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GVP için Hash Data Oluşturmak

htiyaç duyulan alanlar

- OrderID (Sipariş Numarası)
- TerminalID
- Password (SanalPos Şifreniz)
- Number (Müşterinin Kredi Kart Numarası)
- Amount (Sipariş Tutarı)
- HashData

HashData oluřturma ařamaları

HashData 2 ařamada oluřturulacaktır.

1. Security Data: Password + TerminalID
2. Hash Data: OrderID + TerminalID + Number + Amount + SecurityData

Dikkat edilmesi gereken noktalar

- SHA1 Hash algoritması kullanılmalıdır.
- HashData, Hex formatında olmalıdır.
- HashData, Rakamlar ve Büyük Harflerden oluřmalıdır.
- OrderID unique olmalıdır. Eđer OrderID alanını boş gönderirseniz SanalPos sizin için random OrderID yaratır.
- SecurityData'da kullanılan TerminalID, başına 0 konularak 9 digit'e tamamlanmalıdır.
Örn: TerminalID'niz 123456 ise 000123456 şeklinde göndermelisiniz.
- HashData'da kullanılan TerminalID'in başına ise 0 konulmamalıdır.
- Amount (Tutar) alanındaki "." ve/veya "," karakterleri Replace edilmelidir.
Örn; 175,95 olan tutar 17595 olarak gönderilmelidir.
- Amount (Tutar) alanındaki son 2 digit kuruř olarak algılanır.
Örn; 17595 olarak gönderdi iniz tutar aslında 175,95 olarak algılanır.
- **txncurrencycode** alanları için kullanabilece iniz de erler;
 - 949 TRL
 - 840 USD
 - 978 EURO
 - 826 GBP
 - 392 JPY

Örnek kodlarda **txncurrencycode** değeri 949 kullanılmıřtır. Eđer farklı bir para birimi ile çalışacaksanız bu alanları güncellemeniz gerekmektedir.

- **txntimestamp** alanı kullanımlarda random ve unique bir değeri üretmelisiniz.
Örnek; `now()` fonksiyonu gibi...

SHA1 Algoritmasını çeren JavaScript örne i:

.NET Framework'ünde geliřtirdiđiniz programlarda bu kodlara gerek olmayıp System.Security.Cryptography namespace'inin SHA1 sınıfından turettiđiniz SHA1CryptoServiceProvider sınıfını kullanmalısınız.

Bu örnek kodları ASP ve JavaScript tabanlı uygulamalarınızda kullanabilirsiniz.

```
var hexcase = 1;
var b64pad = "=";
var chrsz = 8;

function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

function shal_vm_test() {
    return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
}

function core_shal(x, len) {

    x[len >> 5] |= 0x80 << (24 - len % 32);
    x[((len + 64 >> 9) << 4) + 15] = len;

    var w = Array(80);
    var a = 1732584193;
    var b = -271733879;
    var c = -1732584194;
    var d = 271733878;
    var e = -1009589776;

    for (var i = 0; i < x.length; i += 16) {
        var olda = a;
        var oldb = b;
        var oldc = c;
        var oldd = d;
        var olde = e;

        for (var j = 0; j < 80; j++) {
            if (j < 16) w[j] = x[i + j];
            else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
            var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
                safe_add(safe_add(e, w[j]), shal_kt(j)));
            e = d;
            d = c;
            c = rol(b, 30);
            b = a;
            a = t;
        }

        a = safe_add(a, olda);
        b = safe_add(b, oldb);
        c = safe_add(c, oldc);
        d = safe_add(d, oldd);
        e = safe_add(e, olde);
    }
    return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
        (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
```

```

        for (var i = 0; i < 16; i++) {
            ipad[i] = bkey[i] ^ 0x36363636;
            opad[i] = bkey[i] ^ 0x5C5C5C5C;
        }

        var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
        return core_shal(opad.concat(hash), 512 + 160);
    }

    function safe_add(x, y) {
        var lsw = (x & 0xFFFF) + (y & 0xFFFF);
        var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
        return (msw << 16) | (lsw & 0xFFFF);
    }

    function rol(num, cnt) {
        return (num << cnt) | (num >>> (32 - cnt));
    }

    function str2binb(str) {
        var bin = Array();
        var mask = (1 << chrsz) - 1;
        for (var i = 0; i < str.length * chrsz; i += chrsz)
            bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
        return bin;
    }

    function binb2str(bin) {
        var str = "";
        var mask = (1 << chrsz) - 1;
        for (var i = 0; i < bin.length * 32; i += chrsz)
            str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
        return str;
    }

    function binb2hex(binarray) {
        var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i++) {
            str += hex_tab.charAt((binarray[i >> 2] >>> ((3 - i % 4) * 8 + 4)) & 0xF) +
                hex_tab.charAt((binarray[i >> 2] >>> ((3 - i % 4) * 8)) & 0xF);
        }
        return str;
    }

    function binb2b64(binarray) {
        var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i += 3) {
            var triplet = (((binarray[i >> 2] >>> 8 * (3 - i % 4)) & 0xFF) << 16)
                | (((binarray[i + 1 >> 2] >>> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
                | ((binarray[i + 2 >> 2] >>> 8 * (3 - (i + 2) % 4)) & 0xFF);
            for (var j = 0; j < 4; j++) {
                if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
                else str += tab.charAt((triplet >>> 6 * (3 - j)) & 0x3F);
            }
        }
        return str;
    }
}

```

ÖNEMLİ : HashData ve SecurityData örnekleri sadece algoritmanın nasıl çalıştığını anlatmak için hazırlanmıştır. Bu kod parçalarını size örnek olarak gönderilen kodların içerisine tekrar dâhil etmenize veya sunucunuza yüklemenize gerek bulunmamaktadır. Ekte bulunan ve tüm diller için hazırlanmış olan kod parçalarının içerisine Hashleme adımları zaten entegre edilmiştir.

Security Data (Aşama 1) örnek kodlar:

FORM

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="SecurityData.aspx.vb"
Inherits="TradeSis_GVP.SecurityData" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

```

```
<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <div>
      Terminal ID: <asp:TextBox ID="txtTerminalID" Text="123456" runat="server" />
      <br />
      Password: <asp:TextBox ID="txtPassword" Text="Abq12x46" runat="server" />
      <br />
      <asp:Button ID="cmdSubmit" runat="server" Text="Oluştur" />
      <br /><br />
      <asp:Label ID="lblResults" runat="server" />
    </div>
  </form>
</body>
</html>
```

VB.NET

```
Imports System
Imports System.Net
Imports System.Security.Cryptography

Partial Public Class SecurityData
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then
            End If
        End Sub

    Public Function GetSHA1(ByVal SHA1Data As String) As String

        Dim sha As SHA1 = New SHA1CryptoServiceProvider()
        Dim HashedPassword As String = SHA1Data
        Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
        Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
        Return GetHexadecimal(inputbytes)

    End Function

    Public Function GetHexadecimal(ByVal bytes As Byte()) As String

        Dim s As New StringBuilder()
        Dim length As Integer = bytes.Length
        For n As Integer = 0 To length - 1
            s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
        Next
        Return s.ToString()

    End Function

    Protected Sub cmdSubmit_Click(ByVal sender As Object, ByVal e As EventArgs) Handles cmdSubmit.Click

        Dim strTerminalID As String = txtTerminalID.Text
        Dim _strTerminalID As String = "0" & txtTerminalID.Text 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
        Dim strProvisionPassword As String = txtPassword.Text 'Terminal UserID şifresi
        Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
        lblResults.Text = "Security Data : " & SecurityData

    End Sub

End Class
```

C#

```
using System;
using System.Text;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSiS_GVP
{
    public partial class SecurityData : System.Web.UI.Page
    {
    }
```

```

protected void Page_Load(object sender, EventArgs e)
{
    if (!Page.IsPostBack){
    }
}

public string GetSHA1(string SHA1Data)
{
    SHA1 sha = new SHA1CryptoServiceProvider();
    string HashedPassword = SHA1Data;
    byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
    byte[] inputbytes = sha.ComputeHash(hashbytes);
    return GetHexadecimal(inputbytes);
}

public string GetHexadecimal(byte[] bytes)
{
    StringBuilder s = new StringBuilder();
    int length = bytes.Length;
    for (int n = 0; n <= length - 1; n++)
    {
        s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
    }
    return s.ToString();
}

protected void cmdSubmit_Click(object sender, EventArgs e)
{
    string strTerminalID = txtTerminalID.Text;
    string _strTerminalID = "0" + txtTerminalID.Text; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
    string strProvisionPassword = txtPassword.Text; //Terminal UserID şifresi
    string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();

    lblResults.Text = "Security Data : " + SecurityData;
}
}
}

```

ASP

```

<html>
<head>
    <title></title>
    <script language="javascript" type="text/javascript" runat="server">

        var hexcase = 1;
        var b64pad = "=";
        var chrsz = 8;

        function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
        function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
        function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
        function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
        function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
        function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

        function shal_vm_test() {
            return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
        }

        function core_shal(x, len) {

            x[len >> 5] |= 0x80 << (24 - len % 32);
            x[((len + 64 >> 9) << 4) + 15] = len;

            var w = Array(80);
            var a = 1732584193;
            var b = -271733879;
            var c = -1732584194;
            var d = 271733878;
            var e = -1009589776;

            for (var i = 0; i < x.length; i += 16) {
                var olda = a;
                var oldb = b;
                var oldc = c;
                var oldd = d;
                var olde = e;

                for (var j = 0; j < 80; j++) {
                    if (j < 16) w[j] = x[i + j];
                    else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
                    var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
                        safe_add(safe_add(e, w[j]), shal_kt(j)));

```

```

        e = d;
        d = c;
        c = rol(b, 30);
        b = a;
        a = t;
    }

    a = safe_add(a, olda);
    b = safe_add(b, oldb);
    c = safe_add(c, oldc);
    d = safe_add(d, oldd);
    e = safe_add(e, olde);
}
return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
    (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {
    var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i++) {
        str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
        hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
    }
    return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
        | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
        | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {

```



```

        if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
        else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
    }
    }
    return str;
}
</script>
</head>
<body>
    <%
        If Not IsEmpty(Request.Form("IsFormSubmitted")) Then
            Dim strTerminalID, strTerminalID_, strProvisionPassword, SecurityData

            strTerminalID = Request.Form("txtTerminalID")
            strTerminalID_ = "0" & strTerminalID 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
            strProvisionPassword = Request.Form("txtPassword") 'Terminal UserID şifresi
            SecurityData = hex_shal(strProvisionPassword + strTerminalID_)

            Response.Write("Security Data : " & SecurityData)
        Else
            <%
                <form action="?" method="post">
                    Terminal ID: <input name="txtTerminalID" value="123456" type="text" />
                    <br />
                    Password: <input name="txtPassword" value="Abql2x46" type="text" />
                    <br />
                    <input id="cmdSubmit" type="submit" value="Oluştur" />
                    <input type="hidden" name="IsFormSubmitted" value="submitted" />
                </form>
            <% End If %>
        </body>
    </html>

```

PHP

```

<html>
<head>
    <title></title>
</head>
<body>
    <?php
        If ($_POST['IsFormSubmitted'] == ""){
        }
        else {
            $strTerminalID = $_POST['txtTerminalID'];
            $strTerminalID_ = "0".$_POST['txtTerminalID']; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
            $strProvisionPassword = $_POST['txtPassword']; //Terminal UserID şifresi
            $SecurityData = strtoupper(shal($strProvisionPassword.$strTerminalID_));

            echo($SecurityData);
        }
    ?>
    <form action="?" method="post">
        Terminal ID: <input name="txtTerminalID" value="123456" type="text" />
        <br />
        Password: <input name="txtPassword" value="Abql2x46" type="text" />
        <br />
        <input id="cmdSubmit" type="submit" value="Oluştur" />
        <input type="hidden" name="IsFormSubmitted" value="submitted" />
    </form>
</body>
</html>

```

Hash Data (Aşama 2) örnek kodlar:

FORM

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="HashData.aspx.vb" Inherits="TradeSiS_GVP.HashData" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">

```

```

<div>
    Terminal ID: <asp:TextBox ID="txtTerminalID" Text="123456" runat="server" />
    <br />
    Password: <asp:TextBox ID="txtPassword" Text="Abq12x46" runat="server" />
    <br />
    Order ID: <asp:TextBox ID="txtOrderID" Text="1" runat="server" />
    <br />
    Number: <asp:TextBox ID="txtCCNumber" Text="42424242424242" runat="server" />
    <br />
    Amount: <asp:TextBox ID="txtAmount" Text="175,92" runat="server" />
    <br />
    <asp:Button ID="cmdSubmit" runat="server" Text="Oluştur" />
    <br /><br />
    <asp:Label ID="lblResult_SecurityData" runat="server" />
    <br />
    <asp:Label ID="lblResult_HashData" runat="server" />
</div>
</form>
</body>
</html>

```

VB.NET

```

Imports System
Imports System.Net
Imports System.Security.Cryptography

Partial Public Class HashData
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then
            End If
        End Sub

    Public Function GetSHA1(ByVal SHA1Data As String) As String

        Dim sha As SHA1 = New SHA1CryptoServiceProvider()
        Dim HashedPassword As String = SHA1Data
        Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
        Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
        Return GetHexadecimal(inputbytes)

    End Function

    Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

        Dim s As New StringBuilder()
        Dim length As Integer = bytes.Length
        For n As Integer = 0 To length - 1
            s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
        Next
        Return s.ToString()

    End Function

    Protected Sub cmdSubmit_Click(ByVal sender As Object, ByVal e As EventArgs) Handles cmdSubmit.Click

        Dim strTerminalID As String = txtTerminalID.Text
        Dim _strTerminalID As String = "0" & txtTerminalID.Text 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
        Dim strProvisionPassword As String = txtPassword.Text 'Terminal UserID şifresi
        Dim strOrderID As String = txtOrderID.Text
        Dim strNumber As String = txtCCNumber.Text
        Dim strAmount As String = Replace(txtAmount.Text, ",", "") ' şlem Tutarı

        Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
        lblResult_SecurityData.Text = "Security Data : " & SecurityData

        Dim HashData As String = UCase(GetSHA1(strOrderID + strTerminalID + strNumber + strAmount +
        SecurityData))
        lblResult_HashData.Text = "Hash Data : " & HashData

    End Sub

End Class

```

C#

```

using System;
using System.Text;
using System.Collections.Generic;

```

```

using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSiS_GVP_C
{
    public partial class HashData : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                public string GetSHA1(string SHA1Data)
                {
                    SHA1 sha = new SHA1CryptoServiceProvider();
                    string HashedPassword = SHA1Data;
                    byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
                    byte[] inputbytes = sha.ComputeHash(hashbytes);
                    return GetHexadecimal(inputbytes);
                }

                public string GetHexadecimal(byte[] bytes)
                {
                    StringBuilder s = new StringBuilder();
                    int length = bytes.Length;
                    for (int n = 0; n <= length - 1; n++)
                    {
                        s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
                    }
                    return s.ToString();
                }

                protected void cmdSubmit_Click(object sender, EventArgs e)
                {
                    string strTerminalID = txtTerminalID.Text;
                    string _strTerminalID = "0" + txtTerminalID.Text; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
                    string strProvisionPassword = txtPassword.Text; //Terminal UserID şifresi
                    string strOrderID = txtOrderID.Text;
                    string strNumber = txtCCNumber.Text;
                    string strAmount = txtAmount.Text.Replace(",", ""); // şlem Tutarı

                    string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
                    lblResult_SecurityData.Text = "Security Data : " + SecurityData;

                    string HashData = GetSHA1(strOrderID + strTerminalID + strNumber + strAmount +
                    SecurityData).ToUpper();
                    lblResult_HashData.Text = "Hash Data : " + HashData;
                }
            }
        }
    }
}

```

ASP

```

<html>
<head>
    <title></title>
    <script language="javascript" type="text/javascript" runat="server">

        var hexcase = 1;
        var b64pad = "=";
        var chrsz = 8;

        function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
        function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
        function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
        function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
        function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
        function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

        function shal_vm_test() {
            return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
        }

        function core_shal(x, len) {

            x[len >> 5] |= 0x80 << (24 - len % 32);
            x[(len + 64 >> 9) << 4 + 15] = len;

            var w = Array(80);
            var a = 1732584193;

```

```

var b = -271733879;
var c = -1732584194;
var d = 271733878;
var e = -1009589776;

for (var i = 0; i < x.length; i += 16) {
    var olda = a;
    var oldb = b;
    var oldc = c;
    var oldd = d;
    var olde = e;

    for (var j = 0; j < 80; j++) {
        if (j < 16) w[j] = x[i + j];
        else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
        var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
            safe_add(safe_add(e, w[j]), shal_kt(j)));
        e = d;
        d = c;
        c = rol(b, 30);
        b = a;
        a = t;
    }

    a = safe_add(a, olda);
    b = safe_add(b, oldb);
    c = safe_add(c, oldc);
    d = safe_add(d, oldd);
    e = safe_add(e, olde);
}

return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
        (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {

```

```

        var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i++) {
            str += hex_tab.charAt(((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
                hex_tab.charAt(((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF));
        }

        return str;
    }

    function binb2b64(binarray) {
        var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i += 3) {
            var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
                | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
                | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
            for (var j = 0; j < 4; j++) {
                if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
                else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
            }
        }
        return str;
    }
}
</script>
</head>
<body>
<%
    If Not IsEmpty(Request.Form("IsFormSubmitted")) Then

        Dim strTerminalID, strTerminalID_, strProvisionPassword, strOrderID, strNumber, strAmount,
        SecurityData, HashData

        strTerminalID = Request.Form("txtTerminalID")
        strTerminalID_ = "0" & strTerminalID 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
        strProvisionPassword = Request.Form("txtPassword") 'Terminal UserID şifresi
        strOrderID = Request.Form("txtOrderID")
        strNumber = Request.Form("txtCCNumber")
        strAmount = Replace(Request.Form("txtAmount"), ",", "", " ") 'şlem Tutarı

        SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
        Response.Write("Security Data : " & SecurityData)
        Response.Write("<br />")

        HashData = hex_shal(strOrderID + strTerminalID + strNumber + strAmount + SecurityData)
        Response.Write("Hash Data : " & HashData)

    Else
<%>
<form action="?" method="post">
    Terminal ID: <input name="txtTerminalID" value="123456" type="text" />
    <br />
    Password: <input name="txtPassword" value="Abql2x46" type="text" />
    <br />
    Order ID: <input name="txtOrderID" value="1" type="text" />
    <br />
    Number: <input name="txtCCNumber" value="4242424242424242" type="text" />
    <br />
    Amount: <input name="txtAmount" value="175,92" type="text" />
    <br />
    <input id="cmdSubmit" type="submit" value="Oluştur" />
    <input type="hidden" name="IsFormSubmitted" value="submitted" />
</form>
<% End If %>
</body>
</html>

```

PHP

```

<html>
<head>
    <title></title>
</head>
<body>
    <?php
        If ($_POST['IsFormSubmitted'] == ""){
        }
        else {
            $strTerminalID = $_POST['txtTerminalID'];
            $strTerminalID_ = "0".$_POST['txtTerminalID']; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
            $strProvisionPassword = $_POST['txtPassword']; //Terminal UserID şifresi
            $strOrderID = $_POST['txtOrderID'];
            $strNumber = $_POST['txtCCNumber'];
            $strAmount = $_POST['txtAmount']; //şlem Tutarı
            $strSearch = array('.',',',' ');

```

```
$strReplace = array('','');
$strAmount_ = str_replace($strSearch,$strReplace,$strAmount);
$SecurityData = strtoupper(shal($strProvisionPassword.$strTerminalID_));
$HashData = strtoupper(shal($strOrderID.$strTerminalID.$strNumber.$strAmount_.$SecurityData));

echo($HashData);
}

?>
<form action="?" method="post">
Terminal ID: <input name="txtTerminalID" value="123456" type="text" />
<br />
Password: <input name="txtPassword" value="Abq12x46" type="text" />
<br />
Order ID: <input name="txtOrderID" value="1" type="text" />
<br />
Number: <input name="txtCCNumber" value="4242424242424242" type="text" />
<br />
Amount: <input name="txtAmount" value="175,92" type="text" />
<br />
<input id="cmdSubmit" type="submit" value="Olustur" />
<input type="hidden" name="IsFormSubmitted" value="submitted" />
</form>
</body>
</html>
```

İşlem Göndermek

Provizyon için dataların post edilece i adres

Normal : <https://sanalposprov.garanti.com.tr/VPServlet>

3D Secure : <https://sanalposprov.garanti.com.tr/servlet/gt3dengine>

Yaratmanız gereken de işkenler

- Mode
- Version
- Terminal
- ProvUserID
- HashData
- UserID
- ID
- MerchantID
- Customer
- IPAddress
- EmailAddress
- Number
- ExpireDate
- CVV2
- OrderID
- GroupID
- Description
- Type
- InstallmentCnt
- Amount
- CurrencyCode
- CardholderPresentCode
- MotoInd
- Description
- OriginalRetrefNum

Satış işlemi için örnek kodlar

FORM

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="CCPay.aspx.vb" Inherits="TradeSiS_GVP.CCPay" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
Terminal ID: <asp:TextBox ID="txtTerminalID" runat="server" />
<br />
Password: <asp:TextBox ID="txtPassword" runat="server" />
<br />
User ID: <asp:TextBox ID="txtUserID" runat="server" />
<br />
Merchant ID: <asp:TextBox ID="txtMerchantID" runat="server" />
<br />
Order ID: <asp:TextBox ID="txtOrderID" runat="server" />
<br />
Customer Name: <asp:TextBox ID="txtCustomerName" runat="server" />
<br />
Customer Email: <asp:TextBox ID="txtCustomerEmail" runat="server" />
<br />
Number: <asp:TextBox ID="txtCCNumber" runat="server" />
<br />
Expire Date: <asp:TextBox ID="txtExpDate" runat="server" />
<br />
CVV2: <asp:TextBox ID="txtCVV2" runat="server" />
<br />
Amount: <asp:TextBox ID="txtAmount" runat="server" />
<br />
<asp:Button ID="cmdSubmit" runat="server" Text="Oluştur" />
<br />
<asp:Label ID="lblResults" runat="server" />
</div>
</form>
</body>
</html>
```

VB.NET

```
Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class CCPay
Inherits System.Web.UI.Page

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
If Not Page.IsPostBack Then
End If
End Sub

Public Function GetSHA1(ByVal SHA1Data As String) As String

Dim sha As SHA1 = New SHA1CryptoServiceProvider()
Dim HashedPassword As String = SHA1Data
Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
Return GetHexadecimal(inputbytes)

End Function

Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

Dim s As New StringBuilder()
Dim length As Integer = bytes.Length
For n As Integer = 0 To length - 1
s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
Next
Return s.ToString()

End Function
```

```

End Function

Protected Sub cmdSubmit_Click(ByVal sender As Object, ByVal e As EventArgs) Handles cmdSubmit.Click

    Dim strMode As String = "PROD"
    Dim strVersion As String = "v0.01"
    Dim strTerminalID As String = txtTerminalID.Text
    Dim _strTerminalID As String = "0" & txtTerminalID.Text 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
    Dim strProvUserID As String = "PROVAUT"
    Dim strProvisionPassword As String = txtPassword.Text 'Terminal UserID şifresi
    Dim strUserID As String = txtUserID.Text
    Dim strMerchantID As String = txtMerchantID.Text 'Üye şyeri Numarası
    Dim strCustomerName As String = txtCustomerName.Text
    Dim strIPAddress As String = "192.168.1.1"
    Dim strEmailAddress As String = txtCustomerEmail.Text
    Dim strOrderID As String = txtOrderID.Text
    Dim strNumber As String = txtCCNumber.Text
    Dim strExpireDate As String = txtExpDate.Text
    Dim strCVV2 As String = txtCVV2.Text
    Dim strAmount As String = Replace(txtAmount.Text, ",", "", " ") 'şlem Tutarı
    Dim strType As String = "sales"
    Dim strCurrencyCode As String = "949"
    Dim strCardholderPresentCode As String = "0"
    Dim strMotoInd As String = "N"
    Dim strHostAddress As String = "https://sanalposprov.garanti.com.tr/VPServlet"
    Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
    Dim HashData As String = UCase(GetSHA1(strOrderID + strTerminalID + strNumber + strAmount +
SecurityData))

    Dim doc As New System.Xml.XmlDocument
    Dim dec As System.Xml.XmlDeclaration
    dec = doc.CreateXmlDeclaration("1.0", "ISO-8859-1", "yes")
    doc.AppendChild(dec)

    Dim GVPSRequest As System.Xml.XmlElement
    GVPSRequest = doc.CreateElement("GVPSRequest")
    doc.AppendChild(GVPSRequest)

    Dim Mode As System.Xml.XmlElement
    Mode = doc.CreateElement("Mode")
    Mode.AppendChild(doc.CreateTextNode(strMode))
    GVPSRequest.AppendChild(Mode)

    Dim Version As System.Xml.XmlElement
    Version = doc.CreateElement("Version")
    Version.AppendChild(doc.CreateTextNode(strVersion))
    GVPSRequest.AppendChild(Version)

    Dim Terminal As System.Xml.XmlElement
    Terminal = doc.CreateElement("Terminal")
    GVPSRequest.AppendChild(Terminal)

    Dim ProvUserID As System.Xml.XmlElement
    ProvUserID = doc.CreateElement("ProvUserID")
    ProvUserID.AppendChild(doc.CreateTextNode(strProvUserID))
    Terminal.AppendChild(ProvUserID)

    Dim HashData_ As System.Xml.XmlElement
    HashData_ = doc.CreateElement("HashData")
    HashData_.AppendChild(doc.CreateTextNode(HashData))
    Terminal.AppendChild(HashData_)

    Dim UserID As System.Xml.XmlElement
    UserID = doc.CreateElement("UserID")
    UserID.AppendChild(doc.CreateTextNode(strUserID))
    Terminal.AppendChild(UserID)

    Dim ID As System.Xml.XmlElement
    ID = doc.CreateElement("ID")
    ID.AppendChild(doc.CreateTextNode(strTerminalID))
    Terminal.AppendChild(ID)

    Dim MerchantID As System.Xml.XmlElement
    MerchantID = doc.CreateElement("MerchantID")
    MerchantID.AppendChild(doc.CreateTextNode(strMerchantID))
    Terminal.AppendChild(MerchantID)

    Dim Customer As System.Xml.XmlElement
    Customer = doc.CreateElement("Customer")
    GVPSRequest.AppendChild(Customer)

    Dim IPAddress As System.Xml.XmlElement
    IPAddress = doc.CreateElement("IPAddress")
    IPAddress.AppendChild(doc.CreateTextNode(strIPAddress))
    Customer.AppendChild(IPAddress)

    Dim EmailAddress As System.Xml.XmlElement

```



```

EmailAddress = doc.CreateElement("EmailAddress")
EmailAddress.AppendChild(doc.CreateTextNode(strEmailAddress))
Customer.AppendChild(EmailAddress)

Dim Card As System.Xml.XmlElement
Card = doc.CreateElement("Card")
GVPSRequest.AppendChild(Card)

Dim Number As System.Xml.XmlElement
Number = doc.CreateElement("Number")
Number.AppendChild(doc.CreateTextNode(strNumber))
Card.AppendChild(Number)

Dim ExpireDate As System.Xml.XmlElement
ExpireDate = doc.CreateElement("ExpireDate")
ExpireDate.AppendChild(doc.CreateTextNode(strExpireDate))
Card.AppendChild(ExpireDate)

Dim CVV2 As System.Xml.XmlElement
CVV2 = doc.CreateElement("CVV2")
CVV2.AppendChild(doc.CreateTextNode(strCVV2))
Card.AppendChild(CVV2)

Dim Order As System.Xml.XmlElement
Order = doc.CreateElement("Order")
GVPSRequest.AppendChild(Order)

Dim OrderID As System.Xml.XmlElement
OrderID = doc.CreateElement("OrderID")
OrderID.AppendChild(doc.CreateTextNode(strOrderID))
Order.AppendChild(OrderID)

Dim GroupID As System.Xml.XmlElement
GroupID = doc.CreateElement("GroupID")
GroupID.AppendChild(doc.CreateTextNode(" "))
Order.AppendChild(GroupID)

Dim Description As System.Xml.XmlElement
Description = doc.CreateElement("Description")
Description.AppendChild(doc.CreateTextNode(" "))
Order.AppendChild(Description)

Dim Transaction As System.Xml.XmlElement
Transaction = doc.CreateElement("Transaction")
GVPSRequest.AppendChild(Transaction)

Dim Type As System.Xml.XmlElement
Type = doc.CreateElement("Type")
Type.AppendChild(doc.CreateTextNode(strType))
Transaction.AppendChild(Type)

Dim InstallmentCnt As System.Xml.XmlElement
InstallmentCnt = doc.CreateElement("InstallmentCnt")
InstallmentCnt.AppendChild(doc.CreateTextNode(" "))
Transaction.AppendChild(InstallmentCnt)

Dim Amount As System.Xml.XmlElement
Amount = doc.CreateElement("Amount")
Amount.AppendChild(doc.CreateTextNode(strAmount))
Transaction.AppendChild(Amount)

Dim CurrencyCode As System.Xml.XmlElement
CurrencyCode = doc.CreateElement("CurrencyCode")
CurrencyCode.AppendChild(doc.CreateTextNode(strCurrencyCode))
Transaction.AppendChild(CurrencyCode)

Dim CardholderPresentCode As System.Xml.XmlElement
CardholderPresentCode = doc.CreateElement("CardholderPresentCode")
CardholderPresentCode.AppendChild(doc.CreateTextNode(strCardholderPresentCode))
Transaction.AppendChild(CardholderPresentCode)

Dim MotoInd As System.Xml.XmlElement
MotoInd = doc.CreateElement("MotoInd")
MotoInd.AppendChild(doc.CreateTextNode(strMotoInd))
Transaction.AppendChild(MotoInd)

Dim _Description As System.Xml.XmlElement
_Description = doc.CreateElement("Description")
_Description.AppendChild(doc.CreateTextNode(" "))
Transaction.AppendChild(_Description)

Dim OriginalRetrefNum As System.Xml.XmlElement
OriginalRetrefNum = doc.CreateElement("OriginalRetrefNum")
OriginalRetrefNum.AppendChild(doc.CreateTextNode(" "))
Transaction.AppendChild(OriginalRetrefNum)

Try

```

```

        Dim data As String = "data=" + doc.OuterXml

        Dim _WebRequest As WebRequest = WebRequest.Create(strHostAddress)
        _WebRequest.Method = "POST"

        Dim byteArray As Byte() = Encoding.UTF8.GetBytes(data)
        _WebRequest.ContentType = "application/x-www-form-urlencoded"
        _WebRequest.ContentLength = byteArray.Length

        Dim dataStream As Stream = _WebRequest.GetRequestStream()
        dataStream.Write(byteArray, 0, byteArray.Length)
        dataStream.Close()

        Dim _WebResponse As WebResponse = _WebRequest.GetResponse()
        Console.WriteLine(CType(_WebResponse, HttpWebResponse).StatusDescription)
        dataStream = _WebResponse.GetResponseStream()

        Dim reader As New StreamReader(dataStream)
        Dim responseFromServer As String = reader.ReadToEnd()

        Console.WriteLine(responseFromServer)

        lblResults.Text = "Cevap :" & responseFromServer

    Catch ex As Exception
        lblResults.Text = ex.Message
    End Try

End Sub

End Class

```

C#

```

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSiS_GVP_C
{
    public partial class CCPay : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                public string GetSHA1(string SHA1Data)
                {
                    SHA1 sha = new SHA1CryptoServiceProvider();
                    string HashedPassword = SHA1Data;
                    byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
                    byte[] inputbytes = sha.ComputeHash(hashbytes);
                    return GetHexadecimal(inputbytes);
                }

                public string GetHexadecimal(byte[] bytes)
                {
                    StringBuilder s = new StringBuilder();
                    int length = bytes.Length;
                    for (int n = 0; n <= length - 1; n++)
                    {
                        s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
                    }
                    return s.ToString();
                }

                protected void cmdSubmit_Click(object sender, EventArgs e)
                {
                    string strMode = "PROD";
                    string strVersion = "v0.01";
                    string strTerminalID = txtTerminalID.Text;
                    string _strTerminalID = "0" + txtTerminalID.Text; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
                    string strProvUserID = "PROVAUT";
                    string strProvisionPassword = txtPassword.Text; //Terminal UserID şifresi
                    string strUserID = txtUserID.Text;
                }
            }
        }
    }
}

```

```

        string strMerchantID = txtMerchantID.Text; //Üye Şyeri Numarası
        string strCustomerName = txtCustomerName.Text;
        string strIPAddress = "192.168.1.1";
        string strEmailAddress = txtCustomerEmail.Text;
        string strOrderID = txtOrderID.Text;
        string strNumber = txtCCNumber.Text;
        string strExpireDate = txtExpDate.Text;
        string strCVV2 = txtCVV2.Text;
        string strAmount = txtAmount.Text.Replace(".", ""); // Şlem Tutarı
        string strType = "sales";
        string strCurrencyCode = "949";
        string strCardholderPresentCode = "0";
        string strMotoInd = "N";
        string strHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet";
        string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
        string HashData = GetSHA1(strOrderID + strTerminalID + strNumber + strAmount +
SecurityData).ToUpper();

        System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
        System.Xml.XmlDeclaration dec = null;
        dec = doc.CreateXmlDeclaration("1.0", "ISO-8859-1", "yes");
        doc.AppendChild(dec);

        System.Xml.XmlElement GVPSRequest = null;
        GVPSRequest = doc.CreateElement("GVPSRequest");
        doc.AppendChild(GVPSRequest);

        System.Xml.XmlElement Mode = null;
        Mode = doc.CreateElement("Mode");
        Mode.AppendChild(doc.CreateTextNode(strMode));
        GVPSRequest.AppendChild(Mode);

        System.Xml.XmlElement Version = null;
        Version = doc.CreateElement("Version");
        Version.AppendChild(doc.CreateTextNode(strVersion));
        GVPSRequest.AppendChild(Version);

        System.Xml.XmlElement Terminal = null;
        Terminal = doc.CreateElement("Terminal");
        GVPSRequest.AppendChild(Terminal);

        System.Xml.XmlElement ProvUserID = null;
        ProvUserID = doc.CreateElement("ProvUserID");
        ProvUserID.AppendChild(doc.CreateTextNode(strProvUserID));
        Terminal.AppendChild(ProvUserID);

        System.Xml.XmlElement HashData_ = null;
        HashData_ = doc.CreateElement("HashData");
        HashData_.AppendChild(doc.CreateTextNode(HashData));
        Terminal.AppendChild(HashData_);

        System.Xml.XmlElement UserID = null;
        UserID = doc.CreateElement("UserID");
        UserID.AppendChild(doc.CreateTextNode(strUserID));
        Terminal.AppendChild(UserID);

        System.Xml.XmlElement ID = null;
        ID = doc.CreateElement("ID");
        ID.AppendChild(doc.CreateTextNode(strTerminalID));
        Terminal.AppendChild(ID);

        System.Xml.XmlElement MerchantID = null;
        MerchantID = doc.CreateElement("MerchantID");
        MerchantID.AppendChild(doc.CreateTextNode(strMerchantID));
        Terminal.AppendChild(MerchantID);

        System.Xml.XmlElement Customer = null;
        Customer = doc.CreateElement("Customer");
        GVPSRequest.AppendChild(Customer);

        System.Xml.XmlElement IPAddress = null;
        IPAddress = doc.CreateElement("IPAddress");
        IPAddress.AppendChild(doc.CreateTextNode(strIPAddress));
        Customer.AppendChild(IPAddress);

        System.Xml.XmlElement EmailAddress = null;
        EmailAddress = doc.CreateElement("EmailAddress");
        EmailAddress.AppendChild(doc.CreateTextNode(strEmailAddress));
        Customer.AppendChild(EmailAddress);

        System.Xml.XmlElement Card = null;
        Card = doc.CreateElement("Card");
        GVPSRequest.AppendChild(Card);

        System.Xml.XmlElement Number = null;
        Number = doc.CreateElement("Number");
        Number.AppendChild(doc.CreateTextNode(strNumber));

```

```

Card.AppendChild(Number);

System.Xml.XmlElement ExpireDate = null;
ExpireDate = doc.CreateElement("ExpireDate");
ExpireDate.AppendChild(doc.CreateTextNode(strExpireDate));
Card.AppendChild(ExpireDate);

System.Xml.XmlElement CVV2 = null;
CVV2 = doc.CreateElement("CVV2");
CVV2.AppendChild(doc.CreateTextNode(strCVV2));
Card.AppendChild(CVV2);

System.Xml.XmlElement Order = null;
Order = doc.CreateElement("Order");
GVPSRequest.AppendChild(Order);

System.Xml.XmlElement OrderID = null;
OrderID = doc.CreateElement("OrderID");
OrderID.AppendChild(doc.CreateTextNode(strOrderID));
Order.AppendChild(OrderID);

System.Xml.XmlElement GroupID = null;
GroupID = doc.CreateElement("GroupID");
GroupID.AppendChild(doc.CreateTextNode(""));
Order.AppendChild(GroupID);

System.Xml.XmlElement Description = null;
Description = doc.CreateElement("Description");
Description.AppendChild(doc.CreateTextNode(""));
Order.AppendChild(Description);

System.Xml.XmlElement Transaction = null;
Transaction = doc.CreateElement("Transaction");
GVPSRequest.AppendChild(Transaction);

System.Xml.XmlElement Type = null;
Type = doc.CreateElement("Type");
Type.AppendChild(doc.CreateTextNode(strType));
Transaction.AppendChild(Type);

System.Xml.XmlElement InstallmentCnt = null;
InstallmentCnt = doc.CreateElement("InstallmentCnt");
InstallmentCnt.AppendChild(doc.CreateTextNode(""));
Transaction.AppendChild(InstallmentCnt);

System.Xml.XmlElement Amount = null;
Amount = doc.CreateElement("Amount");
Amount.AppendChild(doc.CreateTextNode(strAmount));
Transaction.AppendChild(Amount);

System.Xml.XmlElement CurrencyCode = null;
CurrencyCode = doc.CreateElement("CurrencyCode");
CurrencyCode.AppendChild(doc.CreateTextNode(strCurrencyCode));
Transaction.AppendChild(CurrencyCode);

System.Xml.XmlElement CardholderPresentCode = null;
CardholderPresentCode = doc.CreateElement("CardholderPresentCode");
CardholderPresentCode.AppendChild(doc.CreateTextNode(strCardholderPresentCode));
Transaction.AppendChild(CardholderPresentCode);

System.Xml.XmlElement MotoInd = null;
MotoInd = doc.CreateElement("MotoInd");
MotoInd.AppendChild(doc.CreateTextNode(strMotoInd));
Transaction.AppendChild(MotoInd);

System.Xml.XmlElement _Description = null;
_Description = doc.CreateElement("Description");
_Description.AppendChild(doc.CreateTextNode(""));
Transaction.AppendChild(_Description);

System.Xml.XmlElement OriginalRetrefNum = null;
OriginalRetrefNum = doc.CreateElement("OriginalRetrefNum");
OriginalRetrefNum.AppendChild(doc.CreateTextNode(""));
Transaction.AppendChild(OriginalRetrefNum);

try{
    string data = "data=" + doc.OuterXml;
    WebRequest _WebRequest = WebRequest.Create(strHostAddress);
    _WebRequest.Method = "POST";

    byte[] byteArray = Encoding.UTF8.GetBytes(data);
    _WebRequest.ContentType = "application/x-www-form-urlencoded";
    _WebRequest.ContentLength = byteArray.Length;

    Stream dataStream = _WebRequest.GetRequestStream();
    dataStream.Write(byteArray, 0, byteArray.Length);
    dataStream.Close();
}

```

```

        WebResponse _WebResponse = _WebRequest.GetResponse();
        Console.WriteLine(((HttpWebResponse)_WebResponse).StatusDescription);
        dataStream = _WebResponse.GetResponseStream();

        StreamReader reader = new StreamReader(dataStream);
        string responseFromServer = reader.ReadToEnd();

        Console.WriteLine(responseFromServer);
        lblResults.Text = "Dönen Cevap : " + responseFromServer;
    }
    catch (Exception ex) {
        lblResults.Text = ex.Message;
    }
}
}
}

```

ASP

```

<html>
<head>
<title></title>
<script language="javascript" type="text/javascript" runat="server">

    var hexcase = 1;
    var b64pad = "=";
    var chrsz = 8;

    function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
    function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
    function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
    function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
    function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
    function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

    function sha1_vm_test() {
        return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
    }

    function core_shal(x, len) {

        x[len >> 5] |= 0x80 << (24 - len % 32);
        x[(len + 64 >> 9) << 4 + 15] = len;

        var w = Array(80);
        var a = 1732584193;
        var b = -271733879;
        var c = -1732584194;
        var d = 271733878;
        var e = -1009589776;

        for (var i = 0; i < x.length; i += 16) {
            var olda = a;
            var oldb = b;
            var oldc = c;
            var oldd = d;
            var olde = e;

            for (var j = 0; j < 80; j++) {
                if (j < 16) w[j] = x[i + j];
                else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
                var t = safe_add(safe_add(rol(a, 5), sha1_ft(j, b, c, d)),
                    safe_add(safe_add(e, w[j]), sha1_kt(j)));
                e = d;
                d = c;
                c = rol(b, 30);
                b = a;
                a = t;
            }

            a = safe_add(a, olda);
            b = safe_add(b, oldb);
            c = safe_add(c, oldc);
            d = safe_add(d, oldd);
            e = safe_add(e, olde);
        }
        return Array(a, b, c, d, e);
    }

    function sha1_ft(t, b, c, d) {
        if (t < 20) return (b & c) | ((~b) & d);
        if (t < 40) return b ^ c ^ d;
        if (t < 60) return (b & c) | (b & d) | (c & d);
        return b ^ c ^ d;
    }

```

```

    }

    function sha1_kt(t) {
        return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
            (t < 60) ? -1894007588 : -899497514;
    }

    function core_hmac_sha1(key, data) {
        var bkey = str2binb(key);
        if (bkey.length > 16) bkey = core_sha1(bkey, key.length * chrsz);

        var ipad = Array(16), opad = Array(16);
        for (var i = 0; i < 16; i++) {
            ipad[i] = bkey[i] ^ 0x36363636;
            opad[i] = bkey[i] ^ 0x5C5C5C5C;
        }

        var hash = core_sha1(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
        return core_sha1(opad.concat(hash), 512 + 160);
    }

    function safe_add(x, y) {
        var lsw = (x & 0xFFFF) + (y & 0xFFFF);
        var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
        return (msw << 16) | (lsw & 0xFFFF);
    }

    function rol(num, cnt) {
        return (num << cnt) | (num >>> (32 - cnt));
    }

    function str2binb(str) {
        var bin = Array();
        var mask = (1 << chrsz) - 1;
        for (var i = 0; i < str.length * chrsz; i += chrsz)
            bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
        return bin;
    }

    function binb2str(bin) {
        var str = "";
        var mask = (1 << chrsz) - 1;
        for (var i = 0; i < bin.length * 32; i += chrsz)
            str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
        return str;
    }

    function binb2hex(binarray) {
        var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i++) {
            str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
                hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
        }
        return str;
    }

    function binb2b64(binarray) {
        var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
        var str = "";
        for (var i = 0; i < binarray.length * 4; i += 3) {
            var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
                | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
                | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
            for (var j = 0; j < 4; j++) {
                if (i * 8 + j > binarray.length * 32) str += b64pad;
                else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
            }
        }
        return str;
    }
}

</script>
</head>
<body>
<?
    strMode = "PROD"
    strVersion = "v0.01"
    strTerminalID = "XXXXXXXX"
    strTerminalID_ = "XXXXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
    strProvUserID = "PROVAUT"
    strProvisionPassword = "XXXXXX" 'Terminal UserID şifresi
    strUserID = "XXXXXX"
    strMerchantID = "XXXXXX" 'Üye şyeri Numarası
    strCustomerName = "Yahya EK NC"
    strIPAddress = "192.168.1.1"
    strEmailAddress = "info@tradesis.com"
    strOrderID = "Deneme"

```

```

strInstallmentCnt = ""
strNumber = Request.Form("cardnumber")
strExpireDate = Request.Form("cardexpiredatemonth") & Request.Form("cardexpiredateyear")
strCVV2 = Request.Form("cardcvv2")
strAmount = "100" ' şlem Tutarı
strType = "sales"
strCurrencyCode = "949"
strCardholderPresentCode = "0"
strMotoInd = "N"
strHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet"
SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
HashData = hex_shal(strOrderID + strTerminalID + strNumber + strAmount + SecurityData)

If Not IsEmpty(Request.Form("IsFormSubmitted")) Then

    Set SrvHTTPS = Server.CreateObject("MSXML2.ServerXMLHTTP")
    Set XMLSend = Server.CreateObject("MSXML2.DOMDocument")

    'GVPSRequest Ana Tag
    Set RootElement = XMLSend.createElement("GVPSRequest")

    '1.Seviyeye Veri Giriş Tagleri
    Set Mode = XMLSend.createElement("Mode")
    Mode.text= strMode
    RootElement.appendChild(Mode)

    Set Version = XMLSend.createElement("Version")
    Version.text= strVersion
    RootElement.appendChild(Version)

    'Terminal 2.Ana Tag Seviyesi
    Set Terminal = XMLSend.createElement("Terminal")
    RootElement.appendChild(Terminal)

    Set ProvUserID = XMLSend.createElement("ProvUserID")
    ProvUserID.text= strProvUserID
    Terminal.appendChild(ProvUserID)

    Set HashData_ = XMLSend.createElement("HashData")
    HashData_.text= HashData
    Terminal.appendChild(HashData_)

    Set UserID = XMLSend.createElement("UserID")
    UserID.text= strUserID
    Terminal.appendChild(UserID)

    Set ID = XMLSend.createElement("ID")
    ID.text= strTerminalID
    Terminal.appendChild(ID)

    Set MerchantID = XMLSend.createElement("MerchantID")
    MerchantID.text= strMerchantID
    Terminal.appendChild(MerchantID)

    'Customer 2.Ana Tag Seviyesi
    Set Customer = XMLSend.createElement("Customer")
    RootElement.appendChild(Customer)

    Set IPAddress = XMLSend.createElement("IPAddress")
    IPAddress.text= strIPAddress
    Customer.appendChild(IPAddress)

    Set EmailAddress = XMLSend.createElement("EmailAddress")
    EmailAddress.text= strEmailAddress
    Customer.appendChild(EmailAddress)

    'Card 2.Ana Tag Seviyesi
    Set Card = XMLSend.createElement("Card")
    RootElement.appendChild(Card)

    Set Number = XMLSend.createElement("Number")
    Number.text= strNumber
    Card.appendChild(Number)

    Set ExpireDate = XMLSend.createElement("ExpireDate")
    ExpireDate.text= strExpireDate
    Card.appendChild(ExpireDate)

    Set CVV2 = XMLSend.createElement("CVV2")
    CVV2.text= strCVV2
    Card.appendChild(CVV2)

    'Order 2.Ana Tag Seviyesi
    Set Order = XMLSend.createElement("Order")
    RootElement.appendChild(Order)

    Set OrderID = XMLSend.createElement("OrderID")

```

```

OrderID.text= strOrderID
Order.appendChild(OrderID)

Set GroupID = XMLSend.createElement("GroupID")
GroupID.text= " "
Order.appendChild(GroupID)

Set Description = XMLSend.createElement("Description")
Description.text= " "
Order.appendChild(Description)

'Transaction 2.Ana Tag Seviyesi
Set Transaction = XMLSend.createElement("Transaction")
RootElement.appendChild(Transaction)

Set Type_ = XMLSend.createElement("Type")
Type_.text= strType
Transaction.appendChild(Type_)

Set InstallmentCnt = XMLSend.createElement("InstallmentCnt")
InstallmentCnt.text= strInstallmentCnt
Transaction.appendChild(InstallmentCnt)

Set Amount = XMLSend.createElement("Amount")
Amount.text= strAmount
Transaction.appendChild(Amount)

Set CurrencyCode = XMLSend.createElement("CurrencyCode")
CurrencyCode.text= strCurrencyCode
Transaction.appendChild(CurrencyCode)

Set CardholderPresentCode = XMLSend.createElement("CardholderPresentCode")
CardholderPresentCode.text= strCardholderPresentCode
Transaction.appendChild(CardholderPresentCode)

Set MotoInd = XMLSend.createElement("MotoInd")
MotoInd.text= strMotoInd
Transaction.appendChild(MotoInd)

Set Description_ = XMLSend.createElement("Description")
Description_.text= " "
Transaction.appendChild(Description_)

Set OriginalRetrefNum = XMLSend.createElement("OriginalRetrefNum")
OriginalRetrefNum.text= " "
Transaction.appendChild(OriginalRetrefNum)

XMLSend.documentElement = RootElement
XMLSend.async = false
XMLSend.resolveExternals = false

SrvHTTPS.open "POST", strHostAddress, false
SrvHTTPS.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
SrvHTTPS.send "data="+XMLSend.xml

Set xmlDoc2 = CreateObject("MSXML2.DOMDocument")
xmlDoc2.setProperty "ServerHTTPRequest", True
xmlDoc2.async = True
xmlDoc2.LoadXML SrvHTTPS.responseText

Response.Write "<br><b>Giden stek</b><br>"
Response.Write XMLSend.xml
Response.Write "<br>"
Response.Write "<br><b>Gelen Yanıt</b><br>"
Response_Doc = SrvHTTPS.responseText
Response_Doc = Replace (Response_Doc, "<", "<")
Response_Doc = Replace (Response_Doc, ">", ">")
Response.Write Response_Doc & "<br>"

End If
%>
<form action="?" method="post">
Card Number: <input name="cardnumber" type="text" />
<br />
Expire Date (mm): <input name="cardexpiredatemonth" type="text" />
<br />
Expire Date (yy): <input name="cardexpiredateyear" type="text" />
<br />
CVV2: <input name="cardcvv2" type="text" />
<br />
<input type="hidden" name="IsFormSubmitted" value="submitted" />
<input id="submit" type="submit" value="şlemi Gönder" />
</form>
</body>
</html>

```



```

<html>
<head>
<title></title>
</head>
<body>
<?php
    $strMode = "PROD";
    $strVersion = "v0.01";
    $strTerminalID = "XXXXXXXX";
    $strTerminalID_ = "XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
    $strProvUserID = "PROVAUT";
    $strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
    $strUserID = "XXXXXX";
    $strMerchantID = "XXXXXX"; //Üye şyeri Numarası
    $strCustomerName = "Yahya EKİNCİ"
    $strIPAddress = "192.168.1.1";
    $strEmailAddress = "info@tradesis.com";
    $strOrderID = "Deneme";
    $strInstallmentCnt = "";
    $strNumber = $_POST['cardnumber'];
    $strExpireDate = $_POST['cardexpiredatemonth'].$_POST['cardexpiredateyear'];
    $strCVV2 = $_POST['cardcvv2'];
    $strAmount = "100"; // şlem Tutarı
    $strType = "sales";
    $strCurrencyCode = "949";
    $strCardholderPresentCode = "0";
    $strMotoInd = "N";
    $strHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet";
    $SecurityData = strtoupper(sha1($strProvisionPassword.$strTerminalID_));
    $HashData = strtoupper(sha1($strOrderID.$strTerminalID.$strNumber.$strAmount.$SecurityData));
    $xml= "<?xml version='1.0' encoding='ISO-8859-1'?">
    <GVPSRequest>
    <Mode>$strMode</Mode><Version>$strVersion</Version>

    <Terminal><ProvUserID>$strProvUserID</ProvUserID><HashData>$HashData</HashData><UserID>$strUserID</UserID><ID>$strTerminalID</ID><MerchantID>$strMerc
hantID</MerchantID></Terminal>
    <Customer><IPAddress>$strIPAddress</IPAddress><EmailAddress>$strEmailAddress</EmailAddress></Customer>
    <Card><Number>$strNumber</Number><ExpireDate>$strExpireDate</ExpireDate><CVV2>$strCVV2</CVV2></Card>
    <Order><OrderID>$strOrderID</OrderID><GroupID></GroupID><Description></Description></Order>

    <Transaction><Type>$strType</Type><InstallmentCnt>$strInstallmentCnt</InstallmentCnt><Amount>$strAmount</Amount><CurrencyCode>$strCurrencyCode</Curren
cyCode><CardholderPresentCode>$strCardholderPresentCode</CardholderPresentCode><MotoInd>$strMotoInd</MotoInd><Description></Description><OriginalRetre
fNum></OriginalRetrefNum></Transaction>
    </GVPSRequest>";

    If ($_POST['IsFormSubmitted'] == ""){
    }
    else {

        $ch=curl_init();
        curl_setopt($ch, CURLOPT_URL, $strHostAddress);
        curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
        curl_setopt($ch, CURLOPT_POST, 1);
        curl_setopt($ch, CURLOPT_POSTFIELDS, "data=".$xml);
        curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 0);
        curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, 0);
        $results = curl_exec($ch);
        curl_close($ch);

        echo " b Giden İstek /b br / "
        echo $xml;
        echo " br / b Gelen Yanıt /b br / "
        echo $results;
    }
    ?>
    <form action="?" method="post">
        Card Number: <input name="cardnumber" type="text" />
        <br />
        Expire Date (mm): <input name="cardexpiredatemonth" type="text" />
        <br />
        Expire Date (yy): <input name="cardexpiredateyear" type="text" />
        <br />
        CVV2: <input name="cardcvv2" type="text" />
        <br />
        <input type="hidden" name="IsFormSubmitted" value="submitted" />
        <input id="submit" type="submit" value="İşlemi Gönder" /
    </form>
</body>

```

3D Secure satış işlemi için örnek kodlar

3D Secure işlemler için HashData oluşturma aşamaları

Bu işlem tipinde HashData 2 aşamada oluşturulacaktır.

1. Security Data: Password + TerminalID
2. Hash Data: TerminalID + OrderID + Amount + SuccessURL + ErrorURL + Type + InstallmentCount + StoreKey + SecurityData

3D_Model işlemlerinde ise 3D Secure'a gönderilecek HASH data yukarıdaki gibi olacak; mdStatus = 1,2,3,4 alan işlemlerde ise Provizyona XML içerisinde gönderilecek HASH data aşağıdaki şekilde olacaktır.

1. Security Data: Password + TerminalID
2. Hash Data: OrderID + TerminalID + Amount + SecurityData

3D Secure do rulama cevapları (mdStatus)

<u>mdStatus = 0 :</u>	<u>3-D Secure imzası geçersiz</u>
<u>mdStatus = 1 :</u>	<u>Tam Do rulama</u>
<u>mdStatus = 2 :</u>	<u>Kart sahibi veya bankası sisteme kayıtlı de il</u>
<u>mdStatus = 3 :</u>	<u>Kartın bankası sisteme kayıtlı de il</u>
<u>mdStatus = 4 :</u>	<u>Do rulama denemesi, kart sahibi sisteme daha sonra kayır olmayı seçmiş</u>
<u>mdStatus = 5 :</u>	<u>Do rulama yapılamıyor</u>
<u>mdStatus = 6 :</u>	<u>3-D Secure Hatası</u>
<u>mdStatus = 7 :</u>	<u>Sistem Hatası</u>
<u>mdStatus = 8 :</u>	<u>Bilinmeyen kartno</u>
<u>mdStatus = 0 :</u>	<u>Do rulama Başarısız</u>

mdStatus = 1 alan işlem tam doğrulama olarak adlandırılır. Bu işlemde müşteri tarafından kart şifresi başarılı olarak girilmiştir.

mdStatus = 2,3,4 alan işlemler yarım doğrulama olarak de erlendirilir.

Diğer durumlarda yapılan işlemler 3D Secure kapsamına girmez.

mdStatus = 0 Durumunda müşteri şifre girişinde hatalı bilgiler girdi i için müşteri doğrulaması başarısız olmuştur.

Aşa ıda yer alan örnek kodlarınızı yukarıda belirtilen kurallara göre yapınız.

3D Model örnekleri

- CardholderPresentCode değeri **13** olmalıdır.

- Provizyon için gönderilen XML datada T G isimlerine ve Büyük Harf Küçük Harf kurallarına dikkat edilmelidir.
- XML Datada kredi kart bilgileri boş gönderilmelidir. Bunun yerine GVPSResponse'dan dönen Md response'u gönderilmelidir.

FORM

3DModel.aspx

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DModel.aspx.vb" Inherits="TradeSiS_GVP_VB._3DModel" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
3D Security Level:
<asp:DropDownList ID="secure3dsecuritylevel" runat="server">
<asp:ListItem Value="3D" Text="3D" />
</asp:DropDownList>
<br />
Card Number: <asp:TextBox ID="cardnumber" runat="server" />
<br />
Expire Date (mm): <asp:TextBox ID="cardexpiredatemonth" runat="server" />
<br />
Expire Date (yy): <asp:TextBox ID="cardexpiredateyear" runat="server" />
<br />
CVV2: <asp:TextBox ID="cardcvv2" runat="server" />
<br />
<asp:Button ID="submit" runat="server" PostBackUrl="https://sanalposprov.garanti.com.tr/servlet/gt3dengine"
Text="Şekli Gönder" />
<asp:HiddenField ID="mode" runat="server" />
<asp:HiddenField ID="apiversion" runat="server" />
<asp:HiddenField ID="terminalprovuserid" runat="server" />
<asp:HiddenField ID="terminaluserid" runat="server" />
<asp:HiddenField ID="terminalmerchantid" runat="server" />
<asp:HiddenField ID="txntype" runat="server" />
<asp:HiddenField ID="txnamount" runat="server" />
<asp:HiddenField ID="txncurrencycode" runat="server" />
<asp:HiddenField ID="txninstallmentcount" runat="server" />
<asp:HiddenField ID="orderid" runat="server" />
<asp:HiddenField ID="terminalid" runat="server" />
<asp:HiddenField ID="successurl" runat="server" />
<asp:HiddenField ID="errorurl" runat="server" />
<asp:HiddenField ID="customeremailaddress" runat="server" />
<asp:HiddenField ID="customeripaddress" runat="server" />
<asp:HiddenField ID="secure3dhash" runat="server" />
</div>
</form>
</body>
</html>
```

3DModelResults.aspx

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DModelResults.aspx.vb"
Inherits="TradeSiS_GVP_VB._3DModelResults" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<b>3D Secure Gelen Yanıt</b> <i>(only mdStatus)</i>
<br />
<asp:TextBox ID="txtmdResult" TextMode="MultiLine" Width="100%" runat="server" />
<br />
<b>3D Secure Gelen Yanıt</b> <i>(all responses)</i>
<br />
<asp:TextBox ID="txtResults" TextMode="MultiLine" Width="100%" Height="300" runat="server" />
<br />
</div>
</form>
</body>
</html>
```

```

<b>Provizyona Giden stek</b>
<br />
<asp:TextBox ID="txtProvRequest" TextMode="MultiLine" Width="100%" runat="server" />
<br /><br />
<b>Provizyondan Gelen Yanıt</b>
<br />
<asp:TextBox ID="txtProvResults" TextMode="MultiLine" Width="100%" runat="server" />
<br /><br />
</div>
</form>
</body>
</html>

```

VB.NET

3DModel.aspx.vb

```

Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class _3DModel
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then

            Dim strMode As String = "PROD"
            Dim strApiVersion As String = "v0.01"
            Dim strTerminalProvUserID As String = "PROVAUT"
            Dim strType As String = "sales"
            Dim strAmount As String = "100" ' şlem Tutarı
            Dim strCurrencyCode As String = "949"
            Dim strInstallmentCount As String = " " 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
            Dim strTerminalUserID As String = "XXXXXX"
            Dim strOrderID As String = "DENEME"
            Dim strCustomerIPAddress As String = "127.0.0.1"
            Dim strCustomerEmailAddress As String = "info@tradesis.com"
            Dim strTerminalID As String = "XXXXXXXX"
            Dim _strTerminalID As String = "XXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
            Dim strTerminalMerchantID As String = "XXXXXX" 'Üye şyeri Numarası
            Dim strStoreKey As String = "XXXXXX" '3D Secure şifreniz
            Dim strProvisionPassword As String = "XXXXXX" 'Terminal UserID şifresi
            Dim strSuccessURL As String = "https://<sunucu_adresi>/3DModelResults.aspx"
            Dim strErrorURL As String = "https://<sunucu_adresi>/3DModelResults.aspx"
            Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
            Dim HashData As String = UCase(GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL +
strErrorURL + strType + strInstallmentCount + strStoreKey + SecurityData))

            mode.Value = strMode
            apiVersion.Value = strApiVersion
            terminalprovuserid.Value = strTerminalProvUserID
            terminaluserid.Value = strTerminalUserID
            terminalmerchantid.Value = strTerminalMerchantID
            txntype.Value = strType
            txnamount.Value = strAmount
            txncurrencycode.Value = strCurrencyCode
            txninstallmentcount.Value = strInstallmentCount
            customeremailaddress.Value = strCustomerEmailAddress
            customeripaddress.Value = strCustomerIPAddress
            orderid.Value = strOrderID
            terminalid.Value = strTerminalID
            successurl.Value = strSuccessURL
            errorurl.Value = strErrorURL
            secure3dhash.Value = HashData

            End If
        End Sub

        Public Function GetSHA1(ByVal SHA1Data As String) As String

            Dim sha As SHA1 = New SHA1CryptoServiceProvider()
            Dim HashedPassword As String = SHA1Data
            Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
            Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
            Return GetHexadecimal(inputbytes)

        End Function

        Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

```

```

Dim s As New StringBuilder()
Dim length As Integer = bytes.Length
For n As Integer = 0 To length - 1
    s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
Next
Return s.ToString()

End Function

End Class

3DModelResults.aspx.vb
-----

Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class _3DModelResults
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load

        If Not Page.IsPostBack Then

            Dim strMDStatus As String = Request.Form.Get("mdstatus")
            Dim strMDStatusText As String

            If strMDStatus = 1 Then
                strMDStatusText = "Tam Do rulama"
            ElseIf strMDStatus = 2 Then
                strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il"
            ElseIf strMDStatus = 3 Then
                strMDStatusText = "Kartın bankası sisteme kayıtlı de il"
            ElseIf strMDStatus = 4 Then
                strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş"
            ElseIf strMDStatus = 5 Then
                strMDStatusText = "Do rulama yapılamıyor"
            ElseIf strMDStatus = 6 Then
                strMDStatusText = "3-D Secure Hatası"
            ElseIf strMDStatus = 7 Then
                strMDStatusText = "Sistem Hatası"
            ElseIf strMDStatus = 8 Then
                strMDStatusText = "Bilinmeyen Kart No"
            ElseIf strMDStatus = 0 Then
                strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz."
            End If

            txtmdResult.Text = strMDStatusText

            'Tam Do rulama, Kart Sahibi veya bankası sisteme kayıtlı de il, Kartın bankası sisteme kayıtlı de il
            'Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş responselarını alan
            'işlemler için Provizyon almaya çalışıyoruz
            If strMDStatus = 1 Or strMDStatus = 2 Or strMDStatus = 3 Or strMDStatus = 4 Then

                Dim strMode As String = Request.Form.Get("mode")
                Dim strVersion As String = Request.Form.Get("apiversion")
                Dim strTerminalID As String = Request.Form.Get("clientid")
                Dim _strTerminalID As String = "0" & Request.Form.Get("clientid")
                Dim strProvisionPassword As String = "XXXXXX" 'Terminal UserID şifresi
                Dim strProvUserID As String = Request.Form.Get("terminalprovuserid")
                Dim strUserID As String = Request.Form.Get("terminaluserid")
                Dim strMerchantID As String = Request.Form.Get("terminalmerchantid") 'Üye şyeri Numarası
                Dim strIPAddress As String = Request.Form.Get("customeripaddress")
                Dim strEmailAddress As String = Request.Form.Get("customeremailaddress")
                Dim strOrderID As String = Request.Form.Get("orderid")
                Dim strNumber As String = " " 'Kart bilgilerinin boş gitmesi gerekiyor
                Dim strExpireDate As String = " " 'Kart bilgilerinin boş gitmesi gerekiyor
                Dim strCVV2 As String = " " 'Kart bilgilerinin boş gitmesi gerekiyor
                Dim strAmount As String = Request.Form.Get("txnamount") 'şlem Tutarı
                Dim strCurrencyCode As String = Request.Form.Get("txncurrencycode")
                Dim strCardholderPresentCode As String = "13" '3D Model işlemde bu de er 13 olmalı
                Dim strType As String = Request.Form.Get("txntype")
                Dim strMotoInd As String = "N"
                Dim strAuthenticationCode As String = Request.Form.Get("cavv")
                Dim strSecurityLevel As String = Request.Form.Get("eci")
                Dim strTxnID As String = Request.Form.Get("xid")
                Dim strMD As String = Request.Form.Get("md")
                Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
                Dim HashData As String = UCase(GetSHA1(strOrderID + strTerminalID + strAmount + SecurityData))

                'Daha kısıtlı bilgileri HASH ediyoruz.
                Dim strHostAddress As String = "https://sanalposprov.garanti.com.tr/VPServlet" 'Provizyon için
                xml'in post edilece i adres

                'Provizyona Post edilecek XML Şablonu

```

```

'Dim strXML As String
'strXML = "<?xml version=""1.0"" encoding=""ISO-8859-9""?>" & _
'      "<GVPSRequest>" & _
'      "<Mode>" & strMode & "</Mode>" & _
'      "<Version>" & strVersion & "</Version>" & _
'      "<ChannelCode></ChannelCode>" & _
'      "<Terminal><ProvUserID>" & strProvUserID & "</ProvUserID><HashData>" & HashData &
"</HashData><UserID>" & strUserID & "</UserID><ID>" & strTerminalID & "</ID><MerchantID>" & strMerchantID &
"</MerchantID></Terminal>" & _
'      "<Customer><IPAddress>" & strIPAddress & "</IPAddress><EmailAddress>" & strEmailAddress &
"</EmailAddress></Customer>" & _
'      "<Card><Number></Number><ExpireDate></ExpireDate></Card>" & _
'      "<Order><OrderID>" & strOrderID &
"</OrderID><GroupID></GroupID><Description></Description></Order>" & _
'      "<Transaction>" & _
'      "<Type>" & strType & "</Type><InstallmentCnt></InstallmentCnt><Amount>" & strAmount &
"</Amount><CurrencyCode>" & strCurrencyCode & "</CurrencyCode><CardholderPresentCode>" & strCardholderPresentCode &
"</CardholderPresentCode><MotoInd>" & strMotoInd & "</MotoInd>" & _
'      "<Secure3D><AuthenticationCode>" & strAuthenticationCode &
"</AuthenticationCode><SecurityLevel>" & strSecurityLevel & "</SecurityLevel><TxnID>" & strTxnID & "</TxnID><Md>" &
strMD & "</Md></Secure3D>" & _
'      "</Transaction>" & _
'      "</GVPSRequest>"

'Provizyona Post edilecek XML Dokümanı
'XML yapısının daha net anlaşılabilmesi için adım adım ilerliyoruz.
'Dilerseniz yukarıdaki XML Şablonunu da kullanabilirsiniz.
'XML'i generate ederken Tag isimlerine -Büyük Harf, Küçük Harf gibi- dikkat ediniz.
Dim doc As New System.Xml.XmlDocument
Dim dec As System.Xml.XmlDeclaration
dec = doc.CreateXmlDeclaration("1.0", "ISO-8859-1", "yes")
doc.AppendChild(dec)

Dim GVPSRequest As System.Xml.XmlElement
GVPSRequest = doc.CreateElement("GVPSRequest")
doc.AppendChild(GVPSRequest)

Dim Mode As System.Xml.XmlElement
Mode = doc.CreateElement("Mode")
Mode.AppendChild(doc.CreateTextNode(strMode))
GVPSRequest.AppendChild(Mode)

Dim Version As System.Xml.XmlElement
Version = doc.CreateElement("Version")
Version.AppendChild(doc.CreateTextNode(strVersion))
GVPSRequest.AppendChild(Version)

Dim ChannelCode As System.Xml.XmlElement
ChannelCode = doc.CreateElement("ChannelCode")
ChannelCode.AppendChild(doc.CreateTextNode(" "))
GVPSRequest.AppendChild(ChannelCode)

Dim Terminal As System.Xml.XmlElement
Terminal = doc.CreateElement("Terminal")
GVPSRequest.AppendChild(Terminal)

Dim ProvUserID As System.Xml.XmlElement
ProvUserID = doc.CreateElement("ProvUserID")
ProvUserID.AppendChild(doc.CreateTextNode(strProvUserID))
Terminal.AppendChild(ProvUserID)

Dim HashData_ As System.Xml.XmlElement
HashData_ = doc.CreateElement("HashData")
HashData_.AppendChild(doc.CreateTextNode(HashData))
Terminal.AppendChild(HashData_)

Dim UserID As System.Xml.XmlElement
UserID = doc.CreateElement("UserID")
UserID.AppendChild(doc.CreateTextNode(strUserID))
Terminal.AppendChild(UserID)

Dim ID As System.Xml.XmlElement
ID = doc.CreateElement("ID")
ID.AppendChild(doc.CreateTextNode(strTerminalID))
Terminal.AppendChild(ID)

Dim MerchantID As System.Xml.XmlElement
MerchantID = doc.CreateElement("MerchantID")
MerchantID.AppendChild(doc.CreateTextNode(strMerchantID))
Terminal.AppendChild(MerchantID)

Dim Customer As System.Xml.XmlElement
Customer = doc.CreateElement("Customer")
GVPSRequest.AppendChild(Customer)

Dim IPAddress As System.Xml.XmlElement
IPAddress = doc.CreateElement("IPAddress")

```

```

IPAddress.AppendChild(doc.CreateTextNode(strIPAddress))
Customer.AppendChild(IPAddress)

    Dim EmailAddress As System.Xml.XmlElement
EmailAddress = doc.CreateElement("EmailAddress")
EmailAddress.AppendChild(doc.CreateTextNode(strEmailAddress))
Customer.AppendChild(EmailAddress)

    Dim Card As System.Xml.XmlElement
Card = doc.CreateElement("Card")
GVPSRequest.AppendChild(Card)

    Dim Number As System.Xml.XmlElement
Number = doc.CreateElement("Number")
Number.AppendChild(doc.CreateTextNode(strNumber))
Card.AppendChild(Number)

    Dim ExpireDate As System.Xml.XmlElement
ExpireDate = doc.CreateElement("ExpireDate")
ExpireDate.AppendChild(doc.CreateTextNode(strExpireDate))
Card.AppendChild(ExpireDate)

    Dim CVV2 As System.Xml.XmlElement
CVV2 = doc.CreateElement("CVV2")
CVV2.AppendChild(doc.CreateTextNode(strCVV2))
Card.AppendChild(CVV2)

    Dim Order As System.Xml.XmlElement
Order = doc.CreateElement("Order")
GVPSRequest.AppendChild(Order)

    Dim OrderID As System.Xml.XmlElement
OrderID = doc.CreateElement("OrderID")
OrderID.AppendChild(doc.CreateTextNode(strOrderID))
Order.AppendChild(OrderID)

    Dim GroupID As System.Xml.XmlElement
GroupID = doc.CreateElement("GroupID")
GroupID.AppendChild(doc.CreateTextNode(" "))
Order.AppendChild(GroupID)

    Dim Description As System.Xml.XmlElement
Description = doc.CreateElement("Description")
Description.AppendChild(doc.CreateTextNode(" "))
Order.AppendChild(Description)

    Dim Transaction As System.Xml.XmlElement
Transaction = doc.CreateElement("Transaction")
GVPSRequest.AppendChild(Transaction)

    Dim Type As System.Xml.XmlElement
Type = doc.CreateElement("Type")
Type.AppendChild(doc.CreateTextNode(strType))
Transaction.AppendChild(Type)

    Dim InstallmentCnt As System.Xml.XmlElement
InstallmentCnt = doc.CreateElement("InstallmentCnt")
InstallmentCnt.AppendChild(doc.CreateTextNode(" "))
Transaction.AppendChild(InstallmentCnt)

    Dim Amount As System.Xml.XmlElement
Amount = doc.CreateElement("Amount")
Amount.AppendChild(doc.CreateTextNode(strAmount))
Transaction.AppendChild(Amount)

    Dim CurrencyCode As System.Xml.XmlElement
CurrencyCode = doc.CreateElement("CurrencyCode")
CurrencyCode.AppendChild(doc.CreateTextNode(strCurrencyCode))
Transaction.AppendChild(CurrencyCode)

    Dim CardholderPresentCode As System.Xml.XmlElement
CardholderPresentCode = doc.CreateElement("CardholderPresentCode")
CardholderPresentCode.AppendChild(doc.CreateTextNode(strCardholderPresentCode))
Transaction.AppendChild(CardholderPresentCode)

    Dim MotoInd As System.Xml.XmlElement
MotoInd = doc.CreateElement("MotoInd")
MotoInd.AppendChild(doc.CreateTextNode(strMotoInd))
Transaction.AppendChild(MotoInd)

    Dim secure3D As System.Xml.XmlElement
secure3D = doc.CreateElement("Secure3D")
Transaction.AppendChild(secure3D)

    Dim AuthenticationCode As System.Xml.XmlElement
AuthenticationCode = doc.CreateElement("AuthenticationCode")
AuthenticationCode.AppendChild(doc.CreateTextNode(strAuthenticationCode))

```

```

secure3D.AppendChild(AuthenticationCode)

    Dim SecurityLevel As System.Xml.XmlElement
    SecurityLevel = doc.CreateElement("SecurityLevel")
    SecurityLevel.AppendChild(doc.CreateTextNode(strSecurityLevel))
    secure3D.AppendChild(SecurityLevel)

    Dim TxnID As System.Xml.XmlElement
    TxnID = doc.CreateElement("TxnID")
    TxnID.AppendChild(doc.CreateTextNode(strTxnID))
    secure3D.AppendChild(TxnID)

    Dim MD As System.Xml.XmlElement
    MD = doc.CreateElement("Md")
    MD.AppendChild(doc.CreateTextNode(strMD))
    secure3D.AppendChild(MD)

    Try

        Dim data As String = "data=" + doc.OuterXml

        Dim _WebRequest As WebRequest = WebRequest.Create(strHostAddress)
        _WebRequest.Method = "POST"

        Dim byteArray As Byte() = Encoding.UTF8.GetBytes(data)
        _WebRequest.ContentType = "application/x-www-form-urlencoded"
        _WebRequest.ContentLength = byteArray.Length

        Dim dataStream As Stream = _WebRequest.GetRequestStream()
        dataStream.Write(byteArray, 0, byteArray.Length)
        dataStream.Close()

        Dim _WebResponse As WebResponse = _WebRequest.GetResponse()
        Console.WriteLine(CType(_WebResponse, HttpWebResponse).StatusDescription)
        dataStream = _WebResponse.GetResponseStream()

        Dim reader As New StreamReader(dataStream)
        Dim responseFromServer As String = reader.ReadToEnd()

        Console.WriteLine(responseFromServer)

        txtProvRequest.Text = "Giden stek : " & data
        txtProvResults.Text = "Gelen Yanıt : " & responseFromServer

        Catch ex As Exception
            txtProvResults.Text = ex.Message
        End Try

    Else

        txtProvRequest.Text = "Giden stek : mdStatus= " & strMDStatus & " alan işlemler için provizyona Request göndermiyoruz"
        txtProvResults.Text = "Gelen Yanıt : Provizyona Request göndermedi imiz için Response alamıyoruz."

    End If

    Dim f As IEnumerator = Request.Form.GetEnumerator()
    While (f.MoveNext())
        Dim xkey As String = f.Current.ToString
        Dim xval As String = Request.Form.Get(xkey)
        txtResults.Text = txtResults.Text + (xkey & " : " & xval & vbCrLf)
    End While

End If

End Sub

Public Function GetSHA1(ByVal SHA1Data As String) As String

    Dim sha As SHA1 = New SHA1CryptoServiceProvider()
    Dim HashedPassword As String = SHA1Data
    Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
    Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
    Return GetHexadecimal(inputbytes)

End Function

Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

    Dim s As New StringBuilder()
    Dim length As Integer = bytes.Length
    For n As Integer = 0 To length - 1
        s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
    Next
    Return s.ToString()

End Function

```


C#

3DModel.aspx.cs

```

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSis_GVP_C
{
    public partial class _DModel : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMode = "PROD";
                string strApiVersion = "v0.01";
                string strTerminalProvUserID = "PROVAUT";
                string strType = "sales";
                string strAmount = "100"; // $lem Tutarı
                string strCurrencyCode = "949";
                string strInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
                string strTerminalUserID = "XXXXXX";
                string strOrderID = "deneme123456";
                string strCustomeripaddress = "127.0.0.1";
                string strcustomeremailaddress = "info@tradesis.com";
                string strTerminalID = "XXXXXXXX";
                string _strTerminalID = "0XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
                string strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
                string strStoreKey = "XXXXXX"; //3D Secure şifreniz
                string strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
                string strSuccessURL = "https://<sunucu_adresi>/3DModelResults.aspx";
                string strErrorURL = "https://<sunucu_adresi>/3DModelResults.aspx";
                string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
                string HashData = GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL +
strType + strInstallmentCount + strStoreKey + SecurityData).ToUpper();

                mode.Value = strMode;
                apiversion.Value = strApiVersion;
                terminalprovuserid.Value = strTerminalProvUserID;
                terminaluserid.Value = strTerminalUserID;
                terminalmerchantid.Value = strTerminalMerchantID;
                txntype.Value = strType;
                txnamount.Value = strAmount;
                txncurrencycode.Value = strCurrencyCode;
                txninstallmentcount.Value = strInstallmentCount;
                customeremailaddress.Value = strcustomeremailaddress;
                customeripaddress.Value = strCustomeripaddress;
                orderid.Value = strOrderID;
                terminalid.Value = strTerminalID;
                successurl.Value = strSuccessURL;
                errorurl.Value = strErrorURL;
                secure3dhash.Value = HashData;
            }
        }

        public string GetSHA1(string SHA1Data)
        {
            SHA1 sha = new SHA1CryptoServiceProvider();
            string HashedPassword = SHA1Data;
            byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
            byte[] inputbytes = sha.ComputeHash(hashbytes);
            return GetHexadecimal(inputbytes);
        }

        public string GetHexadecimal(byte[] bytes)
        {
            StringBuilder s = new StringBuilder();
            int length = bytes.Length;
            for (int n = 0; n <= length - 1; n++)
            {
                s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
            }
        }
    }
}

```

```

    }
    return s.ToString();
}
}
}

3DModelResults.aspx.cs
-----

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSis_GVP_C
{
    public partial class _DModelResults : System.Web.UI.Page
    {
        protected void Page_Load(object sender, System.EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMDStatus = Request.Form.Get("mdstatus");
                string strMDStatusText = null;

                if (strMDStatus.Equals("1"))
                {
                    strMDStatusText = "Tam Do rulama";
                }
                else if (strMDStatus.Equals("2"))
                {
                    strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il";
                }
                else if (strMDStatus.Equals("3"))
                {
                    strMDStatusText = "Kartın bankası sisteme kayıtlı de il";
                }
                else if (strMDStatus.Equals("4"))
                {
                    strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
                }
                else if (strMDStatus.Equals("5"))
                {
                    strMDStatusText = "Do rulama yapılamıyor";
                }
                else if (strMDStatus.Equals("6"))
                {
                    strMDStatusText = "3-D Secure Hatası";
                }
                else if (strMDStatus.Equals("7"))
                {
                    strMDStatusText = "Sistem Hatası";
                }
                else if (strMDStatus.Equals("8"))
                {
                    strMDStatusText = "Bilinmeyen Kart No";
                }
                else if (strMDStatus.Equals("9"))
                {
                    strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
                }

                txtmdResult.Text = strMDStatusText;

                //Tam Do rulama, Kart Sahibi veya bankası sisteme kayıtlı de il, Kartın bankası sisteme kayıtlı
                //Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş responselarını alan
                //işlemler için Provizyon almaya çalışıyoruz

                if (strMDStatus.Equals("1") | strMDStatus.Equals("2") | strMDStatus.Equals("3") |
strMDStatus.Equals("4"))
                {
                    string strMode = Request.Form.Get("mode");
                    string strVersion = Request.Form.Get("apiversion");
                    string strTerminalID = Request.Form.Get("clientid");
                    string _strTerminalID = "0" + Request.Form.Get("clientid");
                    string strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
                    string strProvUserID = Request.Form.Get("terminalprovuserid");
                    string strUserID = Request.Form.Get("terminaluserid");

```

```

string strMerchantID = Request.Form.Get("terminalmerchantid"); //Üye şyeri Numarası
string strIPAddress = Request.Form.Get("customeripaddress");
string strEmailAddress = Request.Form.Get("customeremailaddress");
string strOrderID = Request.Form.Get("orderid");
string strNumber = ""; //Kart bilgilerinin boş gitmesi gerekiyor
string strExpireDate = ""; //Kart bilgilerinin boş gitmesi gerekiyor
string strCVV2 = ""; //Kart bilgilerinin boş gitmesi gerekiyor
string strAmount = Request.Form.Get("txnamount"); // şlem Tutarı
string strCurrencyCode = Request.Form.Get("txncurrencycode");
string strCardholderPresentCode = "13"; //3D Model işlemd e bu de er 13 olmalı
string strType = Request.Form.Get("txntype");
string strMotoInd = "N";
string strAuthenticationCode = Request.Form.Get("cavv");
string strSecurityLevel = Request.Form.Get("eci");
string strTxnID = Request.Form.Get("xid");
string strMD = Request.Form.Get("md");
string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
string HashData = GetSHA1(strOrderID + strTerminalID + strAmount + SecurityData).ToUpper();

//Daha kısıtlı bilgileri HASH ediyoruz.
string strHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet";

//Provizyon için xml'in post edilece i adres
//Provizyona Post edilecek XML Şablonu
//string strXML;
//strXML = "<?xml version='1.0' encoding='ISO-8859-9'?'>" & _
//      "<GVPSRequest>" & _
//      "<Mode>" & strMode & "</Mode>" & _
//      "<Version>" & strVersion & "</Version>" & _
//      "<ChannelCode></ChannelCode>" & _
//      "<Terminal><ProvUserID>" & strProvUserID & "</ProvUserID><HashData>" & HashData &
"</HashData><UserID>" & strUserID & "</UserID><ID>" & strTerminalID & "</ID><MerchantID>" & strMerchantID &
"</MerchantID></Terminal>" & _
//      "<Customer><IPAddress>" & strIPAddress & "</IPAddress><EmailAddress>" &
strEmailAddress & "</EmailAddress></Customer>" & _
//      "<Card><Number><ExpireDate></ExpireDate></Card>" & _
//      "<Order><OrderID>" & strOrderID &
"</OrderID><GroupID></GroupID><Description></Description></Order>" & _
//      "<Transaction>" & _
//      "<Type>" & strType & "</Type><InstallmentCnt></InstallmentCnt><Amount>" & strAmount
& "</Amount><CurrencyCode>" & strCurrencyCode & "</CurrencyCode><CardholderPresentCode>" & strCardholderPresentCode
& "</CardholderPresentCode><MotoInd>" & strMotoInd & "</MotoInd>" & _
//      "<Secure3D><AuthenticationCode>" & strAuthenticationCode &
"</AuthenticationCode><SecurityLevel>" & strSecurityLevel & "</SecurityLevel><TxnID>" & strTxnID & "</TxnID><Md>" &
strMD & "</Md></Secure3D>" & _
//      "<Transaction>" & _
//      "</GVPSRequest>"

//Provizyona Post edilecek XML Dokümanı
//XML yapısının daha net anlaşılabilmesi için adım adım ilerliyoruz.
//Dilerseniz yukarıdaki XML Şablonunu da kullanabilirsiniz.
//XML'i generate ederken Tag isimlerine -Büyük Harf, Küçük Harf gibi- dikkat ediniz.

System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
System.Xml.XmlDeclaration dec = null;
dec = doc.CreateXmlDeclaration("1.0", "ISO-8859-1", "yes");
doc.AppendChild(dec);

System.Xml.XmlElement GVPSRequest = null;
GVPSRequest = doc.CreateElement("GVPSRequest");
doc.AppendChild(GVPSRequest);

System.Xml.XmlElement Mode = null;
Mode = doc.CreateElement("Mode");
Mode.AppendChild(doc.CreateTextNode(strMode));
GVPSRequest.AppendChild(Mode);

System.Xml.XmlElement Version = null;
Version = doc.CreateElement("Version");
Version.AppendChild(doc.CreateTextNode(strVersion));
GVPSRequest.AppendChild(Version);

System.Xml.XmlElement ChannelCode = null;
ChannelCode = doc.CreateElement("ChannelCode");
ChannelCode.AppendChild(doc.CreateTextNode(""));
GVPSRequest.AppendChild(ChannelCode);

System.Xml.XmlElement Terminal = null;
Terminal = doc.CreateElement("Terminal");
GVPSRequest.AppendChild(Terminal);

System.Xml.XmlElement ProvUserID = null;
ProvUserID = doc.CreateElement("ProvUserID");
ProvUserID.AppendChild(doc.CreateTextNode(strProvUserID));
Terminal.AppendChild(ProvUserID);

System.Xml.XmlElement HashData_ = null;
HashData_ = doc.CreateElement("HashData");

```

```

HashData_.AppendChild(doc.CreateTextNode(HashData));
Terminal.AppendChild(HashData_);

System.Xml.XmlElement UserID = null;
UserID = doc.CreateElement("UserID");
UserID.AppendChild(doc.CreateTextNode(strUserID));
Terminal.AppendChild(UserID);

System.Xml.XmlElement ID = null;
ID = doc.CreateElement("ID");
ID.AppendChild(doc.CreateTextNode(strTerminalID));
Terminal.AppendChild(ID);

System.Xml.XmlElement MerchantID = null;
MerchantID = doc.CreateElement("MerchantID");
MerchantID.AppendChild(doc.CreateTextNode(strMerchantID));
Terminal.AppendChild(MerchantID);

System.Xml.XmlElement Customer = null;
Customer = doc.CreateElement("Customer");
GVPSRequest.AppendChild(Customer);

System.Xml.XmlElement IPAddress = null;
IPAddress = doc.CreateElement("IPAddress");
IPAddress.AppendChild(doc.CreateTextNode(strIPAddress));
Customer.AppendChild(IPAddress);

System.Xml.XmlElement EmailAddress = null;
EmailAddress = doc.CreateElement("EmailAddress");
EmailAddress.AppendChild(doc.CreateTextNode(strEmailAddress));
Customer.AppendChild(EmailAddress);

System.Xml.XmlElement Card = null;
Card = doc.CreateElement("Card");
GVPSRequest.AppendChild(Card);

System.Xml.XmlElement Number = null;
Number = doc.CreateElement("Number");
Number.AppendChild(doc.CreateTextNode(strNumber));
Card.AppendChild(Number);

System.Xml.XmlElement ExpireDate = null;
ExpireDate = doc.CreateElement("ExpireDate");
ExpireDate.AppendChild(doc.CreateTextNode(strExpireDate));
Card.AppendChild(ExpireDate);

System.Xml.XmlElement CVV2 = null;
CVV2 = doc.CreateElement("CVV2");
CVV2.AppendChild(doc.CreateTextNode(strCVV2));
Card.AppendChild(CVV2);

System.Xml.XmlElement Order = null;
Order = doc.CreateElement("Order");
GVPSRequest.AppendChild(Order);

System.Xml.XmlElement OrderID = null;
OrderID = doc.CreateElement("OrderID");
OrderID.AppendChild(doc.CreateTextNode(strOrderID));
Order.AppendChild(OrderID);

System.Xml.XmlElement GroupID = null;
GroupID = doc.CreateElement("GroupID");
GroupID.AppendChild(doc.CreateTextNode(""));
Order.AppendChild(GroupID);

System.Xml.XmlElement Description = null;
Description = doc.CreateElement("Description");
Description.AppendChild(doc.CreateTextNode(""));
Order.AppendChild(Description);

System.Xml.XmlElement Transaction = null;
Transaction = doc.CreateElement("Transaction");
GVPSRequest.AppendChild(Transaction);

System.Xml.XmlElement Type = null;
Type = doc.CreateElement("Type");
Type.AppendChild(doc.CreateTextNode(strType));
Transaction.AppendChild(Type);

System.Xml.XmlElement InstallmentCnt = null;
InstallmentCnt = doc.CreateElement("InstallmentCnt");
InstallmentCnt.AppendChild(doc.CreateTextNode(""));
Transaction.AppendChild(InstallmentCnt);

System.Xml.XmlElement Amount = null;
Amount = doc.CreateElement("Amount");
Amount.AppendChild(doc.CreateTextNode(strAmount));

```

```

Transaction.AppendChild(Amount);

System.Xml.XmlElement CurrencyCode = null;
CurrencyCode = doc.CreateElement("CurrencyCode");
CurrencyCode.AppendChild(doc.CreateTextNode(strCurrencyCode));
Transaction.AppendChild(CurrencyCode);

System.Xml.XmlElement CardholderPresentCode = null;
CardholderPresentCode = doc.CreateElement("CardholderPresentCode");
CardholderPresentCode.AppendChild(doc.CreateTextNode(strCardholderPresentCode));
Transaction.AppendChild(CardholderPresentCode);

System.Xml.XmlElement MotoInd = null;
MotoInd = doc.CreateElement("MotoInd");
MotoInd.AppendChild(doc.CreateTextNode(strMotoInd));
Transaction.AppendChild(MotoInd);

System.Xml.XmlElement secure3D = null;
secure3D = doc.CreateElement("Secure3D");
Transaction.AppendChild(secure3D);

System.Xml.XmlElement AuthenticationCode = null;
AuthenticationCode = doc.CreateElement("AuthenticationCode");
AuthenticationCode.AppendChild(doc.CreateTextNode(strAuthenticationCode));
secure3D.AppendChild(AuthenticationCode);

System.Xml.XmlElement SecurityLevel = null;
SecurityLevel = doc.CreateElement("SecurityLevel");
SecurityLevel.AppendChild(doc.CreateTextNode(strSecurityLevel));
secure3D.AppendChild(SecurityLevel);

System.Xml.XmlElement TxnID = null;
TxnID = doc.CreateElement("TxnID");
TxnID.AppendChild(doc.CreateTextNode(strTxnID));
secure3D.AppendChild(TxnID);

System.Xml.XmlElement MD = null;
MD = doc.CreateElement("Md");
MD.AppendChild(doc.CreateTextNode(strMD));
secure3D.AppendChild(MD);

try
{
    string data = "data=" + doc.OuterXml;

    WebRequest _WebRequest = WebRequest.Create(strHostAddress);
    _WebRequest.Method = "POST";

    byte[] byteArray = Encoding.UTF8.GetBytes(data);
    _WebRequest.ContentType = "application/x-www-form-urlencoded";
    _WebRequest.ContentLength = byteArray.Length;

    Stream dataStream = _WebRequest.GetRequestStream();
    dataStream.Write(byteArray, 0, byteArray.Length);
    dataStream.Close();

    WebResponse _WebResponse = _WebRequest.GetResponse();
    Console.WriteLine(((HttpWebResponse)_WebResponse).StatusDescription);
    dataStream = _WebResponse.GetResponseStream();

    StreamReader reader = new StreamReader(dataStream);
    string responseFromServer = reader.ReadToEnd();

    Console.WriteLine(responseFromServer);

    txtProvRequest.Text = "Giden stek : " + data;
    txtProvResults.Text = "Gelen Yanıt : " + responseFromServer;
}
catch (Exception ex)
{
    txtProvResults.Text = ex.Message;
}
else
{
    txtProvRequest.Text = "Giden stek : mdStatus= " + strMDStatus + " alan işlemler için provizyona Request göndermiyoruz";
    txtProvResults.Text = "Gelen Yanıt : Provizyona Request göndermedi imiz için Response alamıyoruz.";
}

IEnumerator f = Request.Form.GetEnumerator();
while ((f.MoveNext()))
{
    string xkey = f.Current.ToString();
    string xval = Request.Form.Get(xkey);

```

```

        txtResults.Text = txtResults.Text + (xkey + " : " + xval);
    }
}

public string GetSHA1(string SHA1Data)
{
    SHA1 sha = new SHA1CryptoServiceProvider();
    string HashedPassword = SHA1Data;
    byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
    byte[] inputbytes = sha.ComputeHash(hashbytes);
    return GetHexadecimal(inputbytes);
}

public string GetHexadecimal(byte[] bytes)
{
    StringBuilder s = new StringBuilder();
    int length = bytes.Length;
    for (int n = 0; n <= length - 1; n++)
    {
        s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
    }
    return s.ToString();
}
}

```

ASP

3DModel.asp

```

<html>
<head>
    <title></title>
    <script language="javascript" type="text/javascript" runat="server">

        var hexcase = 1;
        var b64pad = "=";
        var chrsz = 8;

        function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
        function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
        function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
        function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
        function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
        function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

        function shal_vm_test() {
            return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
        }

        function core_shal(x, len) {

            x[len >> 5] |= 0x80 << (24 - len % 32);
            x[(len + 64 >> 9) << 4] + 15 = len;

            var w = Array(80);
            var a = 1732584193;
            var b = -271733879;
            var c = -1732584194;
            var d = 271733878;
            var e = -1009589776;

            for (var i = 0; i < x.length; i += 16) {
                var olda = a;
                var oldb = b;
                var oldc = c;
                var oldd = d;
                var olde = e;

                for (var j = 0; j < 80; j++) {
                    if (j < 16) w[j] = x[i + j];
                    else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
                    var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
                        safe_add(safe_add(e, w[j]), shal_kt(j)));
                    e = d;
                    d = c;
                    c = rol(b, 30);
                    b = a;
                    a = t;
                }

                a = safe_add(a, olda);
                b = safe_add(b, oldb);
            }
        }
    </script>

```

```

        c = safe_add(c, oldc);
        d = safe_add(d, oldd);
        e = safe_add(e, olde);
    }
    return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
    (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {
    var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i++) {
        str += hex_tab.charAt((binarray[i >> 2] >>> ((3 - i % 4) * 8 + 4)) & 0xF) +
        hex_tab.charAt((binarray[i >> 2] >>> ((3 - i % 4) * 8)) & 0xF);
    }
    return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >>> 8 * (3 - i % 4)) & 0xFF) << 16)
        | (((binarray[i + 1 >> 2] >>> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
        | ((binarray[i + 2 >> 2] >>> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {
            if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
            else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
        }
    }
    return str;
}
</script>
</head>
<body>

```



```

var b = -271733879;
var c = -1732584194;
var d = 271733878;
var e = -1009589776;

for (var i = 0; i < x.length; i += 16) {
    var olda = a;
    var oldb = b;
    var oldc = c;
    var oldd = d;
    var olde = e;

    for (var j = 0; j < 80; j++) {
        if (j < 16) w[j] = x[i + j];
        else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
        var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
            safe_add(safe_add(e, w[j]), shal_kt(j)));
        e = d;
        d = c;
        c = rol(b, 30);
        b = a;
        a = t;
    }

    a = safe_add(a, olda);
    b = safe_add(b, oldb);
    c = safe_add(c, oldc);
    d = safe_add(d, oldd);
    e = safe_add(e, olde);
}

return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
        (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {

```

```

var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
var str = "";
for (var i = 0; i < binarray.length * 4; i++) {
    str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
        hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
}
return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
            | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
            | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {
            if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
            else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
        }
    }
    return str;
}
</script>
</head>
<body>
<$
    strMDStatus = Request.Form("mdstatus")

    If strMDStatus = 1 Then
        Response.Write("Tam Do rulama")
    ElseIf strMDStatus = 2 Then
        Response.Write("Kart Sahibi veya bankası sisteme kayıtlı de il")
    ElseIf strMDStatus = 3 Then
        Response.Write("Kartın bankası sisteme kayıtlı de il")
    ElseIf strMDStatus = 4 Then
        Response.Write("Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş")
    ElseIf strMDStatus = 5 Then
        Response.Write("Do rulama yapılamıyor")
    ElseIf strMDStatus = 7 Then
        Response.Write("Sistem Hatası")
    ElseIf strMDStatus = 8 Then
        Response.Write("Bilinmeyen Kart No")
    ElseIf strMDStatus = 0 Then
        Response.Write("Do rulama Başarısız, 3-D Secure imzası geçersiz.")
    End If

    'Tam Do rulama, Kart Sahibi veya bankası sisteme kayıtlı de il, Kartın bankası sisteme kayıtlı de il
    'Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş responselerini alan
    'işlemler için Provizyon almaya çalışıyoruz
    If strMDStatus = 1 Or strMDStatus = 2 Or strMDStatus = 3 Or strMDStatus = 4 Then

        strMode = Request.Form("mode")
        strVersion = Request.Form("apiversion")
        strTerminalID = Request.Form("clientid")
        strTerminalID_ = "0" & Request.Form("clientid")
        strProvisionPassword = "XXXXXX" 'Terminal UserID şifresi
        strProvUserID = Request.Form("terminalprovuserid")
        strUserID = Request.Form("terminaluserid")
        strMerchantID = Request.Form("terminalmerchantid") 'Üye şyeri Numarası
        strIPAddress = Request.Form("customeripaddress")
        strEmailAddress = Request.Form("customeremailaddress")
        strOrderID = Request.Form("orderid")
        strNumber = " " 'Kart bilgilerinin boş gitmesi gerekiyor
        strExpireDate = " " 'Kart bilgilerinin boş gitmesi gerekiyor
        strCVV2 = " " 'Kart bilgilerinin boş gitmesi gerekiyor
        strAmount = Request.Form("txnamount") ' İşlem Tutarı
        strCurrencyCode = Request.Form("txncurrencycode")
        strCardholderPresentCode = "13" '3D Model işlemde bu de er 13 olmalı
        strType = Request.Form("txntype")
        strMotoInd = "N"
        strAuthenticationCode = Server.URLEncode(Request.Form("cavv"))
        strSecurityLevel = Server.URLEncode(Request.Form("eci"))
        strTxnID = Server.URLEncode(Request.Form("xid"))
        strMD = Server.URLEncode(Request.Form("md"))
        SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
        HashData = hex_shal(strOrderID + strTerminalID + strAmount + SecurityData) 'Daha kısıtlı bilgileri HASH
        ediyoruz.

        strHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet" 'Provizyon için xml'in post edilece i
        adres

        'Provizyona Post edilecek XML Şablonu
        strXML = "<?xml version='1.0' encoding='ISO-8859-9'?" & _
            "<GVPSRequest>" & _
            "<Mode>" & strMode & "</Mode>" & _
            "<Version>" & strVersion & "</Version>" & _
            "<ChannelCode></ChannelCode>" & _

```

```

        "<Terminal><ProvUserID>" & strProvUserID & "</ProvUserID><HashData>" & HashData &
        "</HashData><UserID>" & strUserID & "</UserID><ID>" & strTerminalID & "</ID><MerchantID>" & strMerchantID &
        "</MerchantID></Terminal>" & _
        "<Customer><IPAddress>" & strIPAddress & "</IPAddress><EmailAddress>" & strEmailAddress &
        "</EmailAddress></Customer>" & _
        "<Card><Number></Number><ExpireDate></ExpireDate></Card>" & _
        "<Order><OrderID>" & strOrderID &
        "</OrderID><GroupID></GroupID><Description></Description></Order>" & _
        "<Transaction>" & _
        "<Type>" & strType & "</Type><InstallmentCnt></InstallmentCnt><Amount>" & strAmount &
        "</Amount><CurrencyCode>" & strCurrencyCode & "</CurrencyCode><CardholderPresentCode>" & strCardholderPresentCode &
        "</CardholderPresentCode><MotoInd>" & strMotoInd & "</MotoInd>" & _
        "<Secure3D><AuthenticationCode>" & strAuthenticationCode &
        "</AuthenticationCode><SecurityLevel>" & strSecurityLevel & "</SecurityLevel><TxnID>" & strTxnID & "</TxnID><Md>" &
        strMD & "</Md></Secure3D>" & _
        "</Transaction>" & _
        "</GVPSRequest>"

    Set SrvHTTPS = Server.CreateObject("MSXML2.ServerXMLHTTP")
    Set XMLSend = Server.CreateObject("MSXML2.DOMDocument")

    XMLSend.async = false
    XMLSend.resolveExternals = false

    SrvHTTPS.open "POST", strHostAddress, false
    SrvHTTPS.setRequestHeader "Content-Type", "application/x-www-form-urlencoded"
    SrvHTTPS.send "data="+strXML

    Set xmlDoc2 = CreateObject("MSXML2.DOMDocument")
    xmlDoc2.setProperty "ServerHTTPRequest", True
    xmlDoc2.async = True
    xmlDoc2.LoadXML SrvHTTPS.responseText

    Response.Write "<br><b>Giden stek</b><br>"
    Response.Write strXML
    Response.Write "<br>"
    Response.Write "<br><b>Gelen Yanıt</b><br>"
    Response_Doc = SrvHTTPS.responseText
    Response_Doc = Replace (Response_Doc, "<", "<")
    Response_Doc = Replace (Response_Doc, ">", ">")
    Response.Write Response_Doc & "<br>"

End If

For each obj in request.form
    Response.Write("<br>" & obj & " : " & request.form(obj) & vbcrLf)
Next
%>

</body>
</html>

```

PHP

3DModel.php

```

<html>
<head>
    <title></title>
</head>
<body>
    <?php
        $strMode = "PROD";
        $strApiVersion = "v0.01";
        $strTerminalProvUserID = "PROVAUT";
        $strType = "sales";
        $strAmount = "100"; // şlem Tutarı
        $strCurrencyCode = "949";
        $strInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
        $strTerminalUserID = "XXXXXX";
        $strOrderID = "DENEME";
        $strCustomeripaddress = "127.0.0.1";
        $strcustomeremailaddress = "info@tradesis.com";
        $strTerminalID = "XXXXXXXX";
        $strTerminalID_ = "0XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
        $strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
        $strStoreKey = "XXXXXX"; //3D Secure şifreniz
        $strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
        $strSuccessURL = "https://<sunucu_adresi>/3DModelResults.php";
        $strErrorURL = "https://<sunucu_adresi>/3DModelResults.php";
        $SecurityData = strtoupper(shal($strProvisionPassword.$strTerminalID_));
        $HashData = strtoupper(shal($strTerminalID.$strOrderID.$strAmount.$strSuccessURL.$strErrorURL.
        $strType.$strInstallmentCount.$strStoreKey.$SecurityData));
    ?>

```

```

<form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
    3D Security Level:
    <select name="secure3dsecuritylevel">
        <option value="3D">3D</option>
    </select>
    <br />
    Card Number: <input name="cardnumber" type="text" />
    <br />
    Expire Date (mm): <input name="cardexpiredatemonth" type="text" />
    <br />
    Expire Date (yy): <input name="cardexpiredateyear" type="text" />
    <br />
    CVV2: <input name="cardcvv2" type="text" />
    <br />
    <input id="submit" type="submit" value=" şlemi Gönder" />
    <input type="hidden" name="mode" value="<?php echo $strMode ?>" />
    <input type="hidden" name="apiversion" value="<?php echo $strApiVersion ?>" />
    <input type="hidden" name="terminalprovuserid" value="<?php echo $strTerminalProvUserID ?>" />
    <input type="hidden" name="terminaluserid" value="<?php echo $strTerminalUserID ?>" />
    <input type="hidden" name="terminalmerchantid" value="<?php echo $strTerminalMerchantID ?>" />
    <input type="hidden" name="txntype" value="<?php echo $strType ?>" />
    <input type="hidden" name="txnamount" value="<?php echo $strAmount ?>" />
    <input type="hidden" name="txncurrencycode" value="<?php echo $strCurrencyCode ?>" />
    <input type="hidden" name="txninstallmentcount" value="<?php echo $strInstallmentCount ?>" />
    <input type="hidden" name="orderid" value="<?php echo $strOrderID ?>" />
    <input type="hidden" name="terminalid" value="<?php echo $strTerminalID ?>" />
    <input type="hidden" name="successurl" value="<?php echo $strSuccessURL ?>" />
    <input type="hidden" name="errorurl" value="<?php echo $strErrorURL ?>" />
    <input type="hidden" name="customeremailaddress" value="<?php echo $strcustomeremailaddress ?>" />
    <input type="hidden" name="customeripaddress" value="<?php echo $strCustomeripaddress ?>" />
    <input type="hidden" name="secure3dhash" value="<?php echo $HashData ?>" />
</form>
</body>
</html>

```

3DModelResults.php

```

<html>
<head>
    <title></title>
</head>
<body>
<?php
    $strMDStatus = $_POST['mdstatus'];

    if($strMDStatus == "1"){
        echo "Tam Do rulama";
    }if($strMDStatus == "2"){
        echo "Kart Sahibi veya bankası sisteme kayıtlı de il";
    }if($strMDStatus == "3"){
        echo "Kartın bankası sisteme kayıtlı de il";
    }if($strMDStatus == "4"){
        echo "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
    }if($strMDStatus == "5"){
        echo "Do rulama yapılamıyor";
    }if($strMDStatus == "7"){
        echo "Sistem Hatası";
    }if($strMDStatus == "8"){
        echo "Bilinmeyen Kart No";
    }if($strMDStatus == "0"){
        echo "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
    }

    //Tam Do rulama, Kart Sahibi veya bankası sisteme kayıtlı de il, Kartın bankası sisteme kayıtlı de il
    //Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş responselerini alan
    //işlemler için Provizyon almaya çalışıyoruz
    if ($strMDStatus == "1" || $strMDStatus == "2" || $strMDStatus == "3" || $strMDStatus == "4")
    {
        $strMode = $_POST['mode'];
        $strVersion = $_POST['apiversion'];
        $strTerminalID = $_POST['clientid'];
        $strTerminalID_ = "0".$_POST['clientid'];
        $strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
        $strProvUserID = $_POST['terminalprovuserid'];
        $strUserID = $_POST['terminaluserid'];
        $strMerchantID = $_POST['terminalmerchantid']; //Üye şyeri Numarası
        $strIPAddress = $_POST['customeripaddress'];
        $strEmailAddress = $_POST['customeremailaddress'];
        $strOrderID = $_POST['orderid'];
        $strNumber = ""; //Kart bilgilerinin boş gitmesi gerekiyor
        $strExpireDate = ""; //Kart bilgilerinin boş gitmesi gerekiyor
        $strCVV2 = ""; //Kart bilgilerinin boş gitmesi gerekiyor
        $strAmount = $_POST['txnamount']; // şlem Tutarı
        $strCurrencyCode = $_POST['txncurrencycode'];
        $strCardholderPresentCode = "13"; //3D Model işlemdede er 13 olmalı
        $strType = $_POST['txntype'];
    }

```

```

$StrMotoInd = "N";
$StrAuthenticationCode = $_POST['cavv'];
$StrSecurityLevel = $_POST['eci'];
$StrTxnID = $_POST['xid'];
$StrMD = $_POST['md'];
$SecurityData = strtoupper(shal($StrProvisionPassword.$StrTerminalID));
$HashData = strtoupper(shal($StrOrderID.$StrTerminalID.$StrAmount.$SecurityData)); //Daha kısıtlı bilgileri
HASH ediyoruz.
$StrHostAddress = "https://sanalposprov.garanti.com.tr/VPServlet"; //Provizyon için xml'in post edilece i
adres

//Provizyona Post edilecek XML Şablonu
$StrXML = "<?xml version=\"1.0\" encoding=\"ISO-8859-1\"?>
    <GVPSRequest>
    <Mode>$StrMode</Mode>
    <Version>$StrVersion</Version>
    <ChannelCode></ChannelCode>
    <Terminal><ProvUserID>$StrProvUserID</ProvUserID><HashData>$HashData</HashData>
<UserID>$StrUserID</UserID><ID>$StrTerminalID</ID><MerchantID>$StrMerchantID</MerchantID></Terminal>
    <Customer><IPAddress>$StrIPAddress</IPAddress><EmailAddress>$StrEmailAddress</EmailAddress>
</Customer>

    <Card><Number></Number><ExpireDate></ExpireDate></Card>
    <Order><OrderID>$StrOrderID</OrderID><GroupID></GroupID><Description></Description></Order>
    <Transaction>
    <Type>$StrType</Type><InstallmentCnt></InstallmentCnt><Amount>$StrAmount</Amount>
<CurrencyCode>$StrCurrencyCode</CurrencyCode>
<CardholderPresentCode>$StrCardholderPresentCode</CardholderPresentCode><MotoInd>$StrMotoInd</MotoInd>
    <Secure3D><AuthenticationCode>$StrAuthenticationCode</AuthenticationCode>
<SecurityLevel>$StrSecurityLevel</SecurityLevel><TxnID>$StrTxnID</TxnID><Md>$StrMD</Md></Secure3D>
    </Transaction>
    </GVPSRequest>";

$ch=curl_init();
curl_setopt($ch, CURLOPT_URL, $StrHostAddress);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
curl_setopt($ch, CURLOPT_POST, 1) ;
curl_setopt($ch, CURLOPT_POSTFIELDS, "data=".$StrXML);
curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 0);
curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, 0);
$results = curl_exec($ch);
curl_close($ch);

echo "<b>Giden stek </b><br />";
echo $StrXML;
echo "<br /><b>Gelen Yanıt </b><br />";
echo $results;
}

foreach($_POST as $key => $value)
{
    echo "<br>".$key." : ".$value;
}
?>
</body>
</html>

```

3D_PAY, 3D_HALF, 3D_FULL örnekleri

FORM

3DPay.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DPay.aspx.vb" Inherits="TradeSiS_GVP_VB._3DPay" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        3D Security Level:
        <asp:DropDownList ID="secure3dsecuritylevel" runat="server">
            <asp:ListItem Value="3D_PAY" Text="3D_PAY" />
            <asp:ListItem Value="3D_FULL" Text="3D_FULL" />
            <asp:ListItem Value="3D_HALF" Text="3D_HALF" />
        </asp:DropDownList>
    </div>
    </form>
    </body>
</html>

```

eticaret@garanti.com.tr

Tel: 4440339 - 7

```

<br />
Card Number: <asp:TextBox ID="cardnumber" runat="server" />
<br />
Expire Date (mm): <asp:TextBox ID="cardexpiredatemonth" runat="server" />
<br />
Expire Date (yy): <asp:TextBox ID="cardexpiredateyear" runat="server" />
<br />
CVV2: <asp:TextBox ID="cardcvv2" runat="server" />
<br />
<asp:Button ID="submit" runat="server"PostBackUrl="https://sanalposprov.garanti.com.tr/servlet/gt3dengine"
Text="şlemi Gönder" />
<asp:HiddenField ID="mode" runat="server" />
<asp:HiddenField ID="apiversion" runat="server" />
<asp:HiddenField ID="terminalprovuserid" runat="server" />
<asp:HiddenField ID="terminaluserid" runat="server" />
<asp:HiddenField ID="terminalmerchantid" runat="server" />
<asp:HiddenField ID="txntype" runat="server" />
<asp:HiddenField ID="txnamount" runat="server" />
<asp:HiddenField ID="txncurrencycode" runat="server" />
<asp:HiddenField ID="txinstallmentcount" runat="server" />
<asp:HiddenField ID="orderid" runat="server" />
<asp:HiddenField ID="terminalid" runat="server" />
<asp:HiddenField ID="successurl" runat="server" />
<asp:HiddenField ID="errorurl" runat="server" />
<asp:HiddenField ID="customeripaddress" runat="server" />
<asp:HiddenField ID="secure3dhash" runat="server" />
</div>
</form>
</body>
</html>

```

3DPayResults.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DPayResults.aspx.vb"
Inherits="TradeSis_GVP_VB._3DPayResults" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<b>Gelen Yanıt</b> <i>(mdStatus)</i>
<br />
<asp:TextBox ID="txtmdResult" TextMode="MultiLine" Width="100%" runat="server" />
<br /><br />
<b>Gelen Yanıt</b> <i>(all)</i>
<br />
<asp:TextBox ID="txtResults" TextMode="MultiLine" Width="100%" Height="300" runat="server" />
</div>
</form>
</body>
</html>

```

VB.NET

3DPay.aspx.vb

```

Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class _3DPay
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then

            Dim strMode As String = "PROD"
            Dim strApiVersion As String = "v0.01"
            Dim strTerminalProvUserID As String = "PROVAUT"
            Dim strType As String = "sales"
            Dim strAmount As String = "100" 'şlem Tutarı
            Dim strCurrencyCode As String = "949"
            Dim strInstallmentCount As String = "" 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
            Dim strTerminalUserID As String = "xxxxxx"

```

```

Dim strOrderID As String = "DENEME"
Dim strCustomeripaddress As String = "127.0.0.1"
Dim strTerminalID As String = "XXXXXXX"
Dim _strTerminalID As String = "0XXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
Dim strTerminalMerchantID As String = "XXXXXX" 'Üye şyeri Numarası
Dim strStoreKey As String = "XXXXXX" '3D Secure şifreniz
Dim strProvisionPassword As String = "XXXXXX" 'Terminal UserID şifresi
Dim strSuccessURL As String = "https://<sunucu_adresi>/3DPayResults.aspx"
Dim strErrorURL As String = "https://<sunucu_adresi>/3DPayResults.aspx"
Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
Dim HashData As String = UCase(GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL +
strErrorURL + strType + strInstallmentCount + strStoreKey + SecurityData))

mode.Value = strMode
apiversion.Value = strApiVersion
terminalprovuserid.Value = strTerminalProvUserID
terminaluserid.Value = strTerminalUserID
terminalmerchantid.Value = strTerminalMerchantID
txntype.Value = strType
txnamount.Value = strAmount
txncurrencycode.Value = strCurrencyCode
txninstallmentcount.Value = strInstallmentCount
customeripaddress.Value = strCustomeripaddress
orderid.Value = strOrderID
terminalid.Value = strTerminalID
successurl.Value = strSuccessURL
errorurl.Value = strErrorURL
secure3dhash.Value = HashData

End If
End Sub

Public Function GetSHA1(ByVal SHA1Data As String) As String

Dim sha As SHA1 = New SHA1CryptoServiceProvider()
Dim HashedPassword As String = SHA1Data
Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
Return GetHexadecimal(inputbytes)

End Function

Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

Dim s As New StringBuilder()
Dim length As Integer = bytes.Length
For n As Integer = 0 To length - 1
s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
Next
Return s.ToString()

End Function

End Class

3DPayResults.aspx.vb
-----

Public Partial Class _3DPayResults
Inherits System.Web.UI.Page

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load

If Not Page.IsPostBack Then

Dim strMDStatus As String = Request.Form.Get("mdstatus")
Dim strMDStatusText As String

If strMDStatus = 1 Then
strMDStatusText = "Tam Do rulama"
ElseIf strMDStatus = 2 Then
strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il"
ElseIf strMDStatus = 3 Then
strMDStatusText = "Kartın bankası sisteme kayıtlı de il"
ElseIf strMDStatus = 4 Then
strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş"
ElseIf strMDStatus = 5 Then
strMDStatusText = "Do rulama yapılamıyor"
ElseIf strMDStatus = 7 Then
strMDStatusText = "Sistem Hatası"
ElseIf strMDStatus = 8 Then
strMDStatusText = "Bilinmeyen Kart No"
ElseIf strMDStatus = 0 Then
strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz."
End If

txtmdResult.Text = strMDStatusText

```

```

        Dim f As IEnumerator = Request.Form.GetEnumerator()
        While (f.MoveNext())
            Dim xkey As String = f.Current.ToString
            Dim xval As String = Request.Form.Get(xkey)
            txtResults.Text = txtResults.Text + (xkey & " : " & xval & vbCrLf)
        End While

    End If

End Sub

End Class

```

C#

3DPay.aspx.cs

```

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSis_GVP_C
{
    public partial class _DPay : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMode = "PROD";
                string strApiVersion = "v0.01";
                string strTerminalProvUserID = "PROVAUT";
                string strType = "sales";
                string strAmount = "100"; // şlem Tutarı
                string strCurrencyCode = "949";
                string strInstallmentCount = " "; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
                string strTerminalUserID = "xxxxxx";
                string strOrderID = "deneme";
                string strCustomerIPAddress = "127.0.0.1";
                string strTerminalID = "XXXXXXXX";
                string _strTerminalID = "0XXXXXXXX"; 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
                string strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
                string strStoreKey = "XXXXXX"; //3D Secure şifreniz
                string strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
                string strSuccessURL = "https://<sunucu_adresi>/3DPayResults.aspx";
                string strErrorURL = "https://<sunucu_adresi>/3DPayResults.aspx";
                string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
                string HashData = GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL +
                strType + strInstallmentCount + strStoreKey + SecurityData).ToUpper();

                mode.Value = strMode;
                apiversion.Value = strApiVersion;
                terminalprovuserid.Value = strTerminalProvUserID;
                terminaluserid.Value = strTerminalUserID;
                terminalmerchantid.Value = strTerminalMerchantID;
                txntype.Value = strType;
                txnamount.Value = strAmount;
                txncurrencycode.Value = strCurrencyCode;
                txninstallmentcount.Value = strInstallmentCount;
                customeripaddress.Value = strCustomerIPAddress;
                orderid.Value = strOrderID;
                terminalid.Value = strTerminalID;
                successurl.Value = strSuccessURL;
                errorurl.Value = strErrorURL;
                secure3dhash.Value = HashData;
            }
        }

        public string GetSHA1(string SHA1Data)
        {
            SHA1 sha = new SHA1CryptoServiceProvider();
            string HashedPassword = SHA1Data;
            byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
            byte[] inputbytes = sha.ComputeHash(hashbytes);
            return GetHexadecimal(inputbytes);
        }
    }
}

```



```

    }

    public string GetHexadecimal(byte[] bytes)
    {
        StringBuilder s = new StringBuilder();
        int length = bytes.Length;
        for (int n = 0; n <= length - 1; n++)
        {
            s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
        }
        return s.ToString();
    }
}

}

3DPayResults.aspx.cs
-----

using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace TradeSis_GVP_C
{
    public partial class _DPayResults : System.Web.UI.Page
    {
        protected void Page_Load(object sender, System.EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMDStatus = Request.Form.Get("mdstatus");
                string strMDStatusText = null;

                if (strMDStatus.Equals("1"))
                {
                    strMDStatusText = "Tam Do rulama";
                }
                else if (strMDStatus.Equals("2"))
                {
                    strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il";
                }
                else if (strMDStatus.Equals("4"))
                {
                    strMDStatusText = "Kartın bankası sisteme kayıtlı de il";
                }
                else if (strMDStatus.Equals("5"))
                {
                    strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
                }
                else if (strMDStatus.Equals("6"))
                {
                    strMDStatusText = "Do rulama yapılamıyor";
                }
                else if (strMDStatus.Equals("7"))
                {
                    strMDStatusText = "Sistem Hatası";
                }
                else if (strMDStatus.Equals("8"))
                {
                    strMDStatusText = "Bilinmeyen Kart No";
                }
                else if (strMDStatus.Equals("0"))
                {
                    strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
                }

                txtmdResult.Text = strMDStatusText;

                IEnumerator f = Request.Form.GetEnumerator();
                while (f.MoveNext())
                {
                    string xkey = (string)f.Current;
                    string xval = Request.Form.Get(xkey);
                    txtResults.Text = txtResults.Text + (xkey + " : " + xval);
                }
            }
        }
    }
}

```

3DPay.asp

```

<html>
<head>
  <title></title>
  <script language="javascript" type="text/javascript" runat="server">

    var hexcase = 1;
    var b64pad = "=";
    var chrsz = 8;

    function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
    function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
    function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
    function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
    function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
    function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

    function shal_vm_test() {
      return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
    }

    function core_shal(x, len) {

      x[len >> 5] |= 0x80 << (24 - len % 32);
      x[(len + 64 >> 9) << 4] + 15] = len;

      var w = Array(80);
      var a = 1732584193;
      var b = -271733879;
      var c = -1732584194;
      var d = 271733878;
      var e = -1009589776;

      for (var i = 0; i < x.length; i += 16) {
        var olda = a;
        var oldb = b;
        var oldc = c;
        var oldd = d;
        var olde = e;

        for (var j = 0; j < 80; j++) {
          if (j < 16) w[j] = x[i + j];
          else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
          var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
            safe_add(safe_add(e, w[j]), shal_kt(j)));
          e = d;
          d = c;
          c = rol(b, 30);
          b = a;
          a = t;
        }

        a = safe_add(a, olda);
        b = safe_add(b, oldb);
        c = safe_add(c, oldc);
        d = safe_add(d, oldd);
        e = safe_add(e, olde);
      }
      return Array(a, b, c, d, e);
    }

    function shal_ft(t, b, c, d) {
      if (t < 20) return (b & c) | ((~b) & d);
      if (t < 40) return b ^ c ^ d;
      if (t < 60) return (b & c) | (b & d) | (c & d);
      return b ^ c ^ d;
    }

    function shal_kt(t) {
      return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
        (t < 60) ? -1894007588 : -899497514;
    }

    function core_hmac_shal(key, data) {
      var bkey = str2binb(key);
      if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

      var ipad = Array(16), opad = Array(16);
      for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
      }
    }
  </script>

```

```

    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {
    var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i++) {
        str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
            hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
    }
    return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
            | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
            | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {
            if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
            else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
        }
    }
    return str;
}
</script>
</head>
<body>
<%
    strMode = "PROD"
    strApiVersion = "v0.01"
    strTerminalProvUserID = "PROVAUT"
    strType = "sales"
    strAmount = "100" 'şlem Tutarı
    strCurrencyCode = "949"
    strInstallmentCount = " " 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
    strTerminalUserID = "XXXXXX"
    strOrderID = "DENEME"
    strCustomeripaddress = "127.0.0.1"
    strTerminalID = "XXXXXXXX"
    strTerminalID_ = "0XXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
    strTerminalMerchantID = "XXXXXX" 'Üye şyeri Numarası
    strStoreKey = "XXXXXX" '3D Secure şifreniz
    strProvisionPassword = "XXXXXX" 'Terminal UserID şifresi
    strSuccessURL = "https://<sunucu_adresi>/3DPayResults.asp"
    strErrorURL = "https://<sunucu_adresi>/3DPayResults.asp"
    SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
    HashData = hex_shal(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL + strType +
    strInstallmentCount + strStoreKey + SecurityData)
%>
<form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
    3D Security Level:
    <select name="secure3dsecuritylevel">
        <option value="3D_PAY">3D_PAY</option>
        <option value="3D_FULL">3D_FULL</option>
        <option value="3D_HALF">3D_HALF</option>

```

```

</select>
<br />
Card Number: <input name="cardnumber" type="text" />
<br />
Expire Date (mm): <input name="cardexpiredatemonth" type="text" />
<br />
Expire Date (yy): <input name="cardexpiredateyear" type="text" />
<br />
CVV2: <input name="cardcvv2" type="text" />
<br />
<input id="submit" type="submit" value=" İlemleri Gönder " />
<input type="hidden" name="mode" value="<%=strMode %>" />
<input type="hidden" name="apiversion" value="<%=strApiVersion %>" />
<input type="hidden" name="terminalprovuserid" value="<%=strTerminalProvUserID %>" />
<input type="hidden" name="terminaluserid" value="<%=strTerminalUserID %>" />
<input type="hidden" name="terminalmerchantid" value="<%=strTerminalMerchantID %>" />
<input type="hidden" name="txntype" value="<%=strType %>" />
<input type="hidden" name="txnamount" value="<%=strAmount %>" />
<input type="hidden" name="txncurrencycode" value="<%=strCurrencyCode %>" />
<input type="hidden" name="txinstallmentcount" value="<%=strInstallmentCount %>" />
<input type="hidden" name="orderid" value="<%=strOrderID %>" />
<input type="hidden" name="terminalid" value="<%=strTerminalID %>" />
<input type="hidden" name="successurl" value="<%=strSuccessURL %>" />
<input type="hidden" name="errorurl" value="<%=strErrorURL %>" />
<input type="hidden" name="customeripaddress" value="<%=strCustomeripaddress %>" />
<input type="hidden" name="secure3dhash" value="<%=HashData %>" />
</form>
</body>
</html>

```

3DPayResults.asp

```

<html>
<head>
<title></title>
</head>
<body>
<%=
strMDStatus = Request.Form("mdstatus")

If strMDStatus = 1 Then
    Response.Write("Tam Do rulama")
ElseIf strMDStatus = 2 Then
    Response.Write("Kart Sahibi veya bankası sisteme kayıtlı de il")
ElseIf strMDStatus = 3 Then
    Response.Write("Kartın bankası sisteme kayıtlı de il")
ElseIf strMDStatus = 4 Then
    Response.Write("Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş")
ElseIf strMDStatus = 5 Then
    Response.Write("Do rulama yapılamıyor")
ElseIf strMDStatus = 7 Then
    Response.Write("Sistem Hatası")
ElseIf strMDStatus = 8 Then
    Response.Write("Bilinmeyen Kart No")
ElseIf strMDStatus = 0 Then
    Response.Write("Do rulama Başarısız, 3-D Secure imzası geçersiz.")
End If

For each obj in request.form
    Response.Write("<br>" & obj & " : " & request.form(obj) & vbcrLf)
Next
>
</body>
</html>

```

PHP

3DPay.php

```

<html>
<head>
<title></title>
</head>
<body>
<?php
    $strMode = "PROD";
    $strApiVersion = "v0.01";
    $strTerminalProvUserID = "PROVAUT";
    $strType = "sales";
    $strAmount = "100"; // İlemleri Tutarı
    $strCurrencyCode = "949";

```

```

        $strInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
        $strTerminalUserID = "XXXXXX";
        $strOrderID = "DENEME";
        $strCustomeripaddress = "127.0.0.1";
        $strTerminalID = "XXXXXXXXX";
        $strTerminalID_ = "0XXXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
        $strTerminalMerchantID = "XXXXXX"; //Üye Şyeri Numarası
        $strStoreKey = "XXXXXX"; //3D Secure şifreniz
        $strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
        $strSuccessURL = "https://<sunucu_adresi>/3DPayResults.php";
        $strErrorURL = "https://<sunucu_adresi>/3DPayResults.php";
        $SecurityData = strtoupper(shal($strProvisionPassword.$strTerminalID_));
        $HashData =
        strtoupper(shal($strTerminalID.$strOrderID.$strAmount.$strSuccessURL.$strErrorURL.$strType.$strInstallmentCount.$strStoreKey.$SecurityData));
    ?>
    <form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
        3D Security Level:
        <select name="secure3dsecuritylevel">
            <option value="3D_PAY">3D_PAY</option>
            <option value="3D_FULL">3D_FULL</option>
            <option value="3D_HALF">3D_HALF</option>
        </select>
        <br />
        Card Number: <input name="cardnumber" type="text" />
        <br />
        Expire Date (mm): <input name="cardexpiredatemonth" type="text" />
        <br />
        Expire Date (yy): <input name="cardexpiredateyear" type="text" />
        <br />
        CVV2: <input name="cardcvv2" type="text" />
        <br />
        <input id="submit" type="submit" value="Oluştur" />
        <input type="hidden" name="mode" value="<?php echo $strMode ?>" />
        <input type="hidden" name="apiversion" value="<?php echo $strApiVersion ?>" />
        <input type="hidden" name="terminalprovuserid" value="<?php echo $strTerminalProvUserID ?>" />
        <input type="hidden" name="terminaluserid" value="<?php echo $strTerminalUserID ?>" />
        <input type="hidden" name="terminalmerchantid" value="<?php echo $strTerminalMerchantID ?>" />
        <input type="hidden" name="txntype" value="<?php echo $strType ?>" />
        <input type="hidden" name="txnamount" value="<?php echo $strAmount ?>" />
        <input type="hidden" name="txncurrencycode" value="<?php echo $strCurrencyCode ?>" />
        <input type="hidden" name="txninstallmentcount" value="<?php echo $strInstallmentCount ?>" />
        <input type="hidden" name="orderid" value="<?php echo $strOrderID ?>" />
        <input type="hidden" name="terminalid" value="<?php echo $strTerminalID ?>" />
        <input type="hidden" name="successurl" value="<?php echo $strSuccessURL ?>" />
        <input type="hidden" name="errorurl" value="<?php echo $strErrorURL ?>" />
        <input type="hidden" name="customeripaddress" value="<?php echo $strCustomeripaddress ?>" />
        <input type="hidden" name="secure3dhash" value="<?php echo $HashData ?>" />
    </form>
</body>
</html>

```

3DPayResults.php

```

<html>
<head>
    <title></title>
</head>
<body>
<?php
    $strMDStatus = $_POST["mdStatus"];

    if($mdStatus == 1){
        echo "Tam Do rulama";
    }if($mdStatus == 2){
        echo "Kart Sahibi veya bankası sisteme kayıtlı de il";
    }if($mdStatus == 3){
        echo "Kartın bankası sisteme kayıtlı de il";
    }if($mdStatus == 4){
        echo "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
    }if($mdStatus == 5){
        echo "Do rulama yapılamıyor";
    }if($mdStatus == 7){
        echo "Sistem Hatası";
    }if($mdStatus == 8){
        echo "Bilinmeyen Kart No";
    }if($mdStatus == 0){
        echo "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
    }

    foreach($_POST as $key => $value)
    {
        echo "<br>".$key." : ".$value;
    }
?>

```

```
</body>
</html>
```

3D_OOS_PAY, 3D_OOS_HALF, 3D_OOS_FULL örnekleri

FORM

3DOOSPay.aspx

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DOOSPay.aspx.vb" Inherits="TradeSiS_GVP_VB._3DOOSPay" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head id="Head1" runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        3D Security Level:
        <asp:DropDownList ID="secure3dsecuritylevel" runat="server">
            <asp:ListItem Value="3D_OOS_PAY" Text="3D_OOS_PAY" />
            <asp:ListItem Value="3D_OOS_FULL" Text="3D_OOS_FULL" />
            <asp:ListItem Value="3D_OOS_HALF" Text="3D_OOS_HALF" />
        </asp:DropDownList>
        <br />
        Refresh Time: <asp:TextBox ID="refreshtime" runat="server" />
        <br />
        <asp:Button ID="submit" runat="server" PostBackUrl="https://sanalposprov.garanti.com.tr/servlet/gt3dengine"
Text="şlemi Gönder" />
        <asp:HiddenField ID="mode" runat="server" />
        <asp:HiddenField ID="apiversion" runat="server" />
        <asp:HiddenField ID="terminalprovuserid" runat="server" />
        <asp:HiddenField ID="terminaluserid" runat="server" />
        <asp:HiddenField ID="terminalmerchantid" runat="server" />
        <asp:HiddenField ID="txntype" runat="server" />
        <asp:HiddenField ID="txnamount" runat="server" />
        <asp:HiddenField ID="txncurrencycode" runat="server" />
        <asp:HiddenField ID="txninstallmentcount" runat="server" />
        <asp:HiddenField ID="orderid" runat="server" />
        <asp:HiddenField ID="terminalid" runat="server" />
        <asp:HiddenField ID="successurl" runat="server" />
        <asp:HiddenField ID="errorurl" runat="server" />
        <asp:HiddenField ID="customerEmailAddress" runat="server" />
        <asp:HiddenField ID="customeripaddress" runat="server" />
        <asp:HiddenField ID="companyName" runat="server" />
        <asp:HiddenField ID="lang" runat="server" />
        <asp:HiddenField ID="motoind" runat="server" />
        <asp:HiddenField ID="txntimestamp" runat="server" />
        <asp:HiddenField ID="secure3dhash" runat="server" />
    </div>
    </form>
</body>
</html>
```

3DOOSPayResults.aspx

```
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="3DOOSPayResults.aspx.vb" Inherits="TradeSiS_GVP_VB._3DOOSResults" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head id="Head1" runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        <b>Gelen Yanıt</b> <i>(mdStatus)</i>
        <br />
        <asp:TextBox ID="txtmdResult" TextMode="MultiLine" Width="100%" runat="server" />
        <br />
        <b>Gelen Yanıt</b> <i>(all)</i>
        <br />
        <asp:TextBox ID="txtResults" TextMode="MultiLine" Width="100%" Height="300" runat="server" />
    </div>
```

```
</form>
</body>
</html>
```

VB.NET

3DOOSPay.aspx.vb

```
Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class _3DOOSPay
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then

            Dim strMode As String = "PROD"
            Dim strApiVersion As String = "v0.01"
            Dim strTerminalProvUserID As String = "PROVOOS"
            Dim strType As String = "sales"
            Dim strAmount As String = "100" 'şlem Tutarı
            Dim strCurrencyCode As String = "949"
            Dim strInstallmentCount As String = " " 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
            Dim strTerminalUserID As String = "XXXXXX"
            Dim strOrderID As String = "DENEME1"
            Dim strCustomerIPAddress As String = "127.0.0.1"
            Dim strCustomerEmailAddress As String = "info@tradesis.com"
            Dim strTerminalID As String = "XXXXXXXX"
            Dim _strTerminalID As String = "0XXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
            Dim strTerminalMerchantID As String = "XXXXXX" 'Üye şyeri Numarası
            Dim strStoreKey As String = "XXXXXX" '3D Secure şifreniz
            Dim strProvisionPassword As String = "XXXXXX" 'Terminal UserID şifresi
            Dim strSuccessURL As String = "https://<sunucu_adresi>/3DOOSPayResults.aspx"
            Dim strErrorURL As String = "https://<sunucu_adresi>/3DOOSPayResults.aspx"
            Dim strCompanyName As String = "TradeSiS"
            Dim strlang As String = "tr"
            Dim strMotoInd As String = "N"
            Dim strtimestamp As String = " XXXXXX"
            Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
            Dim HashData As String = UCase(GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL +
strErrorURL + strType + strInstallmentCount + strStoreKey + SecurityData))

            mode.Value = strMode
            apiversion.Value = strApiVersion
            terminalprovuserid.Value = strTerminalProvUserID
            terminaluserid.Value = strTerminalUserID
            terminalmerchantid.Value = strTerminalMerchantID
            txntype.Value = strType
            txnamount.Value = strAmount
            txncurrencycode.Value = strCurrencyCode
            txninstallmentcount.Value = strInstallmentCount
            customerEmailAddress.Value = strCustomerEmailAddress
            customeripaddress.Value = strCustomerIPAddress
            orderid.Value = strOrderID
            terminalid.Value = strTerminalID
            successurl.Value = strSuccessURL
            errorurl.Value = strErrorURL
            companyname.Value = strCompanyName
            lang.Value = strlang
            motoind.Value = strMotoInd
            secure3dhash.Value = HashData
            txntimestamp.Value = strtimestamp

        End If
    End Sub

    Public Function GetSHA1(ByVal SHA1Data As String) As String

        Dim sha As SHA1 = New SHA1CryptoServiceProvider()
        Dim HashedPassword As String = SHA1Data
        Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
        Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
        Return GetHexadecimal(inputbytes)

    End Function

    Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

        Dim s As New StringBuilder()
        Dim length As Integer = bytes.Length
```

```

        For n As Integer = 0 To length - 1
            s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
        Next
        Return s.ToString()

    End Function

End Class

3DOOSPayResults.aspx.vb
-----

Public Partial Class _3DOOSPayResults
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load

        If Not Page.IsPostBack Then

            Dim strMDStatus As String = Request.Form.Get("mdstatus")
            Dim strMDStatusText As String

            If strMDStatus = 1 Then
                strMDStatusText = "Tam Do rulama"
            ElseIf strMDStatus = 2 Then
                strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il"
            ElseIf strMDStatus = 3 Then
                strMDStatusText = "Kartın bankası sisteme kayıtlı de il"
            ElseIf strMDStatus = 4 Then
                strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş"
            ElseIf strMDStatus = 5 Then
                strMDStatusText = "Do rulama yapılamıyor"
            ElseIf strMDStatus = 6 Then
                strMDStatusText = "3-D Secure Hatası"
            ElseIf strMDStatus = 7 Then
                strMDStatusText = "Sistem Hatası"
            ElseIf strMDStatus = 8 Then
                strMDStatusText = "Bilinmeyen Kart No"
            ElseIf strMDStatus = 0 Then
                strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz."
            End If

            txtmdResult.Text = strMDStatusText

            Dim f As IEnumerator = Request.Form.GetEnumerator()
            While (f.MoveNext())
                Dim xkey As String = f.Current.ToString
                Dim xval As String = Request.Form.Get(xkey)
                txtResults.Text = txtResults.Text + (xkey & " : " & xval & vbCrLf)
            End While

        End If

    End Sub

End Class

```

C#

```

3DOOSPay.aspx.cs
-----

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSiS_GVP_C
{
    public partial class _DOOSPay : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMode = "PROD";
                string strApiVersion = "v0.01";
            }
        }
    }
}

```



```

        string strTerminalProvUserID = "PROVOOS";
        string strType = "sales";
        string strAmount = "100"; // şlem Tutarı
        string strCurrencyCode = "949";
        string strInstallmentCount = " "; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
        string strTerminalUserID = "xxxxxx";
        string strOrderID = "deneme";
        string strCustomeripaddress = "127.0.0.1";
        string strTerminalID = "XXXXXXXX";
        string _strTerminalID = "0XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
        string strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
        string strStoreKey = "XXXXXX"; //3D Secure şifreniz
        string strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
        string strSuccessURL = "https://<sunucu_adresi>/3DPayResults.aspx";
        string strErrorURL = "https://<sunucu_adresi>/3DPayResults.aspx";
        string strCompanyName = "TradeSiS";
        string strlang = "tr";
        string strMotoInd = "N";
        string strtimestamp = "XXXXXX";
        string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
        string HashData = GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL +
strType + strInstallmentCount + strStoreKey + SecurityData).ToUpper();

        mode.Value = strMode;
        apiversion.Value = strApiVersion;
        terminalprovuserid.Value = strTerminalProvUserID;
        terminaluserid.Value = strTerminalUserID;
        terminalmerchantid.Value = strTerminalMerchantID;
        txntype.Value = strType;
        txnamount.Value = strAmount;
        txncurrencycode.Value = strCurrencyCode;
        txninstallmentcount.Value = strInstallmentCount;
        customeripaddress.Value = strCustomeripaddress;
        orderid.Value = strOrderID;
        terminalid.Value = strTerminalID;
        successurl.Value = strSuccessURL;
        errorurl.Value = strErrorURL;
        companyname.Value = strCompanyName;
        lang.Value = strlang;
        motoind.Value = strMotoInd;
        secure3dhash.Value = HashData;
        txntimestamp.Value = strtimestamp;
    }
}

public string GetSHA1(string SHA1Data)
{
    SHA1 sha = new SHA1CryptoServiceProvider();
    string HashedPassword = SHA1Data;
    byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
    byte[] inputbytes = sha.ComputeHash(hashbytes);
    return GetHexadecimal(inputbytes);
}

public string GetHexadecimal(byte[] bytes)
{
    StringBuilder s = new StringBuilder();
    int length = bytes.Length;
    for (int n = 0; n <= length - 1; n++)
    {
        s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
    }
    return s.ToString();
}
}

}

3DOOSPayResults.aspx.cs
-----

using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace TradeSiS_GVP_C
{
    public partial class _DOOSPayResults : System.Web.UI.Page
    {
        protected void Page_Load(object sender, System.EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMDStatus = Request.Form.Get("mdstatus");
            }
        }
    }
}

```

```

        string strMDStatusText = null;

        if (strMDStatus.Equals("1"))
        {
            strMDStatusText = "Tam Do rulama";
        }
        else if (strMDStatus.Equals("2"))
        {
            strMDStatusText = "Kart Sahibi veya bankası sisteme kayıtlı de il";
        }
        else if (strMDStatus.Equals("4"))
        {
            strMDStatusText = "Kartın bankası sisteme kayıtlı de il";
        }
        else if (strMDStatus.Equals("5"))
        {
            strMDStatusText = "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
        }
        else if (strMDStatus.Equals("6"))
        {
            strMDStatusText = "Do rulama yapılamıyor";
        }
        else if (strMDStatus.Equals("7"))
        {
            strMDStatusText = "Sistem Hatası";
        }
        else if (strMDStatus.Equals("8"))
        {
            strMDStatusText = "Bilinmeyen Kart No";
        }
        else if (strMDStatus.Equals("0"))
        {
            strMDStatusText = "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
        }

        txtmdResult.Text = strMDStatusText;

        IEnumerator f = Request.Form.GetEnumerator();
        while (f.MoveNext())
        {
            string xkey = (string)f.Current;
            string xval = Request.Form.Get(xkey);
            txtResults.Text = txtResults.Text + (xkey + " : " + xval);
        }
    }
}
}

```

ASP

3DOOSPay.asp

```

<html>
<head>
<title></title>
<script language="javascript" type="text/javascript" runat="server">

    var hexcase = 1;
    var b64pad = "=";
    var chrshz = 8;

    function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrshz)); }
    function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrshz)); }
    function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrshz)); }
    function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
    function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
    function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

    function shal_vm_test() {
        return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
    }

    function core_shal(x, len) {

        x[len >> 5] |= 0x80 << (24 - len % 32);
        x[((len + 64 >> 9) << 4) + 15] = len;

        var w = Array(80);
        var a = 1732584193;
        var b = -271733879;
        var c = -1732584194;
        var d = 271733878;
        var e = -1009589776;
    }

```

```

    for (var i = 0; i < x.length; i += 16) {
        var olda = a;
        var oldb = b;
        var oldc = c;
        var oldd = d;
        var olde = e;

        for (var j = 0; j < 80; j++) {
            if (j < 16) w[j] = x[i + j];
            else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
            var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
                safe_add(safe_add(e, w[j]), shal_kt(j)));
            e = d;
            d = c;
            c = rol(b, 30);
            b = a;
            a = t;
        }

        a = safe_add(a, olda);
        b = safe_add(b, oldb);
        c = safe_add(c, oldc);
        d = safe_add(d, oldd);
        e = safe_add(e, olde);
    }
    return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
        (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {
    var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i++) {
        str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +

```

```

        hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
    }
    return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
            | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
            | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {
            if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
            else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
        }
    }
    return str;
}
</script>
</head>
<body>
    <%
        strMode = "PROD"
        strApiVersion = "v0.01"
        strTerminalProvUserID = "PROVOOS"
        strType = "sales"
        strAmount = "100" 'şlem Tutarı
        strCurrencyCode = "949"
        strInstallmentCount = "" 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
        strTerminalUserID = "XXXXXX"
        strOrderID = "DENEME"
        strCompanyName = "TradeSiS"
        strCustomeremailaddress = "info@tradesis.com"
        strCustomeripaddress = "127.0.0.1"
        strTerminalID = "XXXXXXXX"
        strTerminalID_ = "0XXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
        strTerminalMerchantID = "XXXXXX" 'Üye şyeri Numarası
        strStoreKey = "XXXXXX" '3D Secure şifreniz
        strProvisionPassword = "XXXXXX" 'Terminal UserID şifresi
        strSuccessURL = "https://<sunucu_adresi>/3DOOSPayResults.asp"
        strErrorURL = "https://<sunucu_adresi>/3DOOSPayResults.asp"
        strtimestamp = "XXXXXX"
        strLang = "tr"
        SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
        HashData = hex_shal(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL + strType +
        strInstallmentCount + strStoreKey + SecurityData)
    >
    <form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
        3D Security Level:
        <select name="secure3dsecuritylevel">
            <option value="3D_OOS_PAY">3D_OOS_PAY</option>
            <option value="3D_OOS_FULL">3D_OOS_FULL</option>
            <option value="3D_OOS_HALF">3D_OOS_HALF</option>
        </select>
        <br />
        Refresh Time: <input name="refreshtime" type="text" />
        <br />
        <input id="submit" type="submit" value="şlemi Gönder" />
        <input type="hidden" name="mode" value="<%=strMode %>" />
        <input type="hidden" name="apiversion" value="<%=strApiVersion %>" />
        <input type="hidden" name="terminalprovuserid" value="<%=strTerminalProvUserID %>" />
        <input type="hidden" name="terminaluserid" value="<%=strTerminalUserID %>" />
        <input type="hidden" name="terminalid" value="<%=strTerminalID %>" />
        <input type="hidden" name="terminalmerchantid" value="<%=strTerminalMerchantID %>" />
        <input type="hidden" name="orderid" value="<%=strOrderID %>" />
        <input type="hidden" name="customeremailaddress" value="<%=strCustomeremailaddress %>" />
        <input type="hidden" name="customeripaddress" value="<%=strCustomeripaddress %>" />
        <input type="hidden" name="txntype" value="<%=strType %>" />
        <input type="hidden" name="txnamount" value="<%=strAmount %>" />
        <input type="hidden" name="txncurrencycode" value="<%=strCurrencyCode %>" />
        <input type="hidden" name="companyname" value="<%=strCompanyName %>" />
        <input type="hidden" name="txinstallmentcount" value="<%=strInstallmentCount %>" />
        <input type="hidden" name="successurl" value="<%=strSuccessURL %>" />
        <input type="hidden" name="errorurl" value="<%=strErrorURL %>" />
        <input type="hidden" name="secure3dhash" value="<%=HashData %>" />
        <input type="hidden" name="lang" value="<%=strLang %>" />
        <input type="hidden" name="txntimestamp" value="<%=strtimestamp %>" />
    </form>
</body>
</html>

3DOOSPayResults.asp
-----
<html>
<head>
    <title></title>

```

```

</head>
<body>
    <%
        strMDStatus = Request.Form("mdstatus")

        If strMDStatus = 1 Then
            Response.Write("Tam Do rulama")
        ElseIf strMDStatus = 2 Then
            Response.Write("Kart Sahibi veya bankası sisteme kayıtlı de il")
        ElseIf strMDStatus = 3 Then
            Response.Write("Kartın bankası sisteme kayıtlı de il")
        ElseIf strMDStatus = 4 Then
            Response.Write("Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş")
        ElseIf strMDStatus = 5 Then
            Response.Write("Do rulama yapılamıyor")
        ElseIf strMDStatus = 7 Then
            Response.Write("Sistem Hatası")
        ElseIf strMDStatus = 8 Then
            Response.Write("Bilinmeyen Kart No")
        ElseIf strMDStatus = 0 Then
            Response.Write("Do rulama Başarısız, 3-D Secure imzası geçersiz.")
        End If

        For each obj in request.form
            Response.Write("<br>" & obj & " : " & request.form(obj) & vbcrLf)
        Next
    %>
</body>
</html>

```

PHP

3DOOSPay.php

```

<html>
<head>
    <title></title>
</head>
<body>
    <?php
        $strMode = "PROD";
        $strApiVersion = "v0.01";
        $strTerminalProvUserID = "PROVOOS";
        $strType = "sales";
        $strAmount = "100"; // şlem Tutarı
        $strCurrencyCode = "949";
        $strInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
        $strTerminalUserID = "XXXXXX";
        $strOrderID = "DENEME";
        $strcompanyname = "TradeSiS";
        $strcustomeremailaddress = "info@tradesis.com";
        $strCustomeripaddress = "127.0.0.1";
        $strTerminalID = "XXXXXXXX";
        $strTerminalID_ = "0XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
        $strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
        $strStoreKey = "XXXXXX"; //3D Secure şifreniz
        $strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
        $strSuccessURL = "https://<sunucu_adresi>/3DOOSPayResults.php";
        $strErrorURL = "https://<sunucu_adresi>/3DOOSPayResults.php";
        $strtimestamp = "XXXXXX";
        $strLang = "tr";
        $SecurityData = strtoupper(shal($strProvisionPassword.$strTerminalID_));
        $HashData = strtoupper(shal($strTerminalID.$strOrderID.$strAmount.$strSuccessURL.$strErrorURL.$strType.
        $strInstallmentCount.$strStoreKey.$SecurityData));
        ?>
        <form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
            3D Security Level:
            <select name="secure3dsecuritylevel">
                <option value="3D_OOS_PAY">3D_OOS_PAY</option>
                <option value="3D_OOS_FULL">3D_OOS_FULL</option>
                <option value="3D_OOS_HALF">3D_OOS_HALF</option>
            </select>
            <br />
            Refresh Time: <input name="refreshtime" type="text" />
            <br />
            <input id="submit" type="submit" value="Oluştur" />
            <input type="hidden" name="mode" value="<?php echo $strMode ?>" />
            <input type="hidden" name="apiversion" value="<?php echo $strApiVersion ?>" />
            <input type="hidden" name="terminalprovuserid" value="<?php echo $strTerminalProvUserID ?>" />
            <input type="hidden" name="terminaluserid" value="<?php echo $strTerminalUserID ?>" />
            <input type="hidden" name="terminalid" value="<?php echo $strTerminalID ?>" />
            <input type="hidden" name="terminalmerchantid" value="<?php echo $strTerminalMerchantID ?>" />
            <input type="hidden" name="orderid" value="<?php echo $strOrderID ?>" />

```

```



```

3DOOSPayResults.php

```

<html>
<head>
<title></title>
</head>
<body>
<?php
    $strMDStatus = $_POST["mdStatus"];

    if($mdStatus == 1){
        echo "Tam Do rulama";
    }if($mdStatus == 2){
        echo "Kart Sahibi veya bankası sisteme kayıtlı de il";
    }if($mdStatus == 3){
        echo "Kartın bankası sisteme kayıtlı de il";
    }if($mdStatus == 4){
        echo "Do rulama denemesi, kart sahibi sisteme daha sonra kayıt olmayı seçmiş";
    }if($mdStatus == 5){
        echo "Do rulama yapılamıyor";
    }if($mdStatus == 7){
        echo "Sistem Hatası";
    }if($mdStatus == 8){
        echo "Bilinmeyen Kart No";
    }if($mdStatus == 0){
        echo "Do rulama Başarısız, 3-D Secure imzası geçersiz.";
    }

    foreach($_POST as $key => $value)
    {
        echo "<br>".$key." : ".$value;
    }
?>
</body>
</html>

```

Ortak Ödeme Sayfası (OOS) örnekleri

FORM

OOSPay.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="OOSPay.aspx.vb" Inherits="TradeSiS_GVP_VB.OOSPay" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
Level:
<asp:DropDownList ID="secure3dsecuritylevel" runat="server">
<asp:ListItem Value="OOS_PAY" Text="OOS_PAY" />
</asp:DropDownList>
<br />
Refresh Time: <asp:TextBox ID="refreshtime" runat="server" />
<br />
<asp:Button ID="submit" runat="server"PostBackUrl="https://sanalposprov.garanti.com.tr/servlet/gt3dengine"
Text="şlemi Gönder" />

```

eticaret@garanti.com.tr

Tel: 4440339 - 7

```

<asp:HiddenField ID="mode" runat="server" />
<asp:HiddenField ID="apiversion" runat="server" />
<asp:HiddenField ID="terminalprovuserid" runat="server" />
<asp:HiddenField ID="terminaluserid" runat="server" />
<asp:HiddenField ID="terminalid" runat="server" />
<asp:HiddenField ID="terminalmerchantid" runat="server" />
<asp:HiddenField ID="orderid" runat="server" />
<asp:HiddenField ID="customeremailaddress" runat="server" />
<asp:HiddenField ID="customeripaddress" runat="server" />
<asp:HiddenField ID="txntype" runat="server" />
<asp:HiddenField ID="txnamount" runat="server" />
<asp:HiddenField ID="txncurrencycode" runat="server" />
<asp:HiddenField ID="companyname" runat="server" />
<asp:HiddenField ID="txninstallmentcount" runat="server" />
<asp:HiddenField ID="successurl" runat="server" />
<asp:HiddenField ID="errorurl" runat="server" />
<asp:HiddenField ID="secure3dhash" runat="server" />
<asp:HiddenField ID="lang" runat="server" />
<asp:HiddenField ID="txntimestamp" runat="server" />
</div>
</form>
</body>
</html>

```

OOSPayResults.aspx

```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="OOSPayResults.aspx.vb"
Inherits="TradeSis_GVP_VB.OOSPayResults" %>

```

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

```

```

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<b>Gelen Yanıt</b> <i>(all)</i>
<br />
<asp:TextBox ID="txtResults" TextMode="MultiLine" Width="100%" Height="300" runat="server" />
</div>
</form>
</body>
</html>

```

VB.NET

OOSPay.aspx.vb

```

Imports System
Imports System.Net
Imports System.Xml
Imports System.Security.Cryptography
Imports System.IO

Partial Public Class OOSPay
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
        If Not Page.IsPostBack Then

            Dim strMode As String = "PROD"
            Dim strApiVersion As String = "v0.01"
            Dim strTerminalProvUserID As String = "PROVOOS"
            Dim strType As String = "sales"
            Dim strAmount As String = "100" 'şlem Tutarı
            Dim strCurrencyCode As String = "949"
            Dim strInstallmentCount As String = "" 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
            Dim strTerminalUserID As String = "XXXXXXX"
            Dim strOrderID As String = "DENEME12"
            Dim strCustomerIPAddress As String = "127.0.0.1"
            Dim strCustomerEmailAddress As String = "info@tradesis.com"
            Dim strTerminalID As String = "XXXXXXX"
            Dim _strTerminalID As String = "0XXXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
            Dim strTerminalMerchantID As String = "XXXXXXX" 'Üye şyeri Numarası
            Dim strStoreKey As String = "XXXXXXX" '3D Secure şifreniz
            Dim strProvisionPassword As String = "XXXXXXX" 'Terminal UserID şifresi
            Dim strSuccessURL As String = "https://<sunucu_adresi>/OOSPayResults.aspx"
            Dim strErrorURL As String = "https://<sunucu_adresi>/OOSPayResults.aspx"
            Dim strCompanyName As String = "TradeSis"

```

```

        Dim strlang As String = "tr"
        Dim strtimestamp As String = "XXXXXX"
        Dim SecurityData As String = UCase(GetSHA1(strProvisionPassword + _strTerminalID))
        Dim HashData As String = UCase(GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL +
strErrorURL + strType + strInstallmentCount + strStoreKey + SecurityData))

        mode.Value = strMode
        apiversion.Value = strApiVersion
        terminalprovuserid.Value = strTerminalProvUserID
        terminaluserid.Value = strTerminalUserID
        terminalmerchantid.Value = strTerminalMerchantID
        txntype.Value = strType
        txnamount.Value = strAmount
        txncurrencycode.Value = strCurrencyCode
        txninstallmentcount.Value = strInstallmentCount
        customeremailaddress.Value = strCustomerEmailAddress
        customeripaddress.Value = strCustomerIpAddress
        orderid.Value = strOrderID
        terminalid.Value = strTerminalID
        successurl.Value = strSuccessURL
        errorurl.Value = strErrorURL
        companyname.Value = strCompanyName
        lang.Value = strlang
        secure3dhash.Value = HashData
        txntimestamp.Value = strtimestamp

    End If
End Sub

Public Function GetSHA1(ByVal SHA1Data As String) As String

    Dim sha As SHA1 = New SHA1CryptoServiceProvider()
    Dim HashedPassword As String = SHA1Data
    Dim hashbytes As Byte() = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword)
    Dim inputbytes As Byte() = sha.ComputeHash(hashbytes)
    Return GetHexadecimal(inputbytes)

End Function

Public Shared Function GetHexadecimal(ByVal bytes As Byte()) As String

    Dim s As New StringBuilder()
    Dim length As Integer = bytes.Length
    For n As Integer = 0 To length - 1
        s.Append([String].Format("{0,2:x}", bytes(n)).Replace(" ", "0"))
    Next
    Return s.ToString()

End Function

End Class

OOSPayResults.aspx.vb
-----
Public Partial Class OOSPayResults
    Inherits System.Web.UI.Page

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load

        Dim f As IEnumerator = Request.Form.GetEnumerator()
        While (f.MoveNext())
            Dim xkey As String = f.Current.ToString
            Dim xval As String = Request.Form.Get(xkey)
            txtResults.Text = txtResults.Text + (xkey & " : " & xval & vbCrLf)
        End While

    End Sub

End Class

```

C#

```

OOSPay.aspx.cs
-----

using System;
using System.Net;
using System.Text;
using System.IO;
using System.Xml;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;

```



```

using System.Web.UI.WebControls;
using System.Security.Cryptography;

namespace TradeSis_GVP_C
{
    public partial class OOSPay : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                string strMode = "PROD";
                string strApiVersion = "v0.01";
                string strTerminalProvUserID = "PROVOOS";
                string strType = "sales";
                string strAmount = "100"; // şlem Tutarı
                string strCurrencyCode = "949";
                string strInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
                string strTerminalUserID = "XXXXXX";
                string strOrderID = "deneme";
                string strCustomeripaddress = "127.0.0.1";
                string strCustomeremailaddress = "info@tradesis.com";
                string strTerminalID = "XXXXXXXX";
                string _strTerminalID = "0XXXXXXXX"; 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
                string strTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
                string strStoreKey = "XXXXXX"; //3D Secure şifreniz
                string strProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
                string strSuccessURL = "https://<sunucu_adresi>/OOSPayResults.aspx";
                string strErrorURL = "https://<sunucu_adresi>/OOSPayResults.aspx";
                string strCompanyName = "TradeSis";
                string strlang = "tr";
                string strtimestamp = "XXXXXX";
                string SecurityData = GetSHA1(strProvisionPassword + _strTerminalID).ToUpper();
                string HashData = GetSHA1(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL +
strType + strInstallmentCount + strStoreKey + SecurityData).ToUpper();

                mode.Value = strMode;
                apiversion.Value = strApiVersion;
                terminalprovuserid.Value = strTerminalProvUserID;
                terminaluserid.Value = strTerminalUserID;
                terminalmerchantid.Value = strTerminalMerchantID;
                txntype.Value = strType;
                txnamount.Value = strAmount;
                txncurrencycode.Value = strCurrencyCode;
                txninstallmentcount.Value = strInstallmentCount;
                customeremailaddress.Value = strCustomeremailaddress;
                customeripaddress.Value = strCustomeripaddress;
                orderid.Value = strOrderID;
                terminalid.Value = strTerminalID;
                successurl.Value = strSuccessURL;
                errorurl.Value = strErrorURL;
                companyname.Value = strCompanyName;
                lang.Value = strlang;
                secure3dhash.Value = HashData;
                txntimestamp.Value = strtimestamp;
            }
        }

        public string GetSHA1(string SHA1Data)
        {
            SHA1 sha = new SHA1CryptoServiceProvider();
            string HashedPassword = SHA1Data;
            byte[] hashbytes = Encoding.GetEncoding("ISO-8859-9").GetBytes(HashedPassword);
            byte[] inputbytes = sha.ComputeHash(hashbytes);
            return GetHexadecimal(inputbytes);
        }

        public string GetHexadecimal(byte[] bytes)
        {
            StringBuilder s = new StringBuilder();
            int length = bytes.Length;
            for (int n = 0; n <= length - 1; n++)
            {
                s.Append(String.Format("{0,2:x}", bytes[n]).Replace(" ", "0"));
            }
            return s.ToString();
        }
    }
}

```

OOSPayResults.aspx.cs

```

using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;

```

```

using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace TradeSiS_GVP_C
{
    public partial class OOSPayResults : System.Web.UI.Page
    {
        protected void Page_Load(object sender, System.EventArgs e)
        {
            if (!Page.IsPostBack)
            {
                IEnumerator f = Request.Form.GetEnumerator();
                while (f.MoveNext())
                {
                    string xkey = (string)f.Current;
                    string xval = Request.Form.Get(xkey);
                    txtResults.Text = txtResults.Text + (xkey + " : " + xval);
                }
            }
        }
    }
}

```

ASP

OOSPay.asp

```

<html>
<head>
    <title></title>
    <script language="javascript"    type="text/javascript"    runat="server">

        var hexcase = 1;
        var b64pad = "=";
        var chrsz = 8;

        function hex_shal(s) { return binb2hex(core_shal(str2binb(s), s.length * chrsz)); }
        function b64_shal(s) { return binb2b64(core_shal(str2binb(s), s.length * chrsz)); }
        function str_shal(s) { return binb2str(core_shal(str2binb(s), s.length * chrsz)); }
        function hex_hmac_shal(key, data) { return binb2hex(core_hmac_shal(key, data)); }
        function b64_hmac_shal(key, data) { return binb2b64(core_hmac_shal(key, data)); }
        function str_hmac_shal(key, data) { return binb2str(core_hmac_shal(key, data)); }

        function shal_vm_test() {
            return hex_shal("abc") == "a9993e364706816aba3e25717850c26c9cd0d89d";
        }

        function core_shal(x, len) {

            x[(len >> 5) | 0x80 << (24 - len % 32)] = 0;
            x[((len + 64 >> 9) << 4) + 15] = len;

            var w = Array(80);
            var a = 1732584193;
            var b = -271733879;
            var c = -1732584194;
            var d = 271733878;
            var e = -1009589776;

            for (var i = 0; i < x.length; i += 16) {
                var olda = a;
                var oldb = b;
                var oldc = c;
                var oldd = d;
                var olde = e;

                for (var j = 0; j < 80; j++) {
                    if (j < 16) w[j] = x[i + j];
                    else w[j] = rol(w[j - 3] ^ w[j - 8] ^ w[j - 14] ^ w[j - 16], 1);
                    var t = safe_add(safe_add(rol(a, 5), shal_ft(j, b, c, d)),
                        safe_add(safe_add(e, w[j]), shal_kt(j)));
                    e = d;
                    d = c;
                    c = rol(b, 30);
                    b = a;
                    a = t;
                }

                a = safe_add(a, olda);
                b = safe_add(b, oldb);
                c = safe_add(c, oldc);
                d = safe_add(d, oldd);
                e = safe_add(e, olde);
            }
        }
    </script>

```

```

    }
    return Array(a, b, c, d, e);
}

function shal_ft(t, b, c, d) {
    if (t < 20) return (b & c) | ((~b) & d);
    if (t < 40) return b ^ c ^ d;
    if (t < 60) return (b & c) | (b & d) | (c & d);
    return b ^ c ^ d;
}

function shal_kt(t) {
    return (t < 20) ? 1518500249 : (t < 40) ? 1859775393 :
    (t < 60) ? -1894007588 : -899497514;
}

function core_hmac_shal(key, data) {
    var bkey = str2binb(key);
    if (bkey.length > 16) bkey = core_shal(bkey, key.length * chrsz);

    var ipad = Array(16), opad = Array(16);
    for (var i = 0; i < 16; i++) {
        ipad[i] = bkey[i] ^ 0x36363636;
        opad[i] = bkey[i] ^ 0x5C5C5C5C;
    }

    var hash = core_shal(ipad.concat(str2binb(data)), 512 + data.length * chrsz);
    return core_shal(opad.concat(hash), 512 + 160);
}

function safe_add(x, y) {
    var lsw = (x & 0xFFFF) + (y & 0xFFFF);
    var msw = (x >> 16) + (y >> 16) + (lsw >> 16);
    return (msw << 16) | (lsw & 0xFFFF);
}

function rol(num, cnt) {
    return (num << cnt) | (num >>> (32 - cnt));
}

function str2binb(str) {
    var bin = Array();
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < str.length * chrsz; i += chrsz)
        bin[i >> 5] |= (str.charCodeAt(i / chrsz) & mask) << (32 - chrsz - i % 32);
    return bin;
}

function binb2str(bin) {
    var str = "";
    var mask = (1 << chrsz) - 1;
    for (var i = 0; i < bin.length * 32; i += chrsz)
        str += String.fromCharCode((bin[i >> 5] >>> (32 - chrsz - i % 32)) & mask);
    return str;
}

function binb2hex(binarray) {
    var hex_tab = hexcase ? "0123456789ABCDEF" : "0123456789abcdef";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i++) {
        str += hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8 + 4)) & 0xF) +
        hex_tab.charAt((binarray[i >> 2] >> ((3 - i % 4) * 8)) & 0xF);
    }
    return str;
}

function binb2b64(binarray) {
    var tab = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/";
    var str = "";
    for (var i = 0; i < binarray.length * 4; i += 3) {
        var triplet = (((binarray[i >> 2] >> 8 * (3 - i % 4)) & 0xFF) << 16)
        | (((binarray[i + 1 >> 2] >> 8 * (3 - (i + 1) % 4)) & 0xFF) << 8)
        | ((binarray[i + 2 >> 2] >> 8 * (3 - (i + 2) % 4)) & 0xFF);
        for (var j = 0; j < 4; j++) {
            if (i * 8 + j * 6 > binarray.length * 32) str += b64pad;
            else str += tab.charAt((triplet >> 6 * (3 - j)) & 0x3F);
        }
    }
    return str;
}
</script>
</head>
<body>
<%
    strMode = "PROD"
    strApiVersion = "v0.01"

```

```

strTerminalProvUserID = "PROVOOS"
strType = "sales"
strAmount = "100" 'şlem Tutarı
strCurrencyCode = "949"
strInstallmentCount = " " 'Taksit Sayısı. Boş gönderilirse taksit yapılmaz
strTerminalUserID = "XXXXXX"
strOrderID = "DENEME"
strCustomeripaddress = "127.0.0.1"
strCustomeremailaddress = "info@tradesis.com"
strTerminalID = "XXXXXXXX"
strTerminalID_ = "0XXXXXXXX" 'Başına 0 eklenerek 9 digite tamamlanmalıdır.
strTerminalMerchantID = "XXXXXX" 'Üye şyeri Numarası
strStoreKey = "XXXXXX" '3D Secure şifreniz
strProvisionPassword = "XXXXXX" 'Terminal UserID şifresi
strSuccessURL = "https://<sunucu_adresi>/OOSPayResults.asp"
strErrorURL = "https://<sunucu_adresi>/OOSPayResults.asp"
strCompanyName = "TradeSiS"
strlang = "tr"
strtimestamp = "XXXXXX"
SecurityData = hex_shal(strProvisionPassword + strTerminalID_)
HashData = hex_shal(strTerminalID + strOrderID + strAmount + strSuccessURL + strErrorURL + strType +
strInstallmentCount + strStoreKey + SecurityData)
<?>
<form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
  3D Security Level:
  <select name="secure3dsecuritylevel">
    <option value="OOS_PAY">OOS_PAY</option>
  </select>
  <br />
  Refresh Time: <input name="refreshtime" type="text" />
  <br />
  <input id="submit" type="submit" value="şlemi Gönder" />
  <input type="hidden" name="mode" value="<%=strMode %>" />
  <input type="hidden" name="apiversion" value="<%=strApiVersion %>" />
  <input type="hidden" name="terminalprovuserid" value="<%=strTerminalProvUserID %>" />
  <input type="hidden" name="terminaluserid" value="<%=strTerminalUserID %>" />
  <input type="hidden" name="terminalid" value="<%=strTerminalID %>" />
  <input type="hidden" name="terminalmerchantid" value="<%=strTerminalMerchantID %>" />
  <input type="hidden" name="orderid" value="<%=strOrderID %>" />
  <input type="hidden" name="customeremailaddress" value="<%=strCustomeremailaddress %>" />
  <input type="hidden" name="customeripaddress" value="<%=strCustomeripaddress %>" />
  <input type="hidden" name="txntype" value="<%=strType %>" />
  <input type="hidden" name="txnamount" value="<%=strAmount %>" />
  <input type="hidden" name="txncurrencycode" value="<%=strCurrencyCode %>" />
  <input type="hidden" name="companyname" value="<%=strCompanyName %>" />
  <input type="hidden" name="txinstallmentcount" value="<%=strInstallmentCount %>" />
  <input type="hidden" name="successurl" value="<%=strSuccessURL %>" />
  <input type="hidden" name="errorurl" value="<%=strErrorURL %>" />
  <input type="hidden" name="secure3dhash" value="<%=HashData %>" />
  <input type="hidden" name="lang" value="<%=strLang %>" />
  <input type="hidden" name="txntimestamp" value="<%=strtimestamp %>" />
</form>
</body>
</html>

```

OOSPayResults.asp

```

<html>
<head>
  <title></title>
</head>
<body>
  <%=
    For each obj in request.form
      Response.Write("<br>" & obj & " : " & request.form(obj) & vbcrLf)
    Next
  <%=
</body>
</html>

```

PHP

OOSPay.php

```

<html>
<head>
  <title></title>
</head>
<body>
  <?php
    $strMode = "PROD";
    $strApiVersion = "v0.01";
    $strTerminalProvUserID = "PROVOOS";

```

```

$StrType = "sales";
$StrAmount = "100"; // $lem Tutarı
$StrCurrencyCode = "949";
$StrInstallmentCount = ""; //Taksit Sayısı. Boş gönderilirse taksit yapılmaz
$StrTerminalUserID = "XXXXXX";
$StrOrderID = "DENEME";
$StrCompanyName = "TradeSiS";
$StrCustomeremailaddress = "info@tradesis.com";
$StrCustomeripaddress = "127.0.0.1";
$StrTerminalID = "XXXXXXXX";
$StrTerminalID_ = "0XXXXXXXX"; //Başına 0 eklenerek 9 digite tamamlanmalıdır.
$StrTerminalMerchantID = "XXXXXX"; //Üye şyeri Numarası
$StrStoreKey = "XXXXXX"; //3D Secure şifreniz
$StrProvisionPassword = "XXXXXX"; //Terminal UserID şifresi
$StrSuccessURL = "https://<sunucu_adresi>/OOSPayResults.php";
$StrErrorURL = "https://<sunucu_adresi>/OOSPayResults.php";
$Strtimestamp = "XXXXXX";
$StrLang = "tr";
$SecurityData = strtoupper(shal($StrProvisionPassword.$StrTerminalID_));
$HashData =

?>

<form action="https://sanalposprov.garanti.com.tr/servlet/gt3dengine" method="post">
  3D Security Level:
  <select name="secure3dsecuritylevel">
    <option value="OOS_PAY">OOS_PAY</option>
  </select>
  <br />
  Refresh Time: <input name="refreshtime" type="text" />
  <br />
  <input id="submit" type="submit" value=" $lemi Gönder" />
  <input type="hidden" name="mode" value="<?php echo $StrMode ?>" />
  <input type="hidden" name="apiversion" value="<?php echo $StrApiVersion ?>" />
  <input type="hidden" name="terminalprovuserid" value="<?php echo $StrTerminalProvUserID ?>" />
  <input type="hidden" name="terminaluserid" value="<?php echo $StrTerminalUserID ?>" />
  <input type="hidden" name="terminalid" value="<?php echo $StrTerminalID ?>" />
  <input type="hidden" name="terminalmerchantid" value="<?php echo $StrTerminalMerchantID ?>" />
  <input type="hidden" name="orderid" value="<?php echo $StrOrderID ?>" />
  <input type="hidden" name="customeremailaddress" value="<?php echo $StrCustomeremailaddress ?>" />
  <input type="hidden" name="customeripaddress" value="<?php echo $StrCustomeripaddress ?>" />
  <input type="hidden" name="txntype" value="<?php echo $StrType ?>" />
  <input type="hidden" name="txnamount" value="<?php echo $StrAmount ?>" />
  <input type="hidden" name="txncurrencycode" value="<?php echo $StrCurrencyCode ?>" />
  <input type="hidden" name="companyname" value="<?php echo $StrCompanyName ?>" />
  <input type="hidden" name="txninstallmentcount" value="<?php echo $StrInstallmentCount ?>" />
  <input type="hidden" name="successurl" value="<?php echo $StrSuccessURL ?>" />
  <input type="hidden" name="errorurl" value="<?php echo $StrErrorURL ?>" />
  <input type="hidden" name="secure3dhash" value="<?php echo $HashData ?>" />
  <input type="hidden" name="lang" value="<?php echo $StrLang ?>" />
  <input type="hidden" name="txntimestamp" value="<?php echo $Strtimestamp ?>" />
</form>
</body>
</html>

OOSPayResults.php
-----

<html>
<head>
  <title></title>
</head>
<body>
<?php
  foreach($_POST as $key => $value)
  {
    echo "<br>".$key." : ".$value;
  }
?>
</body>
</html>

```

Sık Kullanılan Terimler

<u>TerminalID:</u>	Terminal Numaranız
<u>MerchantID:</u>	Üye işyeri Numaranız
<u>StoreKey:</u>	3D Secure şifreniz (3D Secure Key)
<u>ProvisionPassword:</u>	SanalPos Şifreniz
<u>Amount:</u>	İşlem Tutarı

eticaret@garanti.com.tr

Tel: 4440339 - 7

<u>CurrencyCode:</u>	Para Birimi Kodu (TL=949)
<u>InstallmentCount:</u>	Taksit Sayısı. Boş gönderilirse taksit yapılmaz
<u>SuccessURL:</u>	Başarılı 3D işlemlerde kullanılacak dönüş sayfası
<u>ErrorURL:</u>	Başarısız 3D işlemlerde kullanılacak dönüş sayfası
<u>Refresh Time:</u>	OOS işlemlerde müşteriye sonuç sayfasına yönlendirilme süresi
<u>mdStatus:</u>	3D işlemlerde dönen sistem yanıtları