تدريب عملى

مقدمة في قواعد بيانات

Visual Studio + SQL-Server

C# with SQL App

SQL Server:

Drop database db

Create database db

Use db

Create table student (id int primary key,name varchar(50),city varchar(50))

C#:

using System.Data.SqlClient;

namespace StudntSystem
{
    public partial class Form1 : Form
    {
        SqlConnection conn;
        SqlDataAdapter da;
        DataSet ds = new DataSet();

Form load

```csharp
private void Form1_Load(object sender, EventArgs e)
{
    string strconnection = "data source=DESKTOP-LMOVISH;
                            initial catalog=db; integrated security=true";
    conn = new SqlConnection(strconnection);
    conn.Open();
    da = new SqlDataAdapter("select * from student", conn);
    SqlCommandBuilder x = new SqlCommandBuilder(da);
    da.Fill(ds,"student");
    dataGridView1.DataSource = ds.Tables["student"];
}
```

Adding a new student to the table (Save Button)

```csharp
private void button1_Click(object sender, EventArgs e)
{
    DataRow r = ds.Tables["student"].NewRow();
    r["id"] = int.Parse(textBox1.Text);
    r["name"] = textBox2.Text;
    r["city"] = textBox3.Text;
    ds.Tables["student"].Rows.Add(r);
    da.Update(ds, "student");
}
```

```csharp
private void button2_Click(object sender, EventArgs e)
{
    foreach (DataRow r in ds.Tables["student"].Rows)
    {
        if (Convert.ToInt32(r["id"]) == int.Parse(textBox1.Text))
        {
            textBox2.Text = Convert.ToString(r["name"]);
            textBox3.Text = Convert.ToString(r["city"]);
        }
    }
}
```

Update any student data in the table. (Update Button)

```csharp
private void button3_Click(object sender, EventArgs e)
{
    foreach (DataRow r in ds.Tables["student"].Rows)
    {
        if (Convert.ToInt32(r["id"]) == int.Parse(textBox1.Text))
        {
            DialogResult x = MessageBox.Show("Are you Sure to edit student",
                    "Editting Student", MessageBoxButtons.YesNo);
            if (x == DialogResult.Yes)
            {
                r["name"] = textBox2.Text;
                r["city"] = textBox3.Text;
                da.Update(ds, "student");
            }
        }
    }
}
```

Removing a row from the table (Delete Button)

```csharp
private void button4_Click(object sender, EventArgs e)
{
    foreach (DataRow r in ds.Tables["student"].Rows)
    {
        if (Convert.ToInt32(r["id"]) == int.Parse(textBox1.Text))
        {
            textBox2.Text = Convert.ToString(r["name"]);
            textBox3.Text = Convert.ToString(r["city"]);
            DialogResult x = MessageBox.Show("Are you Sure to delete student",
                    "Delete Student", MessageBoxButtons.YesNo);
            if (x == DialogResult.Yes)
            {
                r.Delete();
            }
        }
    }
    da.Update(ds, "student");
}
```