namespace ASM2

{

public partial class Form1 : Form

{

List<SinhVien> lstSinhVien;

int index;

public Form1()

{

InitializeComponent();

lstSinhVien = new List<SinhVien>();

}

public bool CheckInput()

{

if (string.IsNullOrWhiteSpace(txtID.Text))

{

MessageBox.Show("You have not entered the Student Id !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtID.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtName.Text))

{

MessageBox.Show("You have not entered the Student Name !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtName.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtGender.Text))

{

MessageBox.Show("You have not entered the Student Mark !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtGender.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtAge.Text))

{

MessageBox.Show("You have not entered the Student Id !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtAge.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtMath.Text))

{

MessageBox.Show("You have not entered the Student Name !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtMath.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtChemistry.Text))

{

MessageBox.Show("You have not entered the Student Mark !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtChemistry.Focus();

return false;

}

if (string.IsNullOrWhiteSpace(txtPhysics.Text))

{

MessageBox.Show("You have not entered the Student Mark !", "Notification", MessageBoxButtons.OK, MessageBoxIcon.Error);

txtPhysics.Focus();

return false;

}

return true;

}

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

{

if (CheckInput())

{

int svID;

string svName;

string svGender;

int svAge;

double svMath;

double svChemistry;

double svPhysics;

svID = Int32.Parse(txtID.Text);

svName = txtName.Text;

svGender = txtGender.Text;

svAge = Int32.Parse(txtAge.Text);

svMath = double.Parse(txtMath.Text);

svChemistry = double.Parse(txtChemistry.Text);

svPhysics = double.Parse(txtPhysics.Text);

SinhVien sv = new SinhVien(svID, svName, svGender, svAge, svMath, svChemistry, svPhysics);

lstSinhVien.Add(sv);

dataGridView.DataSource = null;

dataGridView.DataSource = lstSinhVien;

dataGridView.Refresh();

}

}

private void dataGridView\_CellContentClick(object sender, DataGridViewCellEventArgs e)

{

index = e.RowIndex;

if (index >= 0)

{

txtID.Text = lstSinhVien[index].ID.ToString();

txtName.Text = lstSinhVien[index].Name;

txtGender.Text = lstSinhVien[index].Gender;

txtAge.Text = lstSinhVien[index].Age.ToString();

txtMath.Text = lstSinhVien[index].Math.ToString();

txtChemistry.Text = lstSinhVien[index].Chemistry.ToString();

txtPhysics.Text = lstSinhVien[index].Physics.ToString();

}

}

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

{

if (MessageBox.Show("Do you want to delete?", "Notification", MessageBoxButtons.OKCancel, MessageBoxIcon.Warning) == DialogResult.OK)

{

lstSinhVien.RemoveAt(index);

dataGridView.DataSource = null;

dataGridView.DataSource = lstSinhVien;

}

}

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

{

lstSinhVien.Sort((a, b) => a.Name.CompareTo(b.Name));

dataGridView.DataSource = null;

dataGridView.DataSource = lstSinhVien;

}

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

{

if (index >= 0)

{

lstSinhVien[index].ID = Int32.Parse(txtID.Text);

lstSinhVien[index].Name = txtName.Text;

lstSinhVien[index].Gender = txtGender.Text;

lstSinhVien[index].Age = Int32.Parse(txtAge.Text);

lstSinhVien[index].Math = double.Parse(txtMath.Text);

lstSinhVien[index].Chemistry = double.Parse(txtChemistry.Text);

lstSinhVien[index].Physics = double.Parse(txtPhysics.Text);

dataGridView.DataSource = null;

dataGridView.DataSource = lstSinhVien;

}

}

}

class SinhVien

{

public int ID { get; set; }

public string Name { get; set; }

public string Gender { get; set; }

public int Age { get; set; }

public double Math { get; set; }

public double Chemistry { get; set; }

public double Physics { get; set; }

public SinhVien()

{

ID = 0;

Name = "No name";

Gender = "No gender";

Age = 0;

Math = 0;

Chemistry = 0;

Physics = 0;

}

public SinhVien(int svID, string svName, string svGender, int svAge, double svMath, double svChemistry, double svPhysics)

{

ID = svID;

Name = svName;

Gender = svGender;

Age = svAge;

Math = svMath;

Chemistry = svChemistry;

Physics = svPhysics;

}

}

}