RSA

Imports System.Security.Cryptography

Imports System.Text

Dim textbytes, encryptedtextbytes As Byte()

Dim rsa As New RSACryptoServiceProvider

Dim encoder As New UTF8Encoding

Button- التشفير

Dim TexttoEncrypt As String = TextBox1.Text

textbytes = encoder.GetBytes(TexttoEncrypt)

encryptedtextbytes = rsa.Encrypt(textbytes, True)

TextBox2.Text = Convert.ToBase64String(encryptedtextbytes)

Button- فك التشفير

textbytes = rsa.Decrypt(encryptedtextbytes, True)

TextBox1.Text = encoder.GetString(textbytes)

SHA-1

Imports System.Security.Cryptography

Imports System.Text

Button- التشفير

Select Case Trim(ComboBox1.Text)

Case "SHA1"

TextBox2.Text = GetSHA1Data(Encoding.[Default].GetBytes(TextBox1.Text))

End Select

ListBox1.Items.Clear()

For i = 0 To Len(TextBox2.Text) - 2 Step 2

ListBox1.Items.Add(TextBox2.Text(i) & TextBox2.Text(i + 1))

Next

-----------------------------------------------------------------

Public Sub New(\_KEY As String)

KeyStr = \_KEY

End Sub

Private KeyValue As String

Public Property KeyStr() As String

Get

Return KeyValue

End Get

Set(ByVal value As String)

KeyValue = value

End Set

End Property

Function Encryption(ByVal Path As String) As Byte()

Dim input As Byte() = File.ReadAllBytes(Path)

Dim AES As New System.Security.Cryptography.RijndaelManaged

Dim SHA256 As New System.Security.Cryptography.SHA256Cng

Dim ciphertext As String = ""

Try

AES.Key = SHA256.ComputeHash(System.Text.ASCIIEncoding.ASCII.GetBytes(KeyStr))

AES.Mode = Security.Cryptography.CipherMode.ECB

Dim DESEncrypter As System.Security.Cryptography.ICryptoTransform = AES.CreateEncryptor

Dim Buffer As Byte() = input

Return DESEncrypter.TransformFinalBlock(Buffer, 0, Buffer.Length)

Catch ex As Exception

End Try

End Function

Function Decryption(ByVal Path As String) As Byte()

Dim input As Byte() = File.ReadAllBytes(Path)

Dim AES As New System.Security.Cryptography.RijndaelManaged

Dim SHA256 As New System.Security.Cryptography.SHA256Cng

Try

AES.Key = SHA256.ComputeHash(System.Text.ASCIIEncoding.ASCII.GetBytes(KeyStr))

AES.Mode = Security.Cryptography.CipherMode.ECB

Dim DESDecrypter As System.Security.Cryptography.ICryptoTransform = AES.CreateDecryptor

Dim Buffer As Byte() = input

Return DESDecrypter.TransformFinalBlock(Buffer, 0, Buffer.Length)

Catch ex As Exception

End Try

End Function

SHA-2

Imports System.Security.Cryptography

Imports System.Text

Button-اضافة ملفات

Dim OFP As New OpenFileDialog

OFP.Multiselect = True

OFP.Filter = "Application|\*.exe|Icon|\*.ico|Image|\*.jpg|PNG|\*.PNG|PDF|\*.PDF"

If OFP.ShowDialog = Windows.Forms.DialogResult.OK Then

For Each F In OFP.FileNames

Dim File = New FileInfo(F)

LstFiles.Add(File)

CheckedListBoxListFiles.Items.Add(File.Name)

Next

End If

Button- التشفير

Dim Th As New Threading.Thread(AddressOf Encrypt)

Th.Start()

Button- فك التشفير

Dim Th As New Threading.Thread(AddressOf Decrypt)

Th.Start()

---------------------------------------------

Sub Encrypt()

Button3.Enabled = False

Button2.Enabled = True

For i = 0 To LstFiles.Count - 1

Try

Dim FileEncrypted = EncryptDecryptFiles.Encryption(LstFiles.Item(i).FullName)

If FileEncrypted.Length > 0 Then

My.Computer.FileSystem.WriteAllBytes(LstFiles.Item(i).FullName, FileEncrypted, False)

CheckedListBoxListFiles.SetItemCheckState(i, CheckState.Checked)

CheckedListBoxListFiles.SetSelected(i, True)

Label2.Text = "تم تشفير الملف بنجاح"

End If

Catch ex As Exception

End Try

Threading.Thread.Sleep(100)

Next

End Sub

Sub Decrypt()

Button3.Enabled = True

Button2.Enabled = False

For i = 0 To LstFiles.Count - 1

Try

Dim FileEncrypted = EncryptDecryptFiles.Decryption(LstFiles.Item(i).FullName)

If FileEncrypted.Length > 0 Then

My.Computer.FileSystem.WriteAllBytes(LstFiles.Item(i).FullName, FileEncrypted, False)

CheckedListBoxListFiles.SetItemCheckState(i, CheckState.Checked)

CheckedListBoxListFiles.SetSelected(i, True)

Label2.Text = "تم فك تشفير الملف بنجاح"

End If

Catch ex As Exception

End Try

Threading.Thread.Sleep(100)

Next

End Sub

Function GetSHA1Data(ByVal data As Byte()) As String

'create new instance of md5

Dim sha As SHA1 = SHA1.Create()

'convert the input text to array of bytes

Dim hashData As Byte() = sha.ComputeHash(data)

'create new instance of StringBuilder to save hashed data

Dim returns As New StringBuilder()

'loop for each byte and add it to StringBuilder

For i As Integer = 0 To hashData.Length - 1

returns.Append(hashData(i).ToString("x2"))

Next

' return hexadecimal string

Return returns.ToString()

End Function

Function ValidateSHA1Data(ByVal inputData As Byte(), ByVal storedHashData As String) As Boolean

'hash input text and save it string variable

Dim getHashInputData As String = GetSHA1Data(inputData)

If String.Equals(getHashInputData, storedHashData) Then

Return True

Else

Return False

End If

End Function