AES.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace TranDangKhoa\_AES

{

internal class AES

{

private object master\_key;

private int bit;

public AES(object master\_key, int bit)

{

this.master\_key = master\_key;

this.bit = bit;

}

public String encrypt(String text)

{

return "";

}

public string decrypt(String text)

{

return "";

}

}

}

MainWindow.xaml.cs

using Word = Microsoft.Office.Interop.Word;

using Microsoft.Win32;

using Rijndael256;

using System;

using System.IO;

using DocumentFormat.OpenXml.Packaging;

using DocumentFormat.OpenXml.Wordprocessing;

using System.Reflection.Metadata;

using System.Windows;

using System.Windows.Controls;

using System.Windows.Documents;

using System.Xml.Linq;

namespace TranDangKhoa\_AES

{

/// <summary>

/// Interaction logic for MainWindow.xaml

/// </summary>

public partial class MainWindow : Window

{

public MainWindow()

{

InitializeComponent();

}

private void Button\_Click(object sender, RoutedEventArgs e)

{

var rand = new Random();

var randomKey = "";

int length = Int32.Parse(cbo\_length\_key.Text.Substring(0, 3)) / 8;

for (int i = 0; i < length; i++)

{

var randomNumber = rand.Next(0, 26);

var randomChar = (char)('A' + randomNumber);

randomKey += randomChar;

}

txt\_key.Text = randomKey;

}

private void bt\_chuyen\_ban\_ro\_Click(object sender, RoutedEventArgs e)

{

string tmp = txt\_ban\_ro.Text;

txt\_ban\_ro.Text = "";

txt\_ban\_ma.Text = tmp;

}

private void bt\_chuyen\_ban\_ma\_Click(object sender, RoutedEventArgs e)

{

string tmp = txt\_ban\_ma.Text;

txt\_ban\_ma.Text = "";

txt\_ban\_ro.Text = tmp;

}

private void bt\_ma\_hoa\_Click(object sender, RoutedEventArgs e)

{

String banRo = txt\_ban\_ro.Text;

String key = txt\_key.Text;

int doDaiKhoa = Int32.Parse(cbo\_length\_key.Text.Substring(0, 3));

AES aes = new AES(key, doDaiKhoa);

txt\_ban\_ma.Text = aes.encrypt(banRo);

{

txt\_ban\_ma.Text = Rijndael.Encrypt(txt\_ban\_ro.Text, txt\_key.Text, KeySize.Aes128);

}

}

private void bt\_giai\_ma\_Click(object sender, RoutedEventArgs e)

{

String banMa = txt\_ban\_ma.Text;

String key = txt\_key.Text;

int doDaiKhoa = Int32.Parse(cbo\_length\_key.Text.Substring(0, 3));

AES aes = new AES(key, doDaiKhoa);

{

txt\_ban\_ro.Text = Rijndael.Decrypt(txt\_ban\_ma.Text, txt\_key.Text, KeySize.Aes128);

}

}

private void Button\_Click\_1(object sender, RoutedEventArgs e)

{

Microsoft.Win32.OpenFileDialog dlg = new Microsoft.Win32.OpenFileDialog();

dlg.DefaultExt = ".txt";

dlg.Filter = "Text documents (\*.txt)|\*.txt";

// Display OpenFileDialog by calling ShowDialog method

Nullable<bool> result = dlg.ShowDialog();

if (result == true)

{

string filename = dlg.FileName;

string text = File.ReadAllText(filename);

txt\_ban\_ro.Text = text;

}

}

private void Button\_Click\_2(object sender, RoutedEventArgs e)

{

Microsoft.Win32.OpenFileDialog dlg = new Microsoft.Win32.OpenFileDialog();

dlg.DefaultExt = ".docx";

dlg.Filter = "Text documents (\*.docx)|\*.docx";

// Display OpenFileDialog by calling ShowDialog method

Nullable<bool> result = dlg.ShowDialog();

if (result == true)

{

string filename = dlg.FileName;

string text = string.Empty;

using (WordprocessingDocument wordDoc = WordprocessingDocument.Open(filename, false))

{

var body = wordDoc.MainDocumentPart.Document.Body;

if (body != null)

{

text = body.InnerText;

}

}

string filePath = filename;

txt\_ban\_ro.Text = text;

}

}

private void bt\_luu\_ban\_ro(object sender, RoutedEventArgs e)

{

using (StreamWriter sw = new StreamWriter("BanRo.txt"))

{

sw.Write(txt\_ban\_ro.Text);

}

MessageBox.Show("Lưu file thành công");

}

private void bt\_luu\_ban\_ma(object sender, RoutedEventArgs e)

{

using (StreamWriter sw = new StreamWriter("BanMa.txt"))

{

sw.Write(txt\_ban\_ma.Text);

}

MessageBox.Show("Lưu file thành công");

}

private void Button\_Click\_3(object sender, RoutedEventArgs e)

{

Microsoft.Win32.OpenFileDialog dlg = new Microsoft.Win32.OpenFileDialog();

dlg.DefaultExt = ".txt";

dlg.Filter = "Text documents (\*.txt)|\*.txt";

// Display OpenFileDialog by calling ShowDialog method

Nullable<bool> result = dlg.ShowDialog();

if (result == true)

{

string filename = dlg.FileName;

string text = File.ReadAllText(filename);

txt\_ban\_ma.Text = text;

}

}

private void Button\_Click\_4(object sender, RoutedEventArgs e)

{

Microsoft.Win32.OpenFileDialog dlg = new Microsoft.Win32.OpenFileDialog();

dlg.DefaultExt = ".docx";

dlg.Filter = "Text documents (\*.docx)|\*.docx";

// Display OpenFileDialog by calling ShowDialog method

Nullable<bool> result = dlg.ShowDialog();

if (result == true)

{

string filename = dlg.FileName;

string text = string.Empty;

using (WordprocessingDocument wordDoc = WordprocessingDocument.Open(filename, false))

{

var body = wordDoc.MainDocumentPart.Document.Body;

if (body != null)

{

text = body.InnerText;

}

}

string filePath = filename;

txt\_ban\_ma.Text = text;

}

}

}

}

MainWindow.xaml

<Window x:Class="TranDangKhoa\_AES.MainWindow"

xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

xmlns:d="http://schemas.microsoft.com/expression/blend/2008"

xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"

xmlns:local="clr-namespace:TranDangKhoa\_AES"

mc:Ignorable="d"

Title="AES" Height="464" Width="958">

<Grid Margin="11,-6,0,0" HorizontalAlignment="Left" Width="948">

<Label Content="Bản mã" HorizontalAlignment="Left" Height="28" Margin="566,15,0,0" VerticalAlignment="Top" Width="78" FontSize="16" FontFamily="Segoe UI Black"/>

<Label Content="Bản Rõ&#xD;&#xA;Bản rõ" HorizontalAlignment="Left" Height="28" Margin="29,15,0,0" VerticalAlignment="Top" Width="75" FontSize="16" FontFamily="Segoe UI Black"/>

<TextBox Name="txt\_ban\_ro" HorizontalAlignment="Left" Height="184" Margin="96,43,0,0" TextWrapping="Wrap" Text="TextBox" VerticalAlignment="Top" Width="290"/>

<TextBox Name="txt\_ban\_ma" HorizontalAlignment="Left" Height="280" Margin="640,43,0,0" TextWrapping="Wrap" Text="TextBox" VerticalAlignment="Top" Width="290"/>

<Button Content="File.txt" HorizontalAlignment="Left" Height="24" Margin="396,63,0,0" VerticalAlignment="Top" Width="57" Click="Button\_Click\_1"/>

<Button Content="File.docx" HorizontalAlignment="Left" Height="24" Margin="396,101,0,0" VerticalAlignment="Top" Width="57" Click="Button\_Click\_2"/>

<Button Name="bt\_chuyen\_ban\_ro" Content="=================&gt;" HorizontalAlignment="Left" Margin="424,148,0,0" VerticalAlignment="Top" Width="192" Click="bt\_chuyen\_ban\_ro\_Click"/>

<Button Name="bt\_chuyen\_ban\_ma" Content="&lt;=================" HorizontalAlignment="Left" Margin="424,192,0,0" VerticalAlignment="Top" Width="192" Click="bt\_chuyen\_ban\_ma\_Click"/>

<Grid HorizontalAlignment="Left" VerticalAlignment="Top" Width="349" Margin="37,241,0,0">

<Grid.ColumnDefinitions>

<ColumnDefinition Width="306\*"/>

<ColumnDefinition Width="43\*"/>

</Grid.ColumnDefinitions>

<TextBox Name="txt\_key" HorizontalAlignment="Left" Height="37" Margin="112,0,0,0" TextWrapping="Wrap" Text="TextBox" VerticalAlignment="Center" Width="174"/>

<Label Content="Khóa" HorizontalAlignment="Left" Height="33" VerticalAlignment="Center" Width="54" FontSize="16" FontFamily="Segoe UI Black" Margin="-6,0,0,0"/>

<Button Content="generate" HorizontalAlignment="Left" Height="25" Margin="291,0,0,4" VerticalAlignment="Bottom" Width="58" Grid.ColumnSpan="2" Click="Button\_Click"/>

</Grid>

<Grid HorizontalAlignment="Left" VerticalAlignment="Top" Width="349" Margin="37,290,0,0">

<Grid.ColumnDefinitions>

<ColumnDefinition Width="336\*"/>

<ColumnDefinition Width="13\*"/>

</Grid.ColumnDefinitions>

<Label Content="Độ dài khóa" HorizontalAlignment="Left" Height="33" VerticalAlignment="Center" Width="106" FontSize="16" FontFamily="Segoe UI Black" Margin="-6,0,0,0"/>

<ComboBox Name="cbo\_length\_key" HorizontalAlignment="Left" Height="25" Margin="111,0,0,0" VerticalAlignment="Center" Width="238" Grid.ColumnSpan="2">

<ComboBoxItem Content="128 bit"/>

<ComboBoxItem Content="192 bit"/>

<ComboBoxItem Content="256 bit"/>

</ComboBox>

</Grid>

<Button Content="File.txt" HorizontalAlignment="Left" Height="24" Margin="572,63,0,0" VerticalAlignment="Top" Width="58" Click="Button\_Click\_3"/>

<Button Content="File.docx" HorizontalAlignment="Left" Height="24" Margin="572,101,0,0" VerticalAlignment="Top" Width="58" Click="Button\_Click\_4"/>

<Button Name="bt\_ma\_hoa" Content="Mã hóa" HorizontalAlignment="Left" Height="41" Margin="96,353,0,0" VerticalAlignment="Top" Width="120" FontSize="17" FontFamily="Arial Rounded MT Bold" Click="bt\_ma\_hoa\_Click"/>

<Button Name="bt\_giai\_ma" Content="Giải mã" HorizontalAlignment="Left" Height="41" Margin="640,353,0,0" VerticalAlignment="Top" Width="121" FontSize="17" FontFamily="Arial Rounded MT Bold" Click="bt\_giai\_ma\_Click"/>

<Button x:Name="bt\_ma\_hoa\_Copy" Content="Lưu bản rõ" HorizontalAlignment="Left" Height="41" Margin="266,353,0,0" VerticalAlignment="Top" Width="120" FontSize="17" FontFamily="Arial Rounded MT Bold" Click="bt\_luu\_ban\_ro"/>

<Button x:Name="bt\_giai\_ma\_Copy" Content="Lưu bản mã" HorizontalAlignment="Left" Height="41" Margin="809,353,0,0" VerticalAlignment="Top" Width="121" FontSize="17" FontFamily="Arial Rounded MT Bold" Click="bt\_luu\_ban\_ma"/>

</Grid>

</Window>