

Default.aspx :

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs" Inherits="IAD08Lab.Default" %>

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Login</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Login</h2>

            Username:
            <asp:TextBox ID="txtUser" runat="server"></asp:TextBox>
            <br /><br />

            Password:
            <asp:TextBox ID="txtPass" runat="server" TextMode="Password"></asp:TextBox>
            <br /><br />

            <asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="Login_Click" />
            <br /><br />

            <asp:Label ID="lblMsg" runat="server" ForeColor="Red"></asp:Label>
            <hr />

            <b>Teacher ID:</b> teacher1 <br />
            <b>Password:</b> 123 <br /><br />

            <b>Student ID:</b> student1 <br />
            <b>Password:</b> 123
        </div>
    </form>
</body>
</html>
```

Student Folder :

AttemptQuiz.aspx :

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="AttemptQuiz.aspx.cs"
Inherits="IAD08Lab.Student.AttemptQuiz" %>

<!DOCTYPE html>
<html>
<head runat="server">
```

```

<title>Attempt Quiz</title>
</head>
<body>
<form id="form1" runat="server">

<h2>Attempt Quiz</h2>

<asp:Repeater ID="rptQuestions" runat="server">
  <ItemTemplate>

    <p><%# Eval("Statement") %></p>

    <asp:RadioButtonList ID="rblOptions" runat="server"></asp:RadioButtonList>

    <asp:HiddenField ID="hfQID" runat="server" Value='<%# Eval("QuestionID") %>' />

    <hr />

  </ItemTemplate>
</asp:Repeater>

<asp:Button ID="btnSubmit" runat="server" Text="Submit Quiz" OnClick="SubmitQuiz_Click" />

<br /><br />

<asp:Label ID="lblResult" runat="server" ForeColor="Blue"></asp:Label>

<h3>Time Left: <span id="timer"></span></h3>

<script>
  var time = 600;

  function startTimer() {
    var timer = setInterval(function () {
      var minutes = Math.floor(time / 60);
      var seconds = time % 60;

      document.getElementById("timer").innerHTML =
        minutes + ":" + (seconds < 10 ? "0" : "") + seconds;

      time--;

      if (time < 0) {
        clearInterval(timer);
        alert("Time Up!");
        document.forms[0].submit();
      }
    }, 1000);
  }

  window.onload = startTimer;
</script>

```

```
</form>
</body>
</html>
```

AttemptQuiz.aspx.cs :

```
using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;
using System.Linq;
using System.Web.UI.WebControls;

namespace IAD08Lab.Student
{
    public partial class AttemptQuiz : System.Web.UI.Page
    {
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["Role"] == null || Session["Role"].ToString() != "Student")
            {
                Response.Redirect("~/Default.aspx");
            }

            if (Session["UserID"] == null)
            {
                Response.Redirect("~/Default.aspx");
            }

            int quizID = int.Parse(Request.QueryString["QuizID"]);
            int studentID = Convert.ToInt32(Session["UserID"]);

            using (SqlConnection con = new SqlConnection(cs))
            {
                con.Open();

                SqlCommand cmd = new SqlCommand(
                    "SELECT COUNT(*) FROM Results WHERE StudentID=@s AND QuizID=@q", con);

                cmd.Parameters.AddWithValue("@s", studentID);
                cmd.Parameters.AddWithValue("@q", quizID);

                int count = (int)cmd.ExecuteScalar();
            }
        }
    }
}
```

```

        if (count > 0)
        {
            Response.Write("You have already attempted this quiz.");
            Response.End();
        }
    }

    if (!IsPostBack)
    {
        LoadQuestions();
    }
}

void LoadQuestions()
{
    int quizID = int.Parse(Request.QueryString["QuizID"]);

    using (SqlConnection con = new SqlConnection(cs))
    {
        string query = "SELECT * FROM Questions WHERE QuizID=@q";

        SqlCommand cmd = new SqlCommand(query, con);
        cmd.Parameters.AddWithValue("@q", quizID);

        SqlDataAdapter da = new SqlDataAdapter(cmd);
        DataTable dt = new DataTable();
        da.Fill(dt);

        var rnd = new Random();
        dt = dt.AsEnumerable()
            .OrderBy(x => rnd.Next())
            .CopyToDataTable();

        rptQuestions.DataSource = dt;

        rptQuestions.ItemDataBound += rptQuestions_ItemDataBound;

        rptQuestions.DataBind();
    }
}

protected void rptQuestions_ItemDataBound(object sender, RepeaterItemEventArgs e)
{
    if (e.Item.ItemType == ListItemType.Item ||
        e.Item.ItemType == ListItemType.AlternatingItem)
    {
        DataRowView row = (DataRowView)e.Item.DataItem;

        RadioButtonList rbl = (RadioButtonList)e.Item.FindControl("rblOptions");
    }
}

```

```

        rbl.Items.Add(new ListItem(row["OptionA"].ToString(), "A"));
        rbl.Items.Add(new ListItem(row["OptionB"].ToString(), "B"));
        rbl.Items.Add(new ListItem(row["OptionC"].ToString(), "C"));
        rbl.Items.Add(new ListItem(row["OptionD"].ToString(), "D"));
    }
}

protected void SubmitQuiz_Click(object sender, EventArgs e)
{
    int quizID = int.Parse(Request.QueryString["QuizID"]);
    int studentID = Convert.ToInt32(Session["UserID"]);

    int score = 0;

    using (SqlConnection con = new SqlConnection(cs))
    {
        con.Open();

        foreach (RepeaterItem item in rptQuestions.Items)
        {
            RadioButtonList rbl = (RadioButtonList)item.FindControl("rblOptions");
            HiddenField hf = (HiddenField)item.FindControl("hfQID");

            int qid = int.Parse(hf.Value);
            string selected = rbl.SelectedValue;

            SqlCommand cmd = new SqlCommand(
                "SELECT CorrectAnswer FROM Questions WHERE QuestionID=@id", con);

            cmd.Parameters.AddWithValue("@id", qid);

            string correct = cmd.ExecuteScalar().ToString();

            int marks = (selected == correct) ? 1 : 0;
            score += marks;

            SqlCommand insert = new SqlCommand(
                @"INSERT INTO Answers
                (StudentID, QuizID, QuestionNo, CorrectAns, StudentAns, Marks)
                VALUES (@s,@q,@qn,@c,@sa,@m)", con);

            insert.Parameters.AddWithValue("@s", studentID);
            insert.Parameters.AddWithValue("@q", quizID);
            insert.Parameters.AddWithValue("@qn", qid);
            insert.Parameters.AddWithValue("@c", correct);
            insert.Parameters.AddWithValue("@sa", selected);
            insert.Parameters.AddWithValue("@m", marks);

            insert.ExecuteNonQuery();
        }
    }
}

```

```

int totalQuestions = rptQuestions.Items.Count;
double percentage = (score * 100.0) / totalQuestions;

using (SqlConnection con = new SqlConnection(cs))
{
    con.Open();

    SqlCommand cmd = new SqlCommand(
        @"INSERT INTO Results
        (StudentID, QuizID, TotalMarks, ObtainedMarks, Percentage)
        VALUES (@s,@q,@t,@o,@p)", con);

    cmd.Parameters.AddWithValue("@s", studentID);
    cmd.Parameters.AddWithValue("@q", quizID);
    cmd.Parameters.AddWithValue("@t", totalQuestions);
    cmd.Parameters.AddWithValue("@o", score);
    cmd.Parameters.AddWithValue("@p", percentage);

    cmd.ExecuteNonQuery();
}

// show result page
Response.Redirect("~/Student/Result.aspx?QuizID=" + quizID);
}
}
}

```

MyQuizzes.aspx :

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="MyQuizzes.aspx.cs"
Inherits="IAD08Lab.Student.MyQuizzes" %>

```

```

<form runat="server">

```

```

<h2>Available Quizzes</h2>

```

```

<asp:GridView ID="gvQuiz" runat="server" AutoGenerateColumns="false">
    <Columns>
        <asp:BoundField DataField="QuizID" HeaderText="ID" />
        <asp:BoundField DataField="Title" HeaderText="Title" />
        <asp:BoundField DataField="AllowedTime" HeaderText="Time" />

        <asp:TemplateField>
            <ItemTemplate>
                <a href='<%# "AttemptQuiz.aspx?QuizID=" + Eval("QuizID") %>'>
                    Attempt
                </a>
            </ItemTemplate>
        </asp:TemplateField>
    </Columns>
</asp:GridView>

```

```
</Columns>
</asp:GridView>

</form>
```

MyQuizzes.aspx.cs :

```
using System;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;

namespace IAD08Lab.Student
{
    public partial class MyQuizzes : System.Web.UI.Page
    {
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["Role"] == null || Session["Role"].ToString() != "Student")
            {
                Response.Redirect("~/Default.aspx");
            }

            if (!IsPostBack)
            {
                LoadQuizzes();
            }
        }

        void LoadQuizzes()
        {
            using (SqlConnection con = new SqlConnection(cs))
            {
                string query = "SELECT QuizID, Title, AllowedTime FROM Quiz";

                SqlDataAdapter da = new SqlDataAdapter(query, con);
                DataTable dt = new DataTable();
                da.Fill(dt);

                gvQuiz.DataSource = dt;
                gvQuiz.DataBind();
            }
        }
    }
}
```

Result.aspx :

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Result.aspx.cs"
Inherits="IAD08Lab.Student.Result" %>

<form runat="server">

<h2>Your Result</h2>

<asp:Label ID="lblScore" runat="server"></asp:Label><br /><br />
<asp:Label ID="lblPercent" runat="server"></asp:Label>

</form>
```

Result.aspx.cs :

```
using System;
using System.Data.SqlClient;
using System.Configuration;

namespace IAD08Lab.Student
{
    public partial class Result : System.Web.UI.Page
    {
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["Role"] == null || Session["Role"].ToString() != "Student")
            {
                Response.Redirect("~/Default.aspx");
                return;
            }

            if (Request.QueryString["QuizID"] == null)
            {
                Response.Write("Invalid Quiz ID");
                return;
            }

            int quizID = int.Parse(Request.QueryString["QuizID"]);
            int studentID = Convert.ToInt32(Session["UserID"]);
```

```

using (SqlConnection con = new SqlConnection(cs))
{
    con.Open();

    SqlCommand cmd = new SqlCommand(@"
        SELECT ObtainedMarks, Percentage
        FROM Results
        WHERE StudentID=@s AND QuizID=@q", con);

    cmd.Parameters.AddWithValue("@s", studentID);
    cmd.Parameters.AddWithValue("@q", quizID);

    SqlDataReader dr = cmd.ExecuteReader();

    if (dr.Read())
    {
        lblScore.Text = "Score: " + dr["ObtainedMarks"].ToString();
        lblPercent.Text = "Percentage: " + dr["Percentage"].ToString() + "%";
    }
    else
    {
        lblScore.Text = "No result found.";
        lblPercent.Text = "";
    }
}
}
}
}

```

Teacher Folder :

AddQuestion.aspx :

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="AddQuestion.aspx.cs"
Inherits="IAD08Lab.Teacher.AddQuestion" %>

```

```

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Add Question</title>
</head>
<body>
<form id="form1" runat="server">

    <h2>Add Question</h2>

```

Question:

```
<asp:TextBox ID="txtQ" runat="server"></asp:TextBox>
<br /><br />
```

A: <asp:TextBox ID="txtA" runat="server"></asp:TextBox>

B: <asp:TextBox ID="txtB" runat="server"></asp:TextBox>

C: <asp:TextBox ID="txtC" runat="server"></asp:TextBox>

D: <asp:TextBox ID="txtD" runat="server"></asp:TextBox>

Correct Answer:

```
<asp:DropDownList ID="ddlCorrect" runat="server">
  <asp:ListItem>A</asp:ListItem>
  <asp:ListItem>B</asp:ListItem>
  <asp:ListItem>C</asp:ListItem>
  <asp:ListItem>D</asp:ListItem>
</asp:DropDownList>
```

```
<br /><br />
```

```
<asp:Button ID="btnAdd" runat="server" Text="Add Question" OnClick="btnAdd_Click" />
```

```
<br /><br />
```

```
<!--  NEW: Success Message -->
```

```
<asp:Label ID="lblMsg" runat="server" ForeColor="Green"></asp:Label>
```

```
</form>
```

```
</body>
```

```
</html>
```

AddQuestion.aspx.cs :

```
using System;
```

```
using System.Data.SqlClient;
```

```
using System.Configuration;
```

```
namespace IAD08Lab.Teacher
```

```
{
```

```
    public partial class AddQuestion : System.Web.UI.Page
```

```
    {
```

```
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;
```

```
        protected void Page_Load(object sender, EventArgs e)
```

```
        {
```

```
            if (Session["Role"] == null || Session["Role"].ToString() != "Teacher")
```

```
            {
```

```
                Response.Redirect("~/Default.aspx");
```

```

    }
}

protected void btnAdd_Click(object sender, EventArgs e)
{
    int quizID = int.Parse(Request.QueryString["QuizID"]);

    using (SqlConnection con = new SqlConnection(cs))
    {
        string query = @"INSERT INTO Questions
(QuizID, Statement, OptionA, OptionB, OptionC, OptionD, CorrectAnswer)
VALUES (@q, @s, @a, @b, @c, @d, @ans)";

        SqlCommand cmd = new SqlCommand(query, con);

        cmd.Parameters.AddWithValue("@q", quizID);
        cmd.Parameters.AddWithValue("@s", txtQ.Text);
        cmd.Parameters.AddWithValue("@a", txtA.Text);
        cmd.Parameters.AddWithValue("@b", txtB.Text);
        cmd.Parameters.AddWithValue("@c", txtC.Text);
        cmd.Parameters.AddWithValue("@d", txtD.Text);
        cmd.Parameters.AddWithValue("@ans", ddlCorrect.SelectedValue);

        con.Open();
        cmd.ExecuteNonQuery();
    }

    lblMsg.Text = "Question added successfully!";

    txtQ.Text = "";
    txtA.Text = "";
    txtB.Text = "";
    txtC.Text = "";
    txtD.Text = "";
    ddlCorrect.SelectedIndex = 0;
}
}
}

```

ManageQuiz.aspx :

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ManageQuiz.aspx.cs"
Inherits="IAD08Lab.Teacher.ManageQuiz" %>

<!DOCTYPE html>
<html>
<head runat="server">
    <title>Manage Quiz</title>
</head>

```

```

<body>
<form id="form1" runat="server">

    <h2>Create Quiz</h2>

    Title:
    <asp:TextBox ID="txtTitle" runat="server"></asp:TextBox>
    <br /><br />

    Start Time:
    <asp:TextBox ID="txtStart" runat="server" placeholder="YYYY-MM-DD HH:MM"></asp:TextBox>
    <br /><br />

    Allowed Time (minutes):
    <asp:TextBox ID="txtTime" runat="server"></asp:TextBox>
    <br /><br />

    Randomize Questions:
    <asp:CheckBox ID="chkRandom" runat="server" />
    <br />

    Shuffle Options:
    <asp:CheckBox ID="chkShuffle" runat="server" />
    <br /><br />

    <asp:Button ID="btnCreate" runat="server" Text="Create Quiz" OnClick="CreateQuiz_Click" />

    <br />

    <h2>Your Quizzes</h2>

    <asp:GridView ID="gvQuiz" runat="server" AutoGenerateColumns="false">
        <Columns>
            <asp:BoundField DataField="QuizID" HeaderText="ID" />
            <asp:BoundField DataField="Title" HeaderText="Title" />
            <asp:BoundField DataField="AllowedTime" HeaderText="Time" />

            <asp:TemplateField HeaderText="Action">
                <ItemTemplate>
                    <a href="<%# "AddQuestion.aspx?QuizID=" + Eval("QuizID") %>">
                        Add Questions
                    </a>
                </ItemTemplate>
            </asp:TemplateField>

        </Columns>
    </asp:GridView>

</form>
</body>
</html>

```

ManageQuiz.aspx.cs :

```
using System;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;

namespace IAD08Lab.Teacher
{
    public partial class ManageQuiz : System.Web.UI.Page
    {
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;

        protected void Page_Load(object sender, EventArgs e)
        {
            if (Session["Role"] == null || Session["Role"].ToString() != "Teacher")
            {
                Response.Redirect("~/Default.aspx");
            }

            if (!IsPostBack)
            {
                LoadQuizzes();
            }
        }

        protected void CreateQuiz_Click(object sender, EventArgs e)
        {
            using (SqlConnection con = new SqlConnection(cs))
            {
                string query = @"INSERT INTO Quiz
                (Title, StartTime, AllowedTime, RandomizeQ, ShuffleOptions, CreatedBy)
                VALUES (@t, @start, @time, @r, @s, @user)";

                SqlCommand cmd = new SqlCommand(query, con);

                cmd.Parameters.AddWithValue("@t", txtTitle.Text);
                cmd.Parameters.AddWithValue("@start", DateTime.Parse(txtStart.Text));
                cmd.Parameters.AddWithValue("@time", int.Parse(txtTime.Text));
                cmd.Parameters.AddWithValue("@r", chkRandom.Checked);
                cmd.Parameters.AddWithValue("@s", chkShuffle.Checked);

                cmd.Parameters.AddWithValue("@user", 4);

                con.Open();
                cmd.ExecuteNonQuery();
            }

            LoadQuizzes();
        }
    }
}
```

```

void LoadQuizzes()
{
    using (SqlConnection con = new SqlConnection(cs))
    {
        string query = "SELECT QuizID, Title, AllowedTime FROM Quiz";

        SqlDataAdapter da = new SqlDataAdapter(query, con);
        DataTable dt = new DataTable();
        da.Fill(dt);

        gvQuiz.DataSource = dt;
        gvQuiz.DataBind();
    }
}
}
}

```

Admin Folder :

ManageUsers.aspx :

```

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="ManageUsers.aspx.cs"
Inherits="IAD08Lab.Admin.ManageUsers" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Manage Users - Admin</title>
</head>
<body>
    <form id="form1" runat="server">

        <h2>Admin Panel - Manage Users</h2>

        <asp:Label ID="lblMsg" runat="server" ForeColor="Red"></asp:Label>

        <br /><br />

        <asp:GridView ID="gvUsers" runat="server" AutoGenerateColumns="False">

            <Columns>

                <asp:BoundField DataField="UserID" HeaderText="ID" />
                <asp:BoundField DataField="Username" HeaderText="Name" />
                <asp:BoundField DataField="Email" HeaderText="Email" />
            
```

```

<asp:BoundField DataField="Role" HeaderText="Role" />
<asp:BoundField DataField="IsActive" HeaderText="Active" />
<asp:BoundField DataField="CreatedDate" HeaderText="Created Date" />

<asp:TemplateField HeaderText="Action">
    <ItemTemplate>

        <asp:Button
            ID="btnDelete"
            runat="server"
            Text="Delete"
            CommandArgument="<%# Eval("UserID") %>"
            OnClick="DeleteUser_Click"
            OnClientClick="return confirm('Are you sure you want to delete this user?');" />

    </ItemTemplate>
</asp:TemplateField>

</Columns>

</asp:GridView>

</form>
</body>
</html>

```

ManageUsers.aspx.cs :

```

using System;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;

namespace IAD08Lab.Admin
{
    public partial class ManageUsers : System.Web.UI.Page
    {
        string cs = ConfigurationManager.ConnectionStrings["QuizDB2"].ConnectionString;

        // Admin protection + load users
        protected void Page_Load(object sender, EventArgs e)
        {
            // Only Admin allowed (UserID = 6)
            if (Session["UserID"] == null || Convert.ToInt32(Session["UserID"]) != 6)
            {
                Response.Redirect("~/Default.aspx");
                return;
            }

            if (!IsPostBack)

```

```

    {
        LoadUsers();
    }
}

// Load all users
void LoadUsers()
{
    using (SqlConnection con = new SqlConnection(cs))
    {
        string query = @"
            SELECT
                UserID,
                Username,
                Email,
                Role,
                IsActive,
                CreatedDate
            FROM Users";

        SqlDataAdapter da = new SqlDataAdapter(query, con);
        DataTable dt = new DataTable();
        da.Fill(dt);

        gvUsers.DataSource = dt;
        gvUsers.DataBind();
    }
}

// Delete user
protected void DeleteUser_Click(object sender, EventArgs e)
{
    int userID = Convert.ToInt32(
        ((System.Web.UI.WebControls.Button)sender).CommandArgument
    );

    // Prevent deleting admin (UserID = 6)
    if (userID == 6)
    {
        lblMsg.Text = "Admin account cannot be deleted.";
        return;
    }

    using (SqlConnection con = new SqlConnection(cs))
    {
        con.Open();

        SqlCommand cmd = new SqlCommand(
            "DELETE FROM Users WHERE UserID=@id", con);

        cmd.Parameters.AddWithValue("@id", userID);

        cmd.ExecuteNonQuery();
    }
}

```

```
        lblMsg.Text = "User deleted successfully.";

        LoadUsers(); // refresh grid
    }
}
```