Tên : Trần Ngọc Phương Linh

Lớp : 11CNPM2

MSSV :1150080103

Môn : Phương pháp phát triển phần mềm hướng đối tượng

LAB 6 : WINFORM KẾT NỐI CƠ SỞ DỮ LIỆU NÂNG CAO

A. Mục tiêu

− Hướng dẫn sinh viên xây dựng chương trình Windows Form có tương tác

với cơ sở dữ liệu.

− Hướng dẫn làm quen môi trường lập trình C# với phần mềm Microsoft

Visual Studio 2022.

− Hướng dẫn sinh viên tập làm quen mới soạn thảo, chỉnh sửa mã nguồn,

biên dịch, gỡ lỗi (debug), thực thi chương trình.

− Thiết kế form nhập liệu cho các bảng thông tin trong CSDL.

− Thực thi các câu lệnh SQL tương tác với CSDL với cách sử dụng Thủ tục

nội tại (Store Procedure).

− Làm quen khai báo và xử lý các sự kiện với các control khác nhau.

− Làm quen với cách đặt tên biến lập trình của các control.

B. Nội dung

Đầu tiên vào visual studio 2022 tạo file 🡪 new🡪 project

Và tạo project mới Windows Forms App (.NET Framework)

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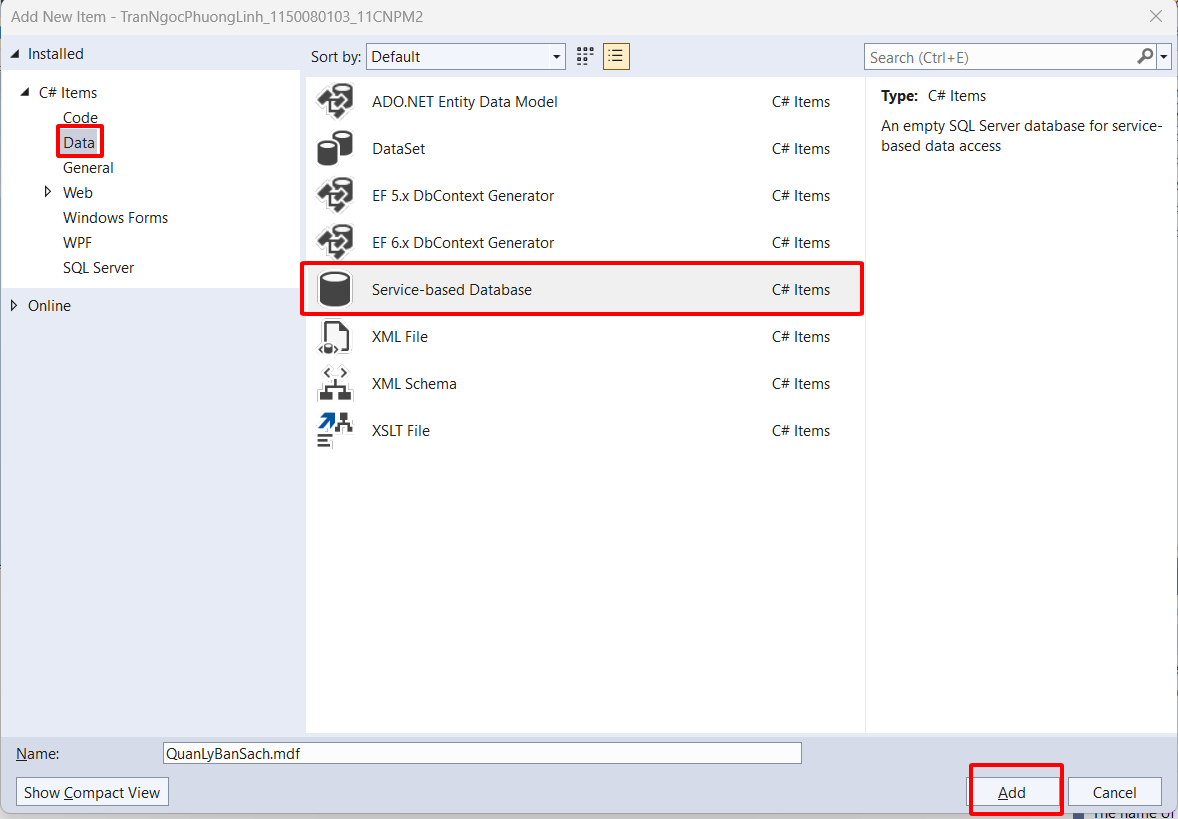
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Xong rồi chúng ta sẽ tới tiến hành tạo CSDL

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Chuột phải ngay tên project Add🡪 New item 🡪 Service-based Database



Rồi chúng ta sẽ thấy QuanLyBanSach nó ban đầu đỏ nên double click vào cho nó xanh rồi ngay Table bấm chuột phải và Add New Table

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Dán

CREATE TABLE NhaXuatBan (

MaXB CHAR(10) PRIMARY KEY,

TenXB NVARCHAR(100),

DiaChi NVARCHAR(500)

);

Vào và bấm update để lưu dữ liệu bảng

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Rồi để chèn dữ liệu thì

Chuột phải ngay QuanLyBanSach.mdf chọn New Query để tạo truy vấn mới chèn dữ liệu vào bảng

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**Thực hành 1: Hiển thị danh sách nhà xuất bản sách.**

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**Tạo Procedure**

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**Form1.cs**using System;

using System.Data;

using System.Data.SqlClient;

using System.Windows.Forms;

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

public partial class Form1 : Form

{

// Chuỗi kết nối: giữ nguyên đường dẫn .mdf của bạn

private readonly string strCon =

@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=""D:\pppt-pmhdt-c#\lab6\TranNgocPhuongLinh\_1150080103\_11CNPM2\QuanLyBanSach.mdf"";Integrated Security=True";

// Đối tượng kết nối

private SqlConnection sqlCon = null;

public Form1()

{

InitializeComponent();

}

// mở kết nối

private void MoKetNoi()

{

if (sqlCon == null)

sqlCon = new SqlConnection(strCon);

if (sqlCon.State == ConnectionState.Closed)

sqlCon.Open();

}

// đóng kết nối

private void DongKetNoi()

{

if (sqlCon != null && sqlCon.State == ConnectionState.Open)

sqlCon.Close();

}

// ===== Thực hành 1: Hiển thị danh sách nhà xuất bản =====

private void HienThiDanhSachNXB()

{

MoKetNoi();

// gọi SP HienThiNXB như thầy

SqlCommand sqlCmd = new SqlCommand();

sqlCmd.CommandType = CommandType.StoredProcedure;

sqlCmd.CommandText = "HienThiNXB";

sqlCmd.Connection = sqlCon;

SqlDataReader reader = sqlCmd.ExecuteReader();

lsvDanhSach.Items.Clear();

while (reader.Read())

{

// MaXB, TenXB, DiaChi

string maXB = reader.GetString(0);

string tenXB = reader.GetString(1);

string diaChi = reader.GetString(2);

var lvi = new ListViewItem(maXB);

lvi.SubItems.Add(tenXB);

lvi.SubItems.Add(diaChi);

lsvDanhSach.Items.Add(lvi);

}

reader.Close();

DongKetNoi();

}

private void Form1\_Load(object sender, EventArgs e)

{

HienThiDanhSachNXB(); // y như trong tài liệu

txtMaXB.Focus();

}

private void lsvDanhSach\_SelectedIndexChanged(object sender, EventArgs e)

{

if (lsvDanhSach.SelectedItems.Count == 0) return;

ListViewItem lvi = lsvDanhSach.SelectedItems[0];

string maXB = lvi.SubItems[0].Text;

HienThiThongTinXBTheoMa(maXB);

}

// xem chi tiết theo mã — gọi SP HienThiChiTietNXB

private void HienThiThongTinXBTheoMa(string maXB)

{

MoKetNoi();

SqlCommand sqlCmd = new SqlCommand();

sqlCmd.CommandType = CommandType.StoredProcedure;

sqlCmd.CommandText = "HienThiChiTietNXB";

sqlCmd.Connection = sqlCon;

SqlParameter parMaXB = new SqlParameter("@MaXB", SqlDbType.Char, 10);

parMaXB.Value = maXB;

sqlCmd.Parameters.Add(parMaXB);

SqlDataReader reader = sqlCmd.ExecuteReader();

txtMaXB.Text = txtTenXB.Text = txtDiaChi.Text = "";

if (reader.Read())

{

txtMaXB.Text = reader.GetString(0);

txtTenXB.Text = reader.GetString(1);

txtDiaChi.Text = reader.GetString(2);

}

reader.Close();

DongKetNoi();

}

}

}

**Form1.Desginer.cs**

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

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()

{

this.lsvDanhSach = new System.Windows.Forms.ListView();

this.colMaXB = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colTenXB = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colDiaChi = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.label1 = new System.Windows.Forms.Label();

this.label2 = new System.Windows.Forms.Label();

this.label3 = new System.Windows.Forms.Label();

this.txtMaXB = new System.Windows.Forms.TextBox();

this.txtTenXB = new System.Windows.Forms.TextBox();

this.txtDiaChi = new System.Windows.Forms.TextBox();

this.SuspendLayout();

//

// lsvDanhSach

//

this.lsvDanhSach.Columns.AddRange(new System.Windows.Forms.ColumnHeader[] {

this.colMaXB,

this.colTenXB,

this.colDiaChi});

this.lsvDanhSach.FullRowSelect = true;

this.lsvDanhSach.GridLines = true;

this.lsvDanhSach.HideSelection = false;

this.lsvDanhSach.Location = new System.Drawing.Point(12, 12);

this.lsvDanhSach.MultiSelect = false;

this.lsvDanhSach.Name = "lsvDanhSach";

this.lsvDanhSach.Size = new System.Drawing.Size(760, 260);

this.lsvDanhSach.TabIndex = 0;

this.lsvDanhSach.UseCompatibleStateImageBehavior = false;

this.lsvDanhSach.View = System.Windows.Forms.View.Details;

this.lsvDanhSach.SelectedIndexChanged += new System.EventHandler(this.lsvDanhSach\_SelectedIndexChanged);

//

// colMaXB

//

this.colMaXB.Text = "Mã NXB";

this.colMaXB.Width = 120;

//

// colTenXB

//

this.colTenXB.Text = "Tên NXB";

this.colTenXB.Width = 260;

//

// colDiaChi

//

this.colDiaChi.Text = "Địa chỉ";

this.colDiaChi.Width = 360;

//

// label1 - Mã NXB

//

this.label1.AutoSize = true;

this.label1.Location = new System.Drawing.Point(12, 292);

this.label1.Name = "label1";

this.label1.Size = new System.Drawing.Size(58, 16);

this.label1.TabIndex = 1;

this.label1.Text = "Mã NXB:";

//

// txtMaXB

//

this.txtMaXB.Location = new System.Drawing.Point(85, 289);

this.txtMaXB.MaxLength = 10;

this.txtMaXB.Name = "txtMaXB";

this.txtMaXB.Size = new System.Drawing.Size(160, 22);

this.txtMaXB.TabIndex = 2;

//

// label2 - Tên NXB

//

this.label2.AutoSize = true;

this.label2.Location = new System.Drawing.Point(270, 292);

this.label2.Name = "label2";

this.label2.Size = new System.Drawing.Size(63, 16);

this.label2.TabIndex = 3;

this.label2.Text = "Tên NXB:";

//

// txtTenXB

//

this.txtTenXB.Location = new System.Drawing.Point(339, 289);

this.txtTenXB.MaxLength = 100;

this.txtTenXB.Name = "txtTenXB";

this.txtTenXB.Size = new System.Drawing.Size(433, 22);

this.txtTenXB.TabIndex = 4;

//

// label3 - Địa chỉ

//

this.label3.AutoSize = true;

this.label3.Location = new System.Drawing.Point(12, 326);

this.label3.Name = "label3";

this.label3.Size = new System.Drawing.Size(54, 16);

this.label3.TabIndex = 5;

this.label3.Text = "Địa chỉ:";

//

// txtDiaChi

//

this.txtDiaChi.Location = new System.Drawing.Point(85, 323);

this.txtDiaChi.MaxLength = 500;

this.txtDiaChi.Name = "txtDiaChi";

this.txtDiaChi.Size = new System.Drawing.Size(687, 22);

this.txtDiaChi.TabIndex = 6;

//

// Form1

//

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(784, 361);

this.Controls.Add(this.txtDiaChi);

this.Controls.Add(this.label3);

this.Controls.Add(this.txtTenXB);

this.Controls.Add(this.label2);

this.Controls.Add(this.txtMaXB);

this.Controls.Add(this.label1);

this.Controls.Add(this.lsvDanhSach);

this.Name = "Form1";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Lab 6 - Hiển thị danh sách NXB";

this.Load += new System.EventHandler(this.Form1\_Load);

this.ResumeLayout(false);

this.PerformLayout();

}

#endregion

private System.Windows.Forms.ListView lsvDanhSach;

private System.Windows.Forms.ColumnHeader colMaXB;

private System.Windows.Forms.ColumnHeader colTenXB;

private System.Windows.Forms.ColumnHeader colDiaChi;

private System.Windows.Forms.Label label1;

private System.Windows.Forms.Label label2;

private System.Windows.Forms.Label label3;

private System.Windows.Forms.TextBox txtMaXB;

private System.Windows.Forms.TextBox txtTenXB;

private System.Windows.Forms.TextBox txtDiaChi;

}

}

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**Thực hành 2: Thêm dữ liệu cho bảng Nhà xuất bản**

**Tạo Procedure**

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**Tạo Form2.cs**

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**Form2.cs**

using System;

using System.Data;

using System.Data.SqlClient;

using System.Windows.Forms;

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

public partial class Form2 : Form

{

// Chuỗi kết nối giống Form1 của bạn

private readonly string strCon =

@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=""D:\pppt-pmhdt-c#\lab6\TranNgocPhuongLinh\_1150080103\_11CNPM2\QuanLyBanSach.mdf"";Integrated Security=True";

// Đối tượng kết nối

SqlConnection sqlCon = null;

public Form2()

{

InitializeComponent();

}

// Mở kết nối

private void MoKetNoi()

{

if (sqlCon == null)

sqlCon = new SqlConnection(strCon);

if (sqlCon.State == ConnectionState.Closed)

sqlCon.Open();

}

// Đóng kết nối

private void DongKetNoi()

{

if (sqlCon != null && sqlCon.State == ConnectionState.Open)

sqlCon.Close();

}

// Hiển thị danh sách NXB (để nhìn thấy record mới)

private void HienThiDanhSachNXB()

{

MoKetNoi();

SqlCommand sqlCmd = new SqlCommand();

sqlCmd.CommandType = CommandType.StoredProcedure;

sqlCmd.CommandText = "HienThiNXB"; // SP danh sách

sqlCmd.Connection = sqlCon;

SqlDataReader reader = sqlCmd.ExecuteReader();

lsvDanhSach.Items.Clear();

while (reader.Read())

{

string ma = reader.GetString(0);

string ten = reader.GetString(1);

string dc = reader.GetString(2);

ListViewItem lvi = new ListViewItem(ma);

lvi.SubItems.Add(ten);

lvi.SubItems.Add(dc);

lsvDanhSach.Items.Add(lvi);

}

reader.Close();

DongKetNoi();

}

// Nút thêm nhà xuất bản (SP ThemDuLieu)

private void btnThem\_Click(object sender, EventArgs e)

{

string ma = txtMaXB.Text.Trim();

string ten = txtTenXB.Text.Trim();

string dc = txtDiaChi.Text.Trim();

if (ma == "" || ten == "" || dc == "")

{

MessageBox.Show("Vui lòng nhập đủ Mã, Tên và Địa chỉ!");

return;

}

try

{

MoKetNoi();

SqlCommand sqlCmd = new SqlCommand();

sqlCmd.CommandType = CommandType.StoredProcedure;

sqlCmd.CommandText = "ThemDuLieu"; // SP thêm

sqlCmd.Connection = sqlCon;

SqlParameter p1 = new SqlParameter("@MaXB", SqlDbType.Char, 10);

SqlParameter p2 = new SqlParameter("@TenXB", SqlDbType.NVarChar, 100);

SqlParameter p3 = new SqlParameter("@DiaChi", SqlDbType.NVarChar, 500);

p1.Value = ma; p2.Value = ten; p3.Value = dc;

sqlCmd.Parameters.Add(p1);

sqlCmd.Parameters.Add(p2);

sqlCmd.Parameters.Add(p3);

sqlCmd.ExecuteNonQuery();

MessageBox.Show("Thêm nhà xuất bản thành công!");

txtMaXB.Clear(); txtTenXB.Clear(); txtDiaChi.Clear();

txtMaXB.Focus();

HienThiDanhSachNXB(); // refresh danh sách

}

catch (SqlException ex) when (ex.Number == 2627 || ex.Number == 2601) // trùng khóa

{

MessageBox.Show("Mã NXB đã tồn tại, vui lòng nhập mã khác!");

}

catch (Exception ex)

{

MessageBox.Show("Lỗi: " + ex.Message);

}

finally

{

DongKetNoi();

}

}

private void Form2\_Load(object sender, EventArgs e)

{

HienThiDanhSachNXB();

}

}

}

**Form2.Designer.cs**

using System.Drawing;

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

partial class Form2

{

private System.ComponentModel.IContainer components = null;

protected override void Dispose(bool disposing)

{

if (disposing && (components != null)) components.Dispose();

base.Dispose(disposing);

}

#region Windows Form Designer generated code

private void InitializeComponent()

{

this.lblTitle = new System.Windows.Forms.Label();

this.grpList = new System.Windows.Forms.GroupBox();

this.lsvDanhSach = new System.Windows.Forms.ListView();

this.colMa = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colTen = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colDiaChi = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.grpInput = new System.Windows.Forms.GroupBox();

this.btnThem = new System.Windows.Forms.Button();

this.txtDiaChi = new System.Windows.Forms.TextBox();

this.txtTenXB = new System.Windows.Forms.TextBox();

this.txtMaXB = new System.Windows.Forms.TextBox();

this.label3 = new System.Windows.Forms.Label();

this.label2 = new System.Windows.Forms.Label();

this.label1 = new System.Windows.Forms.Label();

this.grpList.SuspendLayout();

this.grpInput.SuspendLayout();

this.SuspendLayout();

//

// lblTitle

//

this.lblTitle.Anchor = ((System.Windows.Forms.AnchorStyles)(((System.Windows.Forms.AnchorStyles.Top | System.Windows.Forms.AnchorStyles.Left)

| System.Windows.Forms.AnchorStyles.Right)));

this.lblTitle.Font = new System.Drawing.Font("Microsoft Sans Serif", 16F, System.Drawing.FontStyle.Bold);

this.lblTitle.Location = new System.Drawing.Point(12, 9);

this.lblTitle.Name = "lblTitle";

this.lblTitle.Size = new System.Drawing.Size(760, 32);

this.lblTitle.TabIndex = 0;

this.lblTitle.Text = "Thêm dữ liệu";

this.lblTitle.TextAlign = System.Drawing.ContentAlignment.MiddleCenter;

//

// grpList

//

this.grpList.Controls.Add(this.lsvDanhSach);

this.grpList.Font = new System.Drawing.Font("Microsoft Sans Serif", 9.5F);

this.grpList.Location = new System.Drawing.Point(12, 44);

this.grpList.Name = "grpList";

this.grpList.Size = new System.Drawing.Size(440, 305);

this.grpList.TabIndex = 1;

this.grpList.TabStop = false;

this.grpList.Text = "Danh sách nhà xuất bản:";

//

// lsvDanhSach

//

this.lsvDanhSach.Columns.AddRange(new System.Windows.Forms.ColumnHeader[] {

this.colMa,

this.colTen,

this.colDiaChi});

this.lsvDanhSach.Dock = System.Windows.Forms.DockStyle.Fill;

this.lsvDanhSach.FullRowSelect = true;

this.lsvDanhSach.GridLines = true;

this.lsvDanhSach.HideSelection = false;

this.lsvDanhSach.Location = new System.Drawing.Point(3, 17);

this.lsvDanhSach.MultiSelect = false;

this.lsvDanhSach.Name = "lsvDanhSach";

this.lsvDanhSach.Size = new System.Drawing.Size(434, 285);

this.lsvDanhSach.TabIndex = 0;

this.lsvDanhSach.UseCompatibleStateImageBehavior = false;

this.lsvDanhSach.View = System.Windows.Forms.View.Details;

//

// colMa

//

this.colMa.Text = "Mã NXB";

this.colMa.Width = 90;

//

// colTen

//

this.colTen.Text = "Tên NXB";

this.colTen.Width = 140;

//

// colDiaChi

//

this.colDiaChi.Text = "Địa chỉ";

this.colDiaChi.Width = 190;

//

// grpInput

//

this.grpInput.Controls.Add(this.btnThem);

this.grpInput.Controls.Add(this.txtDiaChi);

this.grpInput.Controls.Add(this.txtTenXB);

this.grpInput.Controls.Add(this.txtMaXB);

this.grpInput.Controls.Add(this.label3);

this.grpInput.Controls.Add(this.label2);

this.grpInput.Controls.Add(this.label1);

this.grpInput.Font = new System.Drawing.Font("Microsoft Sans Serif", 9.5F);

this.grpInput.Location = new System.Drawing.Point(458, 44);

this.grpInput.Name = "grpInput";

this.grpInput.Size = new System.Drawing.Size(314, 305);

this.grpInput.TabIndex = 2;

this.grpInput.TabStop = false;

this.grpInput.Text = "Thông tin nhập liệu:";

//

// btnThem

//

this.btnThem.BackColor = System.Drawing.Color.FromArgb(192, 255, 192); // xanh nhạt như hình

this.btnThem.FlatStyle = System.Windows.Forms.FlatStyle.Flat;

this.btnThem.Font = new System.Drawing.Font("Microsoft Sans Serif", 10F, System.Drawing.FontStyle.Bold);

this.btnThem.Location = new System.Drawing.Point(19, 232);

this.btnThem.Name = "btnThem";

this.btnThem.Size = new System.Drawing.Size(273, 40);

this.btnThem.TabIndex = 6;

this.btnThem.Text = "Thêm nhà xuất bản";

this.btnThem.UseVisualStyleBackColor = false;

this.btnThem.Click += new System.EventHandler(this.btnThem\_Click);

//

// txtDiaChi

//

this.txtDiaChi.Location = new System.Drawing.Point(94, 121);

this.txtDiaChi.MaxLength = 500;

this.txtDiaChi.Multiline = true;

this.txtDiaChi.Name = "txtDiaChi";

this.txtDiaChi.Size = new System.Drawing.Size(198, 90);

this.txtDiaChi.TabIndex = 5;

//

// txtTenXB

//

this.txtTenXB.Location = new System.Drawing.Point(94, 82);

this.txtTenXB.MaxLength = 100;

this.txtTenXB.Name = "txtTenXB";

this.txtTenXB.Size = new System.Drawing.Size(198, 22);

this.txtTenXB.TabIndex = 3;

//

// txtMaXB

//

this.txtMaXB.Location = new System.Drawing.Point(94, 43);

this.txtMaXB.MaxLength = 10;

this.txtMaXB.Name = "txtMaXB";

this.txtMaXB.Size = new System.Drawing.Size(198, 22);

this.txtMaXB.TabIndex = 1;

//

// label3

//

this.label3.AutoSize = true;

this.label3.Location = new System.Drawing.Point(16, 124);

this.label3.Name = "label3";

this.label3.Size = new System.Drawing.Size(54, 16);

this.label3.TabIndex = 4;

this.label3.Text = "Địa chỉ:";

//

// label2

//

this.label2.AutoSize = true;

this.label2.Location = new System.Drawing.Point(16, 85);

this.label2.Name = "label2";

this.label2.Size = new System.Drawing.Size(63, 16);

this.label2.TabIndex = 2;

this.label2.Text = "Tên NXB:";

//

// label1

//

this.label1.AutoSize = true;

this.label1.Location = new System.Drawing.Point(16, 46);

this.label1.Name = "label1";

this.label1.Size = new System.Drawing.Size(58, 16);

this.label1.TabIndex = 0;

this.label1.Text = "Mã NXB:";

//

// Form2

//

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(784, 361);

this.Controls.Add(this.grpInput);

this.Controls.Add(this.grpList);

this.Controls.Add(this.lblTitle);

this.Name = "Form2";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Trần Ngọc Phương Linh-1150080103-11cnpm2";

this.Load += new System.EventHandler(this.Form2\_Load);

this.grpList.ResumeLayout(false);

this.grpInput.ResumeLayout(false);

this.grpInput.PerformLayout();

this.ResumeLayout(false);

}

#endregion

private System.Windows.Forms.Label lblTitle;

private System.Windows.Forms.GroupBox grpList;

private System.Windows.Forms.ListView lsvDanhSach;

private System.Windows.Forms.ColumnHeader colMa;

private System.Windows.Forms.ColumnHeader colTen;

private System.Windows.Forms.ColumnHeader colDiaChi;

private System.Windows.Forms.GroupBox grpInput;

private System.Windows.Forms.Button btnThem;

private System.Windows.Forms.TextBox txtDiaChi;

private System.Windows.Forms.TextBox txtTenXB;

private System.Windows.Forms.TextBox txtMaXB;

private System.Windows.Forms.Label label3;

private System.Windows.Forms.Label label2;

private System.Windows.Forms.Label label1;

}

}

**Thực hành 3: Sửa dữ liệu cho bảng Nhà Xuất bản.**

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**Form3.cs**

using System;

using System.Data;

using System.Data.SqlClient;

using System.Windows.Forms;

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

public partial class Form3 : Form

{

private readonly string strCon =

@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=""D:\pppt-pmhdt-c#\lab6\TranNgocPhuongLinh\_1150080103\_11CNPM2\QuanLyBanSach.mdf"";Integrated Security=True";

private SqlConnection sqlCon = null;

public Form3()

{

InitializeComponent();

}

// ====== Helpers mở/đóng kết nối ======

private void MoKetNoi()

{

if (sqlCon == null) sqlCon = new SqlConnection(strCon);

if (sqlCon.State == ConnectionState.Closed) sqlCon.Open();

}

private void DongKetNoi()

{

if (sqlCon != null && sqlCon.State == ConnectionState.Open)

sqlCon.Close();

}

// ====== Load danh sách NXB (dùng SP HienThiNXB) ======

private void HienThiDanhSachNXB()

{

MoKetNoi();

using (var cmd = new SqlCommand("HienThiNXB", sqlCon))

{

cmd.CommandType = CommandType.StoredProcedure;

using (var rd = cmd.ExecuteReader())

{

lsvDanhSach.Items.Clear();

while (rd.Read())

{

var it = new ListViewItem(rd.GetString(0)); // MaXB

it.SubItems.Add(rd.GetString(1)); // TenXB

it.SubItems.Add(rd.GetString(2)); // DiaChi

lsvDanhSach.Items.Add(it);

}

}

}

DongKetNoi();

}

// ====== Events ======

private void Form3\_Load(object sender, EventArgs e)

{

// tiêu đề form theo yêu cầu

this.Text = "Trần Ngọc Phương Linh - 11CNPM2 - 1150080103";

HienThiDanhSachNXB();

}

private void lsvDanhSach\_SelectedIndexChanged(object sender, EventArgs e)

{

if (lsvDanhSach.SelectedItems.Count == 0) return;

var sel = lsvDanhSach.SelectedItems[0];

txtMaXB.Text = sel.SubItems[0].Text; // KHÓA CHÍNH -> chỉ đọc

txtTenXB.Text = sel.SubItems[1].Text;

txtDiaChi.Text = sel.SubItems[2].Text;

}

private void btnCapNhat\_Click(object sender, EventArgs e)

{

string ma = txtMaXB.Text.Trim();

string ten = txtTenXB.Text.Trim();

string dc = txtDiaChi.Text.Trim();

if (string.IsNullOrWhiteSpace(ma))

{

MessageBox.Show("Hãy chọn một dòng ở danh sách bên trái!");

return;

}

if (string.IsNullOrWhiteSpace(ten) || string.IsNullOrWhiteSpace(dc))

{

MessageBox.Show("Tên NXB và Địa chỉ không được để trống!");

return;

}

try

{

MoKetNoi();

using (var cmd = new SqlCommand("CapNhatThongTin", sqlCon))

{

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.Add("@MaXB", SqlDbType.Char, 10).Value = ma;

cmd.Parameters.Add("@TenXB", SqlDbType.NVarChar, 100).Value = ten;

cmd.Parameters.Add("@DiaChi", SqlDbType.NVarChar, 500).Value = dc;

int n = cmd.ExecuteNonQuery();

MessageBox.Show(n > 0 ? "Cập nhật thành công!" : "Không tìm thấy Mã NXB để cập nhật.");

}

HienThiDanhSachNXB(); // refresh list

}

catch (SqlException ex)

{

MessageBox.Show("Lỗi SQL: " + ex.Message);

}

catch (Exception ex)

{

MessageBox.Show("Lỗi: " + ex.Message);

}

finally

{

DongKetNoi();

}

}

}

}

**Form3.Designer.cs**

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

partial class Form3

{

private System.ComponentModel.IContainer components = null;

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

components.Dispose();

base.Dispose(disposing);

}

#region Windows Form Designer generated code

private void InitializeComponent()

{

this.lblTitle = new System.Windows.Forms.Label();

this.lsvDanhSach = new System.Windows.Forms.ListView();

this.colMa = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colTen = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colDiaChi = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.grpNhap = new System.Windows.Forms.GroupBox();

this.btnCapNhat = new System.Windows.Forms.Button();

this.txtDiaChi = new System.Windows.Forms.TextBox();

this.txtTenXB = new System.Windows.Forms.TextBox();

this.txtMaXB = new System.Windows.Forms.TextBox();

this.lblDiaChi = new System.Windows.Forms.Label();

this.lblTen = new System.Windows.Forms.Label();

this.lblMa = new System.Windows.Forms.Label();

this.grpNhap.SuspendLayout();

this.SuspendLayout();

//

// lblTitle

//

this.lblTitle.Font = new System.Drawing.Font("Microsoft Sans Serif", 14F, System.Drawing.FontStyle.Bold);

this.lblTitle.Location = new System.Drawing.Point(12, 9);

this.lblTitle.Name = "lblTitle";

this.lblTitle.Size = new System.Drawing.Size(760, 30);

this.lblTitle.TabIndex = 0;

this.lblTitle.Text = "Cập nhật dữ liệu";

this.lblTitle.TextAlign = System.Drawing.ContentAlignment.MiddleCenter;

//

// lsvDanhSach

//

this.lsvDanhSach.Columns.AddRange(new System.Windows.Forms.ColumnHeader[] {

this.colMa,

this.colTen,

this.colDiaChi});

this.lsvDanhSach.FullRowSelect = true;

this.lsvDanhSach.GridLines = true;

this.lsvDanhSach.HideSelection = false;

this.lsvDanhSach.Location = new System.Drawing.Point(15, 50);

this.lsvDanhSach.MultiSelect = false;

this.lsvDanhSach.Name = "lsvDanhSach";

this.lsvDanhSach.Size = new System.Drawing.Size(420, 300);

this.lsvDanhSach.TabIndex = 1;

this.lsvDanhSach.UseCompatibleStateImageBehavior = false;

this.lsvDanhSach.View = System.Windows.Forms.View.Details;

this.lsvDanhSach.SelectedIndexChanged += new System.EventHandler(this.lsvDanhSach\_SelectedIndexChanged);

//

// colMa

//

this.colMa.Text = "Mã NXB";

this.colMa.Width = 100;

//

// colTen

//

this.colTen.Text = "Tên NXB";

this.colTen.Width = 150;

//

// colDiaChi

//

this.colDiaChi.Text = "Địa chỉ";

this.colDiaChi.Width = 160;

//

// grpNhap

//

this.grpNhap.Controls.Add(this.btnCapNhat);

this.grpNhap.Controls.Add(this.txtDiaChi);

this.grpNhap.Controls.Add(this.txtTenXB);

this.grpNhap.Controls.Add(this.txtMaXB);

this.grpNhap.Controls.Add(this.lblDiaChi);

this.grpNhap.Controls.Add(this.lblTen);

this.grpNhap.Controls.Add(this.lblMa);

this.grpNhap.Font = new System.Drawing.Font("Microsoft Sans Serif", 10F);

this.grpNhap.Location = new System.Drawing.Point(450, 50);

this.grpNhap.Name = "grpNhap";

this.grpNhap.Size = new System.Drawing.Size(322, 300);

this.grpNhap.TabIndex = 2;

this.grpNhap.TabStop = false;

this.grpNhap.Text = "Thông tin nhập liệu:";

//

// btnCapNhat

//

this.btnCapNhat.BackColor = System.Drawing.Color.Gainsboro;

this.btnCapNhat.Font = new System.Drawing.Font("Microsoft Sans Serif", 10F, System.Drawing.FontStyle.Bold);

this.btnCapNhat.Location = new System.Drawing.Point(20, 220);

this.btnCapNhat.Name = "btnCapNhat";

this.btnCapNhat.Size = new System.Drawing.Size(275, 40);

this.btnCapNhat.TabIndex = 6;

this.btnCapNhat.Text = "Cập nhật thông tin";

this.btnCapNhat.UseVisualStyleBackColor = false;

this.btnCapNhat.Click += new System.EventHandler(this.btnCapNhat\_Click);

//

// txtDiaChi

//

this.txtDiaChi.Location = new System.Drawing.Point(94, 125);

this.txtDiaChi.Multiline = true;

this.txtDiaChi.Name = "txtDiaChi";

this.txtDiaChi.Size = new System.Drawing.Size(201, 80);

this.txtDiaChi.TabIndex = 5;

//

// txtTenXB

//

this.txtTenXB.Location = new System.Drawing.Point(94, 85);

this.txtTenXB.Name = "txtTenXB";

this.txtTenXB.Size = new System.Drawing.Size(201, 23);

this.txtTenXB.TabIndex = 3;

//

// txtMaXB

//

this.txtMaXB.Location = new System.Drawing.Point(94, 45);

this.txtMaXB.Name = "txtMaXB";

this.txtMaXB.ReadOnly = true;

this.txtMaXB.Size = new System.Drawing.Size(201, 23);

this.txtMaXB.TabIndex = 1;

//

// lblDiaChi

//

this.lblDiaChi.AutoSize = true;

this.lblDiaChi.Location = new System.Drawing.Point(17, 128);

this.lblDiaChi.Name = "lblDiaChi";

this.lblDiaChi.Size = new System.Drawing.Size(59, 17);

this.lblDiaChi.TabIndex = 4;

this.lblDiaChi.Text = "Địa chỉ:";

//

// lblTen

//

this.lblTen.AutoSize = true;

this.lblTen.Location = new System.Drawing.Point(17, 88);

this.lblTen.Name = "lblTen";

this.lblTen.Size = new System.Drawing.Size(67, 17);

this.lblTen.TabIndex = 2;

this.lblTen.Text = "Tên NXB:";

//

// lblMa

//

this.lblMa.AutoSize = true;

this.lblMa.Location = new System.Drawing.Point(17, 48);

this.lblMa.Name = "lblMa";

this.lblMa.Size = new System.Drawing.Size(62, 17);

this.lblMa.TabIndex = 0;

this.lblMa.Text = "Mã NXB:";

//

// Form3

//

this.ClientSize = new System.Drawing.Size(784, 361);

this.Controls.Add(this.grpNhap);

this.Controls.Add(this.lsvDanhSach);

this.Controls.Add(this.lblTitle);

this.Name = "Form3";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Trần Ngọc Phương Linh - 11CNPM2 - 1150080103";

this.Load += new System.EventHandler(this.Form3\_Load);

this.grpNhap.ResumeLayout(false);

this.grpNhap.PerformLayout();

this.ResumeLayout(false);

}

#endregion

private System.Windows.Forms.Label lblTitle;

private System.Windows.Forms.ListView lsvDanhSach;

private System.Windows.Forms.ColumnHeader colMa;

private System.Windows.Forms.ColumnHeader colTen;

private System.Windows.Forms.ColumnHeader colDiaChi;

private System.Windows.Forms.GroupBox grpNhap;

private System.Windows.Forms.Button btnCapNhat;

private System.Windows.Forms.TextBox txtDiaChi;

private System.Windows.Forms.TextBox txtTenXB;

private System.Windows.Forms.TextBox txtMaXB;

private System.Windows.Forms.Label lblDiaChi;

private System.Windows.Forms.Label lblTen;

private System.Windows.Forms.Label lblMa;

}

}

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**Thực hành 4: Xóa dữ liệu cho bảng Nhà xuất bản.**

**Tạo Procedure**

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**Form4.** using System;

using System.Data;

using System.Data.SqlClient;

using System.Windows.Forms;

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

public partial class Form4 : Form

{

// Sửa đường dẫn .mdf nếu khác máy bạn

private readonly string strCon =

@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=""D:\pppt-pmhdt-c#\lab6\TranNgocPhuongLinh\_1150080103\_11CNPM2\QuanLyBanSach.mdf"";Integrated Security=True";

private SqlConnection sqlCon = null;

public Form4()

{

InitializeComponent();

}

// ===== Kết nối =====

private void MoKetNoi()

{

if (sqlCon == null) sqlCon = new SqlConnection(strCon);

if (sqlCon.State == ConnectionState.Closed) sqlCon.Open();

}

private void DongKetNoi()

{

if (sqlCon != null && sqlCon.State == ConnectionState.Open)

sqlCon.Close();

}

// ===== Load list NXB =====

private void HienThiDanhSachNXB()

{

MoKetNoi();

using (var cmd = new SqlCommand("HienThiNXB", sqlCon))

{

cmd.CommandType = CommandType.StoredProcedure;

using (var rd = cmd.ExecuteReader())

{

lsvDanhSach.Items.Clear();

while (rd.Read())

{

var it = new ListViewItem(rd.GetString(0)); // MaXB

it.SubItems.Add(rd.GetString(1)); // TenXB

it.SubItems.Add(rd.GetString(2)); // DiaChi

lsvDanhSach.Items.Add(it);

}

}

}

DongKetNoi();

}

private void Form4\_Load(object sender, EventArgs e)

{

HienThiDanhSachNXB();

}

// ===== Xóa =====

private void btnXoa\_Click(object sender, EventArgs e)

{

if (lsvDanhSach.SelectedItems.Count == 0)

{

MessageBox.Show("Hãy chọn 1 dòng trong danh sách để xóa!");

return;

}

string ma = lsvDanhSach.SelectedItems[0].SubItems[0].Text;

if (MessageBox.Show($"Bạn chắc chắn muốn xóa NXB có mã: {ma}?",

"Xác nhận xóa", MessageBoxButtons.YesNo, MessageBoxIcon.Question)

!= DialogResult.Yes) return;

try

{

MoKetNoi();

using (var cmd = new SqlCommand("XoaNXB", sqlCon))

{

cmd.CommandType = CommandType.StoredProcedure;

cmd.Parameters.Add("@MaXB", SqlDbType.Char, 10).Value = ma;

int n = cmd.ExecuteNonQuery();

MessageBox.Show(n > 0 ? "Xóa thành công!" : "Không tìm thấy Mã NXB để xóa!");

}

HienThiDanhSachNXB(); // refresh lại list

}

catch (SqlException ex) when (ex.Number == 547) // FK constraint

{

MessageBox.Show("Không thể xóa vì còn dữ liệu liên quan (ví dụ bảng Sách đang tham chiếu).",

"Lỗi ràng buộc", MessageBoxButtons.OK, MessageBoxIcon.Warning);

}

catch (Exception ex)

{

MessageBox.Show("Lỗi: " + ex.Message);

}

finally

{

DongKetNoi();

}

}

}

}

**cs**

**Form4.Desginer.cs**

namespace TranNgocPhuongLinh\_1150080103\_11CNPM2

{

partial class Form4

{

private System.ComponentModel.IContainer components = null;

protected override void Dispose(bool disposing)

{

if (disposing && (components != null)) components.Dispose();

base.Dispose(disposing);

}

#region Windows Form Designer generated code

private void InitializeComponent()

{

this.lblTitle = new System.Windows.Forms.Label();

this.grpList = new System.Windows.Forms.GroupBox();

this.lsvDanhSach = new System.Windows.Forms.ListView();

this.colMa = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colTen = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.colDiaChi = ((System.Windows.Forms.ColumnHeader)(new System.Windows.Forms.ColumnHeader()));

this.btnXoa = new System.Windows.Forms.Button();

this.grpList.SuspendLayout();

this.SuspendLayout();

//

// lblTitle

//

this.lblTitle.Anchor = ((System.Windows.Forms.AnchorStyles)(((System.Windows.Forms.AnchorStyles.Top | System.Windows.Forms.AnchorStyles.Left)

| System.Windows.Forms.AnchorStyles.Right)));

this.lblTitle.Font = new System.Drawing.Font("Microsoft Sans Serif", 14F, System.Drawing.FontStyle.Bold);

this.lblTitle.Location = new System.Drawing.Point(12, 9);

this.lblTitle.Name = "lblTitle";

this.lblTitle.Size = new System.Drawing.Size(760, 30);

this.lblTitle.TabIndex = 0;

this.lblTitle.Text = "Xóa dữ liệu";

this.lblTitle.TextAlign = System.Drawing.ContentAlignment.MiddleCenter;

//

// grpList

//

this.grpList.Controls.Add(this.lsvDanhSach);

this.grpList.Font = new System.Drawing.Font("Microsoft Sans Serif", 9.5F);

this.grpList.Location = new System.Drawing.Point(15, 50);

this.grpList.Name = "grpList";

this.grpList.Size = new System.Drawing.Size(757, 270);

this.grpList.TabIndex = 1;

this.grpList.TabStop = false;

this.grpList.Text = "Danh sách nhà xuất bản:";

//

// lsvDanhSach

//

this.lsvDanhSach.Columns.AddRange(new System.Windows.Forms.ColumnHeader[] {

this.colMa,

this.colTen,

this.colDiaChi});

this.lsvDanhSach.Dock = System.Windows.Forms.DockStyle.Fill;

this.lsvDanhSach.FullRowSelect = true;

this.lsvDanhSach.GridLines = true;

this.lsvDanhSach.HideSelection = false;

this.lsvDanhSach.Location = new System.Drawing.Point(3, 17);

this.lsvDanhSach.MultiSelect = false;

this.lsvDanhSach.Name = "lsvDanhSach";

this.lsvDanhSach.Size = new System.Drawing.Size(751, 250);

this.lsvDanhSach.TabIndex = 0;

this.lsvDanhSach.UseCompatibleStateImageBehavior = false;

this.lsvDanhSach.View = System.Windows.Forms.View.Details;

//

// colMa

//

this.colMa.Text = "Mã NXB";

this.colMa.Width = 120;

//

// colTen

//

this.colTen.Text = "Tên NXB";

this.colTen.Width = 260;

//

// colDiaChi

//

this.colDiaChi.Text = "Địa chỉ";

this.colDiaChi.Width = 340;

//

// btnXoa

//

this.btnXoa.Anchor = System.Windows.Forms.AnchorStyles.Bottom;

this.btnXoa.BackColor = System.Drawing.Color.Gainsboro;

this.btnXoa.Font = new System.Drawing.Font("Microsoft Sans Serif", 10F, System.Drawing.FontStyle.Bold);

this.btnXoa.Location = new System.Drawing.Point(265, 330);

this.btnXoa.Name = "btnXoa";

this.btnXoa.Size = new System.Drawing.Size(260, 40);

this.btnXoa.TabIndex = 2;

this.btnXoa.Text = "Xóa dữ liệu";

this.btnXoa.UseVisualStyleBackColor = false;

this.btnXoa.Click += new System.EventHandler(this.btnXoa\_Click);

//

// Form4

//

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(784, 381);

this.Controls.Add(this.btnXoa);

this.Controls.Add(this.grpList);

this.Controls.Add(this.lblTitle);

this.Name = "Form4";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Trần Ngọc Phương Linh - 11CNPM2 - 1150080103";

this.Load += new System.EventHandler(this.Form4\_Load);

this.grpList.ResumeLayout(false);

this.ResumeLayout(false);

}

#endregion

private System.Windows.Forms.Label lblTitle;

private System.Windows.Forms.GroupBox grpList;

private System.Windows.Forms.ListView lsvDanhSach;

private System.Windows.Forms.ColumnHeader colMa;

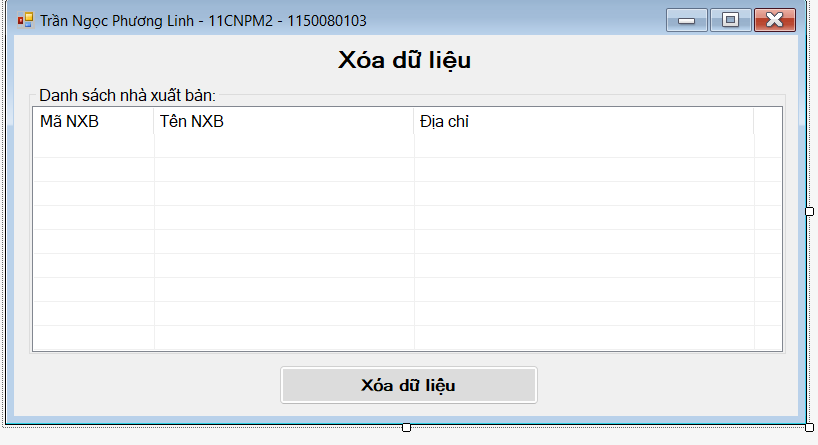
private System.Windows.Forms.ColumnHeader colTen;

private System.Windows.Forms.ColumnHeader colDiaChi;

private System.Windows.Forms.Button btnXoa;

}

}



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