

STUDENT MANAGEMENT APPLICATION

.NET C#

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PROGRAM CODE:

File: **MainForm.cs**

```
using System;
using System.Windows.Forms;

namespace StudentManagementApp
{
    public partial class MainForm : Form
    {
        public MainForm()
        {
            InitializeComponent();
        }

        private void buttonLogin_Click(object sender, EventArgs e)
        {
            LoginForm loginForm = new LoginForm();
            loginForm.Show();
            this.Hide();
        }

        private void buttonRegistration_Click(object sender, EventArgs e)
        {
            RegistrationForm registrationForm = new RegistrationForm();
            registrationForm.Show();
            this.Hide();
        }

        private void label1_Click(object sender, EventArgs e)
        {
        }
    }
}
```

File: LoginForm.cs

```
using System;
using System.Data.SqlClient;
using System.Windows.Forms;

namespace StudentManagementApp
{
    public partial class LoginForm : Form
    {
        private string connectionString = "Data Source=ANSHADANSHA1;Initial
Catalog=StudentManagement;Integrated Security=True;TrustServerCertificate=True";

        public LoginForm()
        {
            InitializeComponent();
        }

        private void buttonLogin_Click(object sender, EventArgs e)
        {
            string name = textUser.Text;
            string password = textPass.Text;

            if (ValidateCredentials(name, password))
            {
                StudentDashboard studentdashboard = new StudentDashboard();
                studentdashboard.Show();
                this.Hide();
            }
            else
            {
                MessageBox.Show("Invalid username or password.");
            }
        }

        private bool ValidateCredentials(string name, string password)
        {
            bool isValid = false;
            string query = "SELECT COUNT(*) FROM Student WHERE Name = @Name AND Password =
@Password";

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    command.Parameters.AddWithValue("@Name", name);
                    command.Parameters.AddWithValue("@Password", password);

                    try
                    {
                        connection.Open();
                        int userCount = (int)command.ExecuteScalar();
                        isValid = (userCount > 0);
                    }
                    catch (Exception ex)
                    {
                        MessageBox.Show($"Error: {ex.Message}");
                    }
                }
            }

            return isValid;
        }

        private void label1_Click(object sender, EventArgs e)
        {

```

```
    }

    private void btnCancel_Click(object sender, EventArgs e)
    {
        MainForm mainForm = new MainForm();
        mainForm.Show();
        this.Hide();
    }
}
```

File: RegistrationForm.cs

```
using System;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace StudentManagementApp
{
    public partial class RegistrationForm : Form
    {
        private string connectionString = "Data Source=ANSHADANSHA1;Initial
Catalog=StudentManagement;Integrated Security=True;TrustServerCertificate=True";

        public RegistrationForm()
        {
            InitializeComponent();
        }

        private void buttonRegister_Click(object sender, EventArgs e)
        {
            string name = textBoxName.Text;
            string department = textBoxDepartment.Text;
            string phone = textBoxPhone.Text;
            DateTime dob = dateTimePickerDOB.Value;
            string gender = radioButtonMale.Checked ? "Male" : radioButtonFemale.Checked ?
"Female" : "Other";
            string password = textBoxPassword.Text;

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                string query = "INSERT INTO Student (Name, Department, PhoneNo, DOB,
Gender, Password) VALUES (@Name, @Department, @Phone, @DOB, @Gender, @Password)";
                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    command.Parameters.AddWithValue("@Name", name);
                    command.Parameters.AddWithValue("@Department", department);
                    command.Parameters.AddWithValue("@Phone", phone);
                    command.Parameters.AddWithValue("@DOB", dob);
                    command.Parameters.AddWithValue("@Gender", gender);
                    command.Parameters.AddWithValue("@Password", password);
                    try
                    {
                        connection.Open();
                        command.ExecuteNonQuery();
                        MessageBox.Show("Student registered successfully!");

                        MainForm mainForm = new MainForm();
                        mainForm.Show();
                        this.Hide();
                    }
                    catch (Exception ex)
                    {
                        MessageBox.Show($"Error: {ex.Message}");
                    }
                }
            }
        }

        private void button1_Click(object sender, EventArgs e)
        {
            MainForm mainForm = new MainForm();
            mainForm.Show();
            this.Hide();
        }
    }
}
```

File: **StudentDashBoard.cs**

```
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 StudentManagementApp
{
    public partial class StudentDashboard : Form
    {
        public StudentDashboard()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            ViewMarksForm viewmarksForm = new ViewMarksForm();
            viewmarksForm.Show();
            this.Hide();
        }

        private void label1_Click(object sender, EventArgs e)
        {
        }

        private void button1_Click(object sender, EventArgs e)
        {
            AddMarksForm addmarksForm = new AddMarksForm();
            addmarksForm.Show();
            this.Hide();
        }
    }
}
```

File: AddMarksForm.cs

```
using System;
using System.Data.SqlClient;
using System.Windows.Forms;

namespace StudentManagementApp
{
    public partial class AddMarksForm : Form
    {
        private string connectionString = "Data Source=ANSHADANSHA1;Initial
Catalog=StudentManagement;Integrated Security=True;TrustServerCertificate=True";

        public AddMarksForm()
        {
            InitializeComponent();
            LoadStudents();
        }

        private void LoadStudents()
        {
            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                string query = "SELECT ID, Name FROM Student";
                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    connection.Open();
                    SqlDataReader reader = command.ExecuteReader();
                    while (reader.Read())
                    {
                        comboBoxStudent.Items.Add(new { ID = reader["ID"], Name =
reader["Name"] });
                    }
                    connection.Close();
                }
            }
            comboBoxStudent.DisplayMember = "Name";
            comboBoxStudent.ValueMember = "ID";
        }

        private void buttonAddMarks_Click(object sender, EventArgs e)
        {
            if (comboBoxStudent.SelectedItem == null)
            {
                MessageBox.Show("Please select a student.");
                return;
            }

            if (string.IsNullOrEmpty(textBoxMarks.Text)
|| !int.TryParse(textBoxMarks.Text, out int marks))
            {
                MessageBox.Show("Please enter a valid marks value.");
                return;
            }

            int studentID = (int)((dynamic)comboBoxStudent.SelectedItem).ID;
            string subject = cbSubject.SelectedItem.ToString();

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                string query = "INSERT INTO Mark (StudentID, Subject,Mark) VALUES
(@StudentID,@Subject, @Mark)";
                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    command.Parameters.AddWithValue("@StudentID", studentID);
                    command.Parameters.AddWithValue("@Subject", subject);
                }
            }
        }
    }
}
```

```

        command.Parameters.AddWithValue("@Mark", marks);

        try
        {
            connection.Open();
            command.ExecuteNonQuery();
            MessageBox.Show("Marks added successfully!");
        }
        catch (Exception ex)
        {
            MessageBox.Show($"Error: {ex.Message}");
        }
        finally
        {
            connection.Close();
        }
    }
}

private void comboBoxStudent_SelectedIndexChanged(object sender, EventArgs e)
{
}

private void button1_Click(object sender, EventArgs e)
{
    StudentDashboard studentdashboard = new StudentDashboard();
    studentdashboard.Show();
    this.Hide();
}

private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
{
}
}

```

File: ViewMarksForm.cs

```
using System;
using System.Data.SqlClient;
using System.Drawing;
using System.Windows.Forms;

namespace StudentManagementApp
{
    public partial class ViewMarksForm : Form
    {
        private const string PlaceholderText = "Enter Student Name";

        public ViewMarksForm()
        {
            InitializeComponent();
            SetPlaceholder();
        }

        private void SetPlaceholder()
        {
            textBoxStudentName.Text = PlaceholderText;
            textBoxStudentName.ForeColor = Color.Gray;
            textBoxStudentName.Enter += RemovePlaceholder;
            textBoxStudentName.Leave += SetPlaceholder;
        }

        private void RemovePlaceholder(object sender, EventArgs e)
        {
            if (textBoxStudentName.Text == PlaceholderText)
            {
                textBoxStudentName.Text = "";
                textBoxStudentName.ForeColor = Color.Black;
            }
        }

        private void SetPlaceholder(object sender, EventArgs e)
        {
            if (string.IsNullOrEmpty(textBoxStudentName.Text))
            {
                textBoxStudentName.Text = PlaceholderText;
                textBoxStudentName.ForeColor = Color.Gray;
            }
        }

        private void buttonFetchMarks_Click(object sender, EventArgs e)
        {
            string studentName = textBoxStudentName.Text;

            if (studentName == PlaceholderText || string.IsNullOrEmpty(studentName))
            {
                MessageBox.Show("Please enter a valid Student Name.");
                return;
            }

            using (SqlConnection connection = new SqlConnection("Data
Source=ANSHADANSHA1;Initial Catalog=StudentManagement;Integrated
Security=True;TrustServerCertificate=True"))
            {
                // Updated query to fetch marks by student name
                string query = @"
                SELECT m.Subject, m.Mark
                FROM Mark m
                INNER JOIN Student s ON m.StudentId = s.Id
                WHERE s.Name = @StudentName";

                using (SqlCommand command = new SqlCommand(query, connection))
            }
        }
    }
}
```



```

        {
            command.Parameters.AddWithValue("@StudentName", studentName);

            try
            {
                connection.Open();
                using (SqlDataReader reader = command.ExecuteReader())
                {
                    listBoxMarks.Items.Clear();
                    while (reader.Read())
                    {
                        string subject = reader["Subject"].ToString();
                        string mark = reader["Mark"].ToString();
                        listBoxMarks.Items.Add($"{subject}: {mark}");
                    }
                }
            }
            catch (Exception ex)
            {
                MessageBox.Show($"Error: {ex.Message}");
            }
            finally
            {
                connection.Close();
            }
        }
    }
}

```

PROGRAM OUTPUT:

Main Form

Student Management Application

Login Register

RegistrationForm

Registration

Name

Department

Phone

DOB

Gender ☐ Male ☒ Female ☐ Other

Password:

Register Cancel

Registration

Name

Department

Phone

DOB

Gender

☐ Male

☒ Female

☐ Other

Password:

Register

Cancel

Student registered successfully!

OK

Student Login

Username

Password

Login

Cancel

Student Dashboard

Add Student
Marks

View Student
Marks

Add Marks

Student

Subject

Marks

Add Marks

Go to
Dashboard

Add Marks

Student

Dilsha C P

Subject

Python

Marks

75

Marks added successfully!

OK

Add Marks

Go to
Dashboard

Dilsha C P

Fetch Marks

Go Back

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