HOME WORK 13/10/2023

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Lập Trình C#(3)

1

Kết quả:

A computer screen with a white box and black text

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A computer screen with a black background

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CODE:

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| using System;  using System.Collections.Generic;  using System.ComponentModel;  using System.Data;  using System.Drawing;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using System.Windows.Forms;  namespace SQL\_winform  {  public partial class Form1 : Form  {  public Form1()  {  InitializeComponent();  }  private void button1\_Click(object sender, EventArgs e)  {  try  {  Connect.Instance.Open();  MessageBox.Show("Connect database successfully!", "Success");  }  catch (Exception ex)  {  MessageBox.Show(ex.Message, "Errors");  }  }  private void btnDisconnect\_Click(object sender, EventArgs e)  {  try  {  Connect.Instance.Close();  MessageBox.Show("Disconnect database successfully!", "Success");  }  catch (Exception ex)  {  MessageBox.Show(ex.Message, "Errors");  }  }  }  } |

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| namespace SQL\_winform  {  partial class Form1  {  /// <summary>  /// Required designer variable.  /// </summary>  private System.ComponentModel.IContainer components = null;  /// <summary>  /// Clean up any resources being used.  /// </summary>  /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>  protected override void Dispose(bool disposing)  {  if (disposing && (components != null))  {  components.Dispose();  }  base.Dispose(disposing);  }  #region Windows Form Designer generated code  /// <summary>  /// Required method for Designer support - do not modify  /// the contents of this method with the code editor.  /// </summary>  private void InitializeComponent()  {  btnConnect = new System.Windows.Forms.Button();  btnDisconnect = new System.Windows.Forms.Button();  SuspendLayout();  //  // btnConnect  //  btnConnect.Location = new System.Drawing.Point(120, 50);  btnConnect.Name = "btnConnect";  btnConnect.Size = new System.Drawing.Size(280, 50);  btnConnect.TabIndex = 0;  btnConnect.Text = "Connect database";  btnConnect.UseVisualStyleBackColor = true;  btnConnect.Click += button1\_Click;  //  // btnDisconnect  //  btnDisconnect.Location = new System.Drawing.Point(120, 135);  btnDisconnect.Name = "btnDisconnect";  btnDisconnect.Size = new System.Drawing.Size(280, 50);  btnDisconnect.TabIndex = 1;  btnDisconnect.Text = "Disconnect database";  btnDisconnect.UseVisualStyleBackColor = true;  btnDisconnect.Click += btnDisconnect\_Click;  //  // Form1  //  AutoScaleDimensions = new System.Drawing.SizeF(7F, 15F);  AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;  ClientSize = new System.Drawing.Size(534, 320);  Controls.Add(btnDisconnect);  Controls.Add(btnConnect);  Name = "Form1";  Text = "Form1";  ResumeLayout(false);  }  #endregion  private System.Windows.Forms.Button btnConnect;  private System.Windows.Forms.Button btnDisconnect;  }  } |

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| using System;  using System.Collections.Generic;  using System.Linq;  using System.Security.Policy;  using System.Threading.Tasks;  using System.Windows.Forms;  namespace SQL\_winform  {  internal static class Program  {  /// <summary>  /// The main entry point for the application.  /// </summary>  [STAThread]  static void Main()  {  Application.SetHighDpiMode(HighDpiMode.SystemAware);  Application.EnableVisualStyles();  Application.SetCompatibleTextRenderingDefault(false);  Application.Run(new Form1());  }  }  } |

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| using System;  using System.Windows.Forms;  using Microsoft.Data.SqlClient;  using Microsoft.Extensions.Configuration;  using MySqlConnector;  namespace SQL\_winform  {  static class Connect  {  static string url = "Server=localhost;User ID=root;Password='';Database=student";  private static MySqlConnection? conn;  public static MySqlConnection Instance {  get  {  if (conn == null)  {  conn = new MySqlConnection(url);  }  return conn;  }  }  }  } |

Form 2

Kết quả

A screenshot of a computer

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Code

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| namespace SQL\_winform  {  partial class Form2  {  /// <summary>  /// Required designer variable.  /// </summary>  private System.ComponentModel.IContainer components = null;  /// <summary>  /// Clean up any resources being used.  /// </summary>  /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>  protected override void Dispose(bool disposing)  {  if (disposing && (components != null))  {  components.Dispose();  }  base.Dispose(disposing);  }  #region Windows Form Designer generated code  /// <summary>  /// Required method for Designer support - do not modify  /// the contents of this method with the code editor.  /// </summary>  private void InitializeComponent()  {  lbClassID = new System.Windows.Forms.Label();  lbNumberOfStudent = new System.Windows.Forms.Label();  txtClassID = new System.Windows.Forms.TextBox();  txtNumberOfStudent = new System.Windows.Forms.TextBox();  btnCaculate = new System.Windows.Forms.Button();  SuspendLayout();  //  // lbClassID  //  lbClassID.AutoSize = true;  lbClassID.Location = new System.Drawing.Point(160, 89);  lbClassID.Name = "lbClassID";  lbClassID.Size = new System.Drawing.Size(75, 15);  lbClassID.TabIndex = 0;  lbClassID.Text = "Enter ClassID";  //  // lbNumberOfStudent  //  lbNumberOfStudent.AutoSize = true;  lbNumberOfStudent.Location = new System.Drawing.Point(160, 151);  lbNumberOfStudent.Name = "lbNumberOfStudent";  lbNumberOfStudent.Size = new System.Drawing.Size(109, 15);  lbNumberOfStudent.TabIndex = 1;  lbNumberOfStudent.Text = "Number of Student";  //  // txtClassID  //  txtClassID.Location = new System.Drawing.Point(305, 85);  txtClassID.Name = "txtClassID";  txtClassID.Size = new System.Drawing.Size(215, 23);  txtClassID.TabIndex = 2;  //  // txtNumberOfStudent  //  txtNumberOfStudent.Location = new System.Drawing.Point(305, 147);  txtNumberOfStudent.Name = "txtNumberOfStudent";  txtNumberOfStudent.ReadOnly = true;  txtNumberOfStudent.Size = new System.Drawing.Size(215, 23);  txtNumberOfStudent.TabIndex = 3;  //  // btnCaculate  //  btnCaculate.Font = new System.Drawing.Font("Segoe UI Semibold", 12F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point);  btnCaculate.Location = new System.Drawing.Point(225, 224);  btnCaculate.Name = "btnCaculate";  btnCaculate.Size = new System.Drawing.Size(316, 45);  btnCaculate.TabIndex = 4;  btnCaculate.Text = "Caculate Number Of Student";  btnCaculate.UseVisualStyleBackColor = true;  btnCaculate.Click += btnCaculate\_Click;  //  // Form2  //  AutoScaleDimensions = new System.Drawing.SizeF(7F, 15F);  AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;  ClientSize = new System.Drawing.Size(800, 450);  Controls.Add(btnCaculate);  Controls.Add(txtNumberOfStudent);  Controls.Add(txtClassID);  Controls.Add(lbNumberOfStudent);  Controls.Add(lbClassID);  Name = "Form2";  Text = "Form2";  ResumeLayout(false);  PerformLayout();  }  #endregion  private System.Windows.Forms.Label lbClassID;  private System.Windows.Forms.Label lbNumberOfStudent;  private System.Windows.Forms.TextBox txtClassID;  private System.Windows.Forms.TextBox txtNumberOfStudent;  private System.Windows.Forms.Button btnCaculate;  }  } |

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| using Microsoft.Data.SqlClient;  using MySqlConnector;  using System;  using System.Collections.Generic;  using System.ComponentModel;  using System.Data;  using System.Drawing;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using System.Windows.Forms;  namespace SQL\_winform  {  public partial class Form2 : Form  {  public Form2()  {  InitializeComponent();  }  private void btnCaculate\_Click(object sender, EventArgs e)  {  if(Connect.Instance.State==ConnectionState.Closed)  Connect.Instance.Open();  MySqlCommand cmd = new MySqlCommand($"SELECT count(\*) from student where ClassID='{txtClassID.Text}'", Connect.Instance);  var result = cmd.ExecuteScalar();  txtNumberOfStudent.Text = result.ToString();  Connect.Instance.Close();  }  }  } |

FORM 3

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Code

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| using System.Windows.Forms;  namespace SQL\_winform  {  partial class Form3  {  /// <summary>  /// Required designer variable.  /// </summary>  private System.ComponentModel.IContainer components = null;  /// <summary>  /// Clean up any resources being used.  /// </summary>  /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>  protected override void Dispose(bool disposing)  {  if (disposing && (components != null))  {  components.Dispose();  }  base.Dispose(disposing);  }  #region Windows Form Designer generated code  /// <summary>  /// Required method for Designer support - do not modify  /// the contents of this method with the code editor.  /// </summary>  private void InitializeComponent()  {  lbClassID = new System.Windows.Forms.Label();  txtClassID = new System.Windows.Forms.TextBox();  btnViewDetail = new System.Windows.Forms.Button();  txtClassIDRes = new System.Windows.Forms.TextBox();  lblClassIdRes = new System.Windows.Forms.Label();  txtClassName = new System.Windows.Forms.TextBox();  lbClassName = new System.Windows.Forms.Label();  txtYear = new System.Windows.Forms.TextBox();  lbYear = new System.Windows.Forms.Label();  lvStudent = new System.Windows.Forms.ListView();  btnViewListStudent = new System.Windows.Forms.Button();  SuspendLayout();  //  // lbClassID  //  lbClassID.AutoSize = true;  lbClassID.Location = new System.Drawing.Point(67, 62);  lbClassID.Name = "lbClassID";  lbClassID.Size = new System.Drawing.Size(75, 15);  lbClassID.TabIndex = 0;  lbClassID.Text = "Enter ClassID";  //  // txtClassID  //  txtClassID.Location = new System.Drawing.Point(167, 59);  txtClassID.Name = "txtClassID";  txtClassID.Size = new System.Drawing.Size(227, 23);  txtClassID.TabIndex = 1;  //  // btnViewDetail  //  btnViewDetail.Location = new System.Drawing.Point(67, 100);  btnViewDetail.Name = "btnViewDetail";  btnViewDetail.Size = new System.Drawing.Size(327, 31);  btnViewDetail.TabIndex = 2;  btnViewDetail.Text = "View in Detail";  btnViewDetail.UseVisualStyleBackColor = true;  btnViewDetail.Click += btnViewDetail\_Click;  //  // txtClassIDRes  //  txtClassIDRes.Location = new System.Drawing.Point(167, 169);  txtClassIDRes.Name = "txtClassIDRes";  txtClassIDRes.Size = new System.Drawing.Size(227, 23);  txtClassIDRes.TabIndex = 4;  //  // lblClassIdRes  //  lblClassIdRes.AutoSize = true;  lblClassIdRes.Location = new System.Drawing.Point(67, 172);  lblClassIdRes.Name = "lblClassIdRes";  lblClassIdRes.Size = new System.Drawing.Size(45, 15);  lblClassIdRes.TabIndex = 3;  lblClassIdRes.Text = "ClassID";  //  // txtClassName  //  txtClassName.Location = new System.Drawing.Point(167, 209);  txtClassName.Name = "txtClassName";  txtClassName.Size = new System.Drawing.Size(227, 23);  txtClassName.TabIndex = 6;  //  // lbClassName  //  lbClassName.AutoSize = true;  lbClassName.Location = new System.Drawing.Point(67, 212);  lbClassName.Name = "lbClassName";  lbClassName.Size = new System.Drawing.Size(69, 15);  lbClassName.TabIndex = 5;  lbClassName.Text = "Class Name";  //  // txtYear  //  txtYear.Location = new System.Drawing.Point(167, 255);  txtYear.Name = "txtYear";  txtYear.Size = new System.Drawing.Size(227, 23);  txtYear.TabIndex = 8;  //  // lbYear  //  lbYear.AutoSize = true;  lbYear.Location = new System.Drawing.Point(67, 258);  lbYear.Name = "lbYear";  lbYear.Size = new System.Drawing.Size(29, 15);  lbYear.TabIndex = 7;  lbYear.Text = "Year";  //  // lvStudent  //  lvStudent.Location = new System.Drawing.Point(447, 131);  lvStudent.Name = "lvStudent";  lvStudent.Size = new System.Drawing.Size(324, 147);  lvStudent.TabIndex = 9;  lvStudent.UseCompatibleStateImageBehavior = false;  lvStudent.FullRowSelect = true;  lvStudent.GridLines = true;  lvStudent.View=View.Details;  lvStudent.Columns.Add("Student ID",108);  lvStudent.Columns.Add("Name", 108);  lvStudent.Columns.Add("Class ID",108);  //  // btnViewListStudent  //  btnViewListStudent.Location = new System.Drawing.Point(447, 75);  btnViewListStudent.Name = "btnViewListStudent";  btnViewListStudent.Size = new System.Drawing.Size(327, 31);  btnViewListStudent.TabIndex = 10;  btnViewListStudent.Text = "View List Of Student";  btnViewListStudent.UseVisualStyleBackColor = true;  btnViewListStudent.Click += btnViewListStudent\_Click;  //  // Form3  //  AutoScaleDimensions = new System.Drawing.SizeF(7F, 15F);  AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;  ClientSize = new System.Drawing.Size(800, 450);  Controls.Add(btnViewListStudent);  Controls.Add(lvStudent);  Controls.Add(txtYear);  Controls.Add(lbYear);  Controls.Add(txtClassName);  Controls.Add(lbClassName);  Controls.Add(txtClassIDRes);  Controls.Add(lblClassIdRes);  Controls.Add(btnViewDetail);  Controls.Add(txtClassID);  Controls.Add(lbClassID);  Name = "Form3";  Text = "Form3";  ResumeLayout(false);  PerformLayout();  }  #endregion  private System.Windows.Forms.Label lbClassID;  private System.Windows.Forms.TextBox txtClassID;  private System.Windows.Forms.Button btnViewDetail;  private System.Windows.Forms.TextBox txtClassIDRes;  private System.Windows.Forms.Label lblClassIdRes;  private System.Windows.Forms.TextBox txtClassName;  private System.Windows.Forms.Label lbClassName;  private System.Windows.Forms.TextBox txtYear;  private System.Windows.Forms.Label lbYear;  private System.Windows.Forms.ListView lvStudent;  private System.Windows.Forms.Button btnViewListStudent;  }  } |

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| using MySqlConnector;  using System;  using System.Collections.Generic;  using System.ComponentModel;  using System.Data;  using System.Drawing;  using System.Linq;  using System.Text;  using System.Threading.Tasks;  using System.Windows.Forms;  namespace SQL\_winform  {  public partial class Form3 : Form  {  public Form3()  {  InitializeComponent();  }  private void btnViewDetail\_Click(object sender, EventArgs e)  {  txtClassIDRes.Text = "";  txtClassName.Text = "";  txtYear.Text = "";  if (Connect.Instance.State == ConnectionState.Closed)  Connect.Instance.Open();  MySqlCommand cmd = new MySqlCommand($"SELECT \* from class where ClassID='{txtClassID.Text}'", Connect.Instance);  var result = cmd.ExecuteReader();  if (result.Read())  {  txtClassIDRes.Text = result.GetString(0);  txtClassName.Text = result.GetString(1);  txtYear.Text = result.GetUInt32(2).ToString();  }  Connect.Instance.Close();  }  private void btnViewListStudent\_Click(object sender, EventArgs e)  {  lvStudent.Items.Clear();  if (Connect.Instance.State == ConnectionState.Closed)  Connect.Instance.Open();  MySqlCommand cmd = new MySqlCommand($"SELECT \* from student where ClassID='{txtClassID.Text}'", Connect.Instance);  var result = cmd.ExecuteReader();  while (result.Read())  {  string studentID = result.GetString(0);  string name = result.GetString(1);  string classID = result.GetString(2);  ListViewItem item = new ListViewItem(studentID);  item.SubItems.Add(name);  item.SubItems.Add(classID);  lvStudent.Items.Add(item);  }  Connect.Instance.Close();  }  }  } |