



Lab Task # 2

Visual Programming

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QUIZ MANAGEMENT SYSTEM IN .NET WINDOWS FORMS

Statement:

Create a Login Form for Each user and Also register it .Develop a GUI Program where you have select random record from database and display it on the GUI. This allow user to select the one option from the given option if the selected option is the right answer then move to next question and each user can answer at least 5 questions. And If the User pick the wrong Question a pop up shows its wrong and allow him to pick again. You have to Display the score of the User. Also add the timer.

DataBase ScreenShots:

Account Details:

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Data Connections' pane shows the 'databasez.mdf' database. Under 'Tables', the 'info' table is selected. The table structure is shown as follows:

username	password	name	rollNo	score
a	a	s	2	109
Ali	ali	ali	1	0
M.Ali	ali	Ali	22	7
NULL	NULL	NULL	NULL	NULL

The 'score' column has a blue highlight on the value 7.

Questions with options, question number and correct answer.

[illegible]

Form1

Username

Password

username/password is wrong!

Form2

username

password

name

age

Congrates! Account Created Successfully.

Form1

Username

Password

Login

Register

Form3

Question: Who was Naruto?

TIMER 11

Options for Quiz

- ☐ Hokagi
- ☐ Shinobi
- ☐ Gujjar
- ☐ Chunin

Score

Next Question

Welcome ! M.AliTahir

Form3

Question: Who was Naruto?

TIMER 10

Options for Quiz

- ☒ Hokagi
- ☐ Shinobi
- ☐ Gujjar
- ☐ Chunin

Next Question

Score

Wrond Answer! Choose Again.

OK

Welcome ! M.AliTahir

Right Answer Hence Score ++.

Form3

Question: Who was Naruto?

TIMER 32

Options for Quiz

- ☐ Hokagi
- ☐ Shinobi
- ☒ Gujjar
- ☐ Chunin

Next Question

Score 1

Right Answer!

OK

Welcome ! M.AliTahir

Question: Which is the oldest Barrage of Pakistan?

TIMER 51

Options for Quiz

- ☐ Rorhi
- ☒ Sukhur
- ☐ Chashma
- ☐ None of Above

Score 2

Next Question

Right Answer!

OK

Welcome ! M.AliTahir

Question: Which is the national flower of Pakistan?

TIMER 67

Options for Quiz

- ☐ Rose
- ☒ Jasmine
- ☐ Sun flower
- ☐ None of these

Score 3

Next Question

Right Answer!

OK

Welcome ! M.AliTahir

Question: Which is the capital of Qatar

TIMER 84

Options for Quiz

- ☐ Dhaka
- ☒ Doha
- ☐ Washington abcd
- ☐ Sharjah

Score 4

Next Question

Right Answer!

OK

Welcome ! M.AliTahir

Question: The biggest Island of the World is _____?

TIMER 100

Options for Quiz

- ☐ Iceland
- ☐ England
- ☐ Srilanka
- ☒ Greenland

Score 5

Next Question

Right Answer!

OK

Welcome ! M.AliTahir

Timeup Scenario, Message appears along side with total score and then logout the session.

The screenshot shows a Windows application window titled "Form3". The main interface displays a quiz question: "Question: Second largest city of Pakistan is?". To the right of the question, a "TIMER" shows "0". Below the question, there is a section titled "Options for Quiz" with four radio button options: Karachi, Faisalabad, Lahore, and Islamabad. The "Islamabad" option is selected. To the right of the options, the "Score" is displayed as "5". At the bottom left, there is a "Next Question" button. A modal dialog box is open in the center with the text "Wrond Answer! Choose Again." and an "OK" button. Another modal dialog box is open on the right with the text "Time is up, Answer fast next time.You Scored: 5" and an "OK" button. At the bottom right, there is a "Welcome ! M.AliTahir" message.

Last Question: displays total score and then logout.

The screenshot shows the same "Form3" application window. The quiz question remains "Question: Second largest city of Pakistan is?". The "TIMER" now shows "38". The "Options for Quiz" section shows four radio button options: Karachi, Faisalabad, Lahore, and Islamabad. The "Lahore" option is selected. The "Score" is now displayed as "11". The "Next Question" button is still present at the bottom left. A modal dialog box is open in the center with the text "Right Answer! You Scored: 11" and an "OK" button. The "Welcome ! M.AliTahir" message is still at the bottom right.

CODE:

FORM1.CS (LOGIN):

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp420
{
    public partial class Form1 : Form
    {
        public static string username;
        public SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\ok\Documents\databaseez.mdf;Integrat
ed Security=True;Connect Timeout=30");
        public Form1()
        {
            InitializeComponent();
            Connection();
        }
        public SqlConnection Connection()
        {
            if (con.State == ConnectionState.Open)
            {
                con.Close();
            }
            con.Open();
            return con;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            Connection();
        }
    }
}
```

```

        SqlCommand cmd = new SqlCommand("select * from info where username = '" + textBox1.Text +
"" and password = '" + textBox2.Text + "'", con);
        SqlDataReader s = cmd.ExecuteReader();
        if (s.Read())
        {
            username = textBox1.Text;
            Form3 F3 = new Form3();
            F3.ShowDialog();
        }
        else
        {
            MessageBox.Show("username/password is wrong!");
        }
        textBox1.Clear();
        textBox2.Clear();
    }
    private void button2_Click(object sender, EventArgs e)
    {
        Form2 F2 = new Form2();
        F2.ShowDialog();
    }
    private void Form1_Load(object sender, EventArgs e)
    {
    }
}
}

```

FORM2.CS (Registration):

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace WindowsFormsApp420
{
    public partial class Form2 : Form
    {
        public SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\ok\Documents\databaseez.mdf;Integrat
ed Security=True;Connect Timeout=30");
        public Form2()
        {

```

```

        InitializeComponent();
        Connection();
    }
    public SqlConnection Connection()
    {
        if (con.State == ConnectionState.Open)
        {
            con.Close();
        }
        con.Open();
        return con;
    }
    private void button1_Click(object sender, EventArgs e)
    {
        Connection();
        SqlCommand cmd = new SqlCommand("INSERT INTO info VALUES ('" + textBox1.Text + "','" +
textBox2.Text + "','" + textBox3.Text + "','" + textBox4.Text + "','0)", con);
        int a = cmd.ExecuteNonQuery();
        MessageBox.Show("Congrates! Account Created Successfully.");
        this.Close();
    }
    private void Form2_Load(object sender, EventArgs e)
    {
    }
}
}

```

FORM3.CS (Quiz):

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace WindowsFormsApp420
{
    public partial class Form3 : Form
    {
        private int counter;
        public int no=1;
        public SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\ok\Documents\databaseez.mdf;Integrat
ed Security=True;Connect Timeout=30");

```

```

public Form3()
{
    InitializeComponent();
    Connection();
    int n = qn(no);
    timer.Start();
}
public SqlConnection Connection()
{
    if (con.State == ConnectionState.Open)
    {
        con.Close();
    }
    con.Open();
    return con;
}
private void Form3_Load(object sender, EventArgs e)
{
    label4.Text = Form1.username;
}
private void timer_Tick(object sender, EventArgs e)
{
    counter++;
    lab.Text = counter.ToString();
    if (counter == 120)
    {
        lab.Text = "0";
        timer.Stop();
        MessageBox.Show("Time is up, Answer fast next time.You Scored: " + label3.Text);
        this.Close();
        Form1 F1 = new Form1();
        F1.ShowDialog();
    }
}
public int marks;
public int markz;
int sst(int markz)
{
    String qry0 = "update info SET score = " + markz + " where username = " + label4.Text + "";
    SqlCommand cmd0 = new SqlCommand(qry0, con);
    Connection();
    int st = cmd0.ExecuteNonQuery();
    return st;
}
int mrk(int marks)
{
    Connection();

```

```

        SqlCommand cmd = new SqlCommand("SELECT score from info where username=" + label4.Text
+ "", con);
        SqlDataReader s = cmd.ExecuteReader();
        while (s.Read())
        {
            marks = Convert.ToInt32(s.GetValue(0).ToString());
            markz = marks;
        }
        return markz;
    }
    int qn(int no)
    {
        Connection();
        SqlCommand cmd = new SqlCommand("SELECT questions from QnA where Num = " + no + "",
con);
        SqlDataReader s = cmd.ExecuteReader();
        while (s.Read())
        {
            label00.Text = s.GetValue(0).ToString();
        }
        Connection();
        SqlCommand cmd1 = new SqlCommand("SELECT a,b,c,d FROM QnA where questions=" +
label00.Text + "", con);
        SqlDataReader s1 = cmd1.ExecuteReader();
        while (s1.Read())
        {
            radioButton1.Text = s1.GetValue(0).ToString();
            radioButton2.Text = s1.GetValue(1).ToString();
            radioButton3.Text = s1.GetValue(2).ToString();
            radioButton4.Text = s1.GetValue(3).ToString();
        }
        return no;
    }
    private void button1_Click(object sender, EventArgs e)
    {
        int markz = mrk(marks);
        Connection();
        SqlCommand cmd11 = new SqlCommand("SELECT answer from QnA where questions=" +
label00.Text + "", con);
        SqlDataReader s2 = cmd11.ExecuteReader();
        if (s2.Read())
        //while (s2.Read()) //Connection issues, solved with if
        {
            if (radioButton1.Checked == true)
            {
                if (radioButton1.Text == s2.GetValue(0).ToString())
                {
                    if (no == 6)

```

```

{
    no += 1;
    markz += 1;
    label3.Text = markz.ToString();
    int st = sst(markz);
    MessageBox.Show("Right Answer! You Scored: "+label3.Text);
    radioButton1.Checked = false;
    timer.Stop();
    Form1 F1 = new Form1();
    F1.ShowDialog();
    this.Close();
}
else
{
    no += 1;
    markz += 1;
    label3.Text = markz.ToString();
    int st = sst(markz);
    MessageBox.Show("Right Answer!");
    int n = qn(no);
    radioButton1.Checked = false;
}
}
else
{
    MessageBox.Show("Wrond Answer! Choose Again.");
}
}
else if (radioButton2.Checked == true)
{
    if (radioButton2.Text == s2.GetValue(0).ToString())
    {
        if (no == 6)
        {
            no += 1;
            markz += 1;
            label3.Text = markz.ToString();
            int st = sst(markz);
            MessageBox.Show("Right Answer! You Scored: " + label3.Text);
            radioButton2.Checked = false;
            timer.Stop();
            Form1 F1 = new Form1();
            F1.ShowDialog();
            this.Close();
        }
        else
        {
            no += 1;

```

```

        markz += 1;
        label3.Text = markz.ToString();
        int st = sst(markz);
        MessageBox.Show("Right Answer!");
        int n = qn(no);
        radioButton2.Checked = false;
    }
}
else
{
    MessageBox.Show("Wrond Answer! Choose Again.");
}
}
else if (radioButton3.Checked == true)
{
    if (radioButton3.Text == s2.GetValue(0).ToString())
    {
        if (no == 6)
        {
            no += 1;
            markz += 1;
            label3.Text = markz.ToString();
            int st = sst(markz);
            MessageBox.Show("Right Answer! You Scored: " + label3.Text);
            radioButton3.Checked = false;
            timer.Stop();
            Form1 F1 = new Form1();
            F1.ShowDialog();
            this.Close();
        }
        else
        {
            no += 1;
            markz += 1;
            label3.Text = markz.ToString();
            int st = sst(markz);
            MessageBox.Show("Right Answer!");
            int n = qn(no);
            radioButton3.Checked = false;
        }
    }
}
else
{
    MessageBox.Show("Wrond Answer! Choose Again.");
}
}
else if (radioButton4.Checked == true)
{

```

```

if (radioButton4.Text == s2.GetValue(0).ToString())
{
    if (no == 6)
    {
        no += 1;
        markz += 1;
        label3.Text = markz.ToString();
        int st = sst(markz);
        MessageBox.Show("Right Answer! You Scored: " + label3.Text);
        radioButton4.Checked = false;
        timer.Stop();
        Form1 F1 = new Form1();
        F1.ShowDialog();
        this.Close();
    }
    else
    {
        no += 1;
        markz += 1;
        label3.Text = markz.ToString();
        int st = sst(markz);
        MessageBox.Show("Right Answer!");
        int n = qn(no);
        radioButton4.Checked = false;
    }
}
else
{
    MessageBox.Show("Wrond Answer! Choose Again.");
}
}
}
}
}
}
}

```