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Option Strict On
Imports Microsoft.VisualBasic
Imports System.Security.Cryptography

Public Class PassHash
    Private Shared hasher As SHA1Managed = New SHA1Managed
    Private Shared Hasher512 As SHA512Managed = New SHA512Managed

    Private Sub New()
        ' do nothing, make class uncreatable
    End Sub

    Public Shared Function Hash(ByVal password As String) As String
        ' convert password to byte array
        Dim passwordBytes() As Byte = _
            System.Text.ASCIIEncoding.ASCII.GetBytes(password)

        ' generate hash from byte array of password
        Dim passwordHash() As Byte = hasher.ComputeHash(passwordBytes)

        ' convert hash to string
        Return Convert.ToBase64String(passwordHash, 0, passwordHash.Length)
    End Function

    Public Shared Function Hash512(ByVal password As String) As String
        ' convert password to byte array
        Dim passwordBytes() As Byte = _
            System.Text.ASCIIEncoding.ASCII.GetBytes(password)

        ' generate hash from byte array of password
        Dim passwordHash() As Byte = Hasher512.ComputeHash(passwordBytes)

        ' convert hash to string
        Return Convert.ToBase64String(passwordHash, 0, passwordHash.Length)
    End Function
End Class

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