatible; MSIE 5.0; Windows 98; DigExt)";

request.Method = "POST";

System.Net.ServicePointManager.CertificatePolicy = new MyPolicy();

String encryptedPassword = encryptedPasswod(password);

String NewsecureKey = hashGenerator(username.Trim(), senderid.Trim(), message.Trim(), secureKey.Trim());

Console.Write(NewsecureKey);

Console.Write(encryptedPassword);

String smsservicetype = "bulkmsg"; // for bulk msg

String query = "username=" + HttpUtility.UrlEncode(username.Trim()) +

"&password=" + HttpUtility.UrlEncode(encryptedPassword) +

"&smsservicetype=" + HttpUtility.UrlEncode(smsservicetype) +

"&content=" + HttpUtility.UrlEncode(message.Trim()) +

"&bulkmobno=" + HttpUtility.UrlEncode(mobileNos) +

"&senderid=" + HttpUtility.UrlEncode(senderid.Trim()) +

"&key=" + HttpUtility.UrlEncode(NewsecureKey.Trim()) +

"&templateid=" + HttpUtility.UrlEncode(templateid.Trim());

Console.Write(query);

byte[] byteArray = Encoding.ASCII.GetBytes(query);

request.ContentType = "application/x-www-form-urlencoded";

request.ContentLength = byteArray.Length;

dataStream = request.GetRequestStream();

dataStream.Write(byteArray, 0, byteArray.Length);

dataStream.Close();

WebResponse response = request.GetResponse();

String Status = ((HttpWebResponse)response).StatusDescription;

dataStream = response.GetResponseStream();

StreamReader reader = new StreamReader(dataStream);

String responseFromServer = reader.ReadToEnd();

reader.Close();

dataStream.Close();

response.Close();

return responseFromServer;

}

///

/// method for Sending unicode..

///

/// Registered user name

/// Valid login password

/// Sender ID

/// valid Mobile Numbers

/// Unicodemessage Message Content

/// Department generate key by login to services portal

//method for Sending unicode message..

public String sendUnicodeSMS(String username, String password, String senderid, String mobileNos, String Unicodemessage, String secureKey, String templateid)

{

Stream dataStream;

System.Net.ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12; //forcing .Net framework to use TLSv1.2

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("https://msdgweb.mgov.gov.in/esms/sendsmsrequestDLT");

request.ProtocolVersion = HttpVersion.Version10;

request.KeepAlive = false;

request.ServicePoint.ConnectionLimit = 1;

//((HttpWebRequest)request).UserAgent = ".NET Framework Example Client";

((HttpWebRequest)request).UserAgent = "Mozilla/4.0 (compatible; MSIE 5.0; Windows 98; DigExt)";

request.Method = "POST";

System.Net.ServicePointManager.CertificatePolicy = new MyPolicy();

String U\_Convertedmessage = "";

foreach (char c in Unicodemessage)

{

int j = (int)c;

String sss = "&#" + j + ";";

U\_Convertedmessage = U\_Convertedmessage + sss;

}

String encryptedPassword = encryptedPasswod(password);

String NewsecureKey = hashGenerator(username.Trim(), senderid.Trim(), U\_Convertedmessage.Trim(), secureKey.Trim());

String smsservicetype = "unicodemsg"; // for unicode msg

String query = "username=" + HttpUtility.UrlEncode(username.Trim()) +

"&password=" + HttpUtility.UrlEncode(encryptedPassword) +

"&smsservicetype=" + HttpUtility.UrlEncode(smsservicetype) +

"&content=" + HttpUtility.UrlEncode(U\_Convertedmessage.Trim()) +

"&bulkmobno=" + HttpUtility.UrlEncode(mobileNos) +

"&senderid=" + HttpUtility.UrlEncode(senderid.Trim()) +

"&key=" + HttpUtility.UrlEncode(NewsecureKey.Trim())+

"&templateid=" + HttpUtility.UrlEncode(templateid.Trim());

byte[] byteArray = Encoding.ASCII.GetBytes(query);

request.ContentType = "application/x-www-form-urlencoded";

request.ContentLength = byteArray.Length;

dataStream = request.GetRequestStream();

dataStream.Write(byteArray, 0, byteArray.Length);

dataStream.Close();

WebResponse response = request.GetResponse();

String Status = ((HttpWebResponse)response).StatusDescription;

dataStream = response.GetResponseStream();

StreamReader reader = new StreamReader(dataStream);

String responseFromServer = reader.ReadToEnd();

reader.Close();

dataStream.Close();

response.Close();

return responseFromServer;

}

///

/// Method for sending OTP MSG.

///

/// Registered user name

/// Valid login password

/// Sender ID

/// valid single Mobile Number

/// Message Content

/// Department generate key by login to services portal

// Method for sending OTP MSG.

public String sendOTPMSG(String username, String password, String senderid, String mobileNo, String message, String secureKey, String templateid)

{

Stream dataStream;

System.Net.ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12; //forcing .Net framework to use TLSv1.2

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("https://msdgweb.mgov.gov.in/esms/sendsmsrequestDLT");

request.ProtocolVersion = HttpVersion.Version10;

request.KeepAlive = false;

request.ServicePoint.ConnectionLimit = 1;

//((HttpWebRequest)request).UserAgent = ".NET Framework Example Client";

((HttpWebRequest)request).UserAgent = "Mozilla/4.0 (compatible; MSIE 5.0; Windows 98; DigExt)";

request.Method = "POST";

System.Net.ServicePointManager.CertificatePolicy = new MyPolicy();

String encryptedPassword = encryptedPasswod(password);

String key = hashGenerator(username.Trim(), senderid.Trim(), message.Trim(), secureKey.Trim());

String smsservicetype = "otpmsg"; //For OTP message.

String query = "username=" + HttpUtility.UrlEncode(username.Trim()) +

"&password=" + HttpUtility.UrlEncode(encryptedPassword) +

"&smsservicetype=" + HttpUtility.UrlEncode(smsservicetype) +

"&content=" + HttpUtility.UrlEncode(message.Trim()) +

"&mobileno=" + HttpUtility.UrlEncode(mobileNo) +

"&senderid=" + HttpUtility.UrlEncode(senderid.Trim()) +

"&key=" + HttpUtility.UrlEncode(key.Trim())+

"&templateid=" + HttpUtility.UrlEncode(templateid.Trim());

byte[] byteArray = Encoding.ASCII.GetBytes(query);

request.ContentType = "application/x-www-form-urlencoded";

request.ContentLength = byteArray.Length;

dataStream = request.GetRequestStream();

dataStream.Write(byteArray, 0, byteArray.Length);

dataStream.Close();

WebResponse response = request.GetResponse();

String Status = ((HttpWebResponse)response).StatusDescription;

dataStream = response.GetResponseStream();

StreamReader reader = new StreamReader(dataStream);

String responseFromServer = reader.ReadToEnd();

reader.Close();

dataStream.Close();

response.Close();

return responseFromServer;

}

// Method for sending UnicodeOTP MSG.

///

/// method for Sending unicode..

///

/// Registered user name

/// Valid login password

/// Sender ID

/// valid Mobile Numbers

/// Unicodemessage Message Content

/// Department generate key by login to services portal

//method for Sending unicode message..

public String sendUnicodeOTPSMS(String username, String password, String senderid, String mobileNos, String UnicodeOTPmsg, String secureKey, String templateid)

{

Stream dataStream;

System.Net.ServicePointManager.SecurityProtocol = SecurityProtocolType.Tls12; //forcing .Net framework to use TLSv1.2

HttpWebRequest request = (HttpWebRequest)WebRequest.Create("https://msdgweb.mgov.gov.in/esms/sendsmsrequestDLT");

request.ProtocolVersion = HttpVersion.Version10;

request.KeepAlive = false;

request.ServicePoint.ConnectionLimit = 1;

//((HttpWebRequest)request).UserAgent = ".NET Framework Example Client";

((HttpWebRequest)request).UserAgent = "Mozilla/4.0 (compatible; MSIE 5.0; Windows 98; DigExt)";

request.Method = "POST";

System.Net.ServicePointManager.CertificatePolicy = new MyPolicy();

String U\_Convertedmessage = "";

foreach (char c in UnicodeOTPmsg)

{

int j = (int)c;

String sss = "&#" + j + ";";

U\_Convertedmessage = U\_Convertedmessage + sss;

}

String encryptedPassword = encryptedPasswod(password);

String NewsecureKey = hashGenerator(username.Trim(), senderid.Trim(), U\_Convertedmessage.Trim(), secureKey.Trim());

String smsservicetype = "unicodeotpmsg"; // for unicode msg

String query = "username=" + HttpUtility.UrlEncode(username.Trim()) +

"&password=" + HttpUtility.UrlEncode(encryptedPassword) +

"&smsservicetype=" + HttpUtility.UrlEncode(smsservicetype) +

"&content=" + HttpUtility.UrlEncode(U\_Convertedmessage.Trim()) +

"&bulkmobno=" + HttpUtility.UrlEncode(mobileNos) +

"&senderid=" + HttpUtility.UrlEncode(senderid.Trim()) +

"&key=" + HttpUtility.UrlEncode(NewsecureKey.Trim())+

"&templateid=" + HttpUtility.UrlEncode(templateid.Trim());

byte[] byteArray = Encoding.ASCII.GetBytes(query);

request.ContentType = "application/x-www-form-urlencoded";

request.ContentLength = byteArray.Length;

dataStream = request.GetRequestStream();

dataStream.Write(byteArray, 0, byteArray.Length);

dataStream.Close();

WebResponse response = request.GetResponse();

String Status = ((HttpWebResponse)response).StatusDescription;

dataStream = response.GetResponseStream();

StreamReader reader = new StreamReader(dataStream);

String responseFromServer = reader.ReadToEnd();

reader.Close();

dataStream.Close();

response.Close();

return responseFromServer;

}

///

/// Method to get Encrypted the password

///

/// password as String"

protected String encryptedPasswod(String password)

{

byte[] encPwd = Encoding.UTF8.GetBytes(password);

//static byte[] pwd = new byte[encPwd.Length];

HashAlgorithm sha1 = HashAlgorithm.Create("SHA1");

byte[] pp = sha1.ComputeHash(encPwd);

// static string result = System.Text.Encoding.UTF8.GetString(pp);

StringBuilder sb = new StringBuilder();

foreach (byte b in pp)

{

sb.Append(b.ToString("x2"));

}

return sb.ToString();

}

///

/// Method to Generate hash code

///

/// your last generated Secure\_key

protected String hashGenerator(String Username, String sender\_id, String message, String secure\_key)

{

StringBuilder sb = new StringBuilder();

sb.Append(Username).Append(sender\_id).Append(message).Append(secure\_key);

byte[] genkey = Encoding.UTF8.GetBytes(sb.ToString());

//static byte[] pwd = new byte[encPwd.Length];

HashAlgorithm sha1 = HashAlgorithm.Create("SHA512");

byte[] sec\_key = sha1.ComputeHash(genkey);

StringBuilder sb1 = new StringBuilder();

for (int i = 0; i < sec\_key.Length; i++)

{

sb1.Append(sec\_key[i].ToString("x2"));

}

return sb1.ToString();

}

}

}

class MyPolicy : ICertificatePolicy

{

public bool CheckValidationResult(ServicePoint srvPoint, X509Certificate certificate, WebRequest request, int certificateProblem)

{

return true;

}

}