



Pakistan Institute of Engineering and Applied Sciences

Lab Title.....Online Quiz System

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CODES of All Pages:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Login.aspx.vb"
Inherits="Login" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head runat="server">
```

```
<title>Login</title>
```

```
<style>
```

```
body { font-family: Arial, sans-serif; max-width: 400px; margin: 50px auto; }
```

```
label, input { display: block; margin: 10px 0; width: 100%; }
```

```
input[type="submit"] { background-color: #007ACC; color: white; border: none;
padding: 10px; cursor: pointer; }
```

```
input[type="submit"]:hover { background-color: #005A9E; }
```

```
.error { color: red; margin-top: 10px; }
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<h2>Login</h2>
```

```
<asp:Label ID="lblError" runat="server" CssClass="error"></asp:Label>
```

```
<label for="txtUsername">Username:</label>
```

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

```
<label for="txtPassword">Password:</label>

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

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

</form>

</body>

</html>
```

```
Imports System.Data.SqlClient
```

```
Partial Class Login
```

```
    Inherits System.Web.UI.Page
```

```
    Private connectionString As String = "Data Source=DESKTOP-6EPGA6H;Initial
    Catalog=QuizDB;Integrated Security=True"
```

```
    Protected Sub btnLogin_Click(sender As Object, e As EventArgs)
```

```
        Dim username As String = txtUsername.Text.Trim()
```

```
        Dim password As String = txtPassword.Text.Trim()
```

```
        lblError.Text = ""
```

```
        ' Validate input
```

```
        If String.IsNullOrEmpty(username) OrElse String.IsNullOrEmpty(password) Then
```

```
lblError.Text = "Please enter username and password."

Return

End If

' Hardcoded admin login
If username.ToLower() = "admin" AndAlso password = "admin123" Then

    Session("UserID") = 0

    Session("UserRole") = "admin"

    ' Debug message (optional)
    ' lblError.Text = "Admin login successful, redirecting..."

    Response.Redirect("AdminDashboard.aspx", False)

    Context.ApplicationInstance.CompleteRequest()

    Return

End If

' Check user in database (teachers and students)
Try

    Using con As New SqlConnection(connectionString)

        Using cmd As New SqlCommand("SELECT UserID, Role FROM USERS WHERE
Username=@Username AND Password=@Password", con)

            cmd.Parameters.AddWithValue("@Username", username)

            cmd.Parameters.AddWithValue("@Password", password) ' In production, use
hashed passwords!

            con.Open()

            Using reader = cmd.ExecuteReader()
```

```
If reader.Read() Then
```

```
    Dim userID As Integer = Convert.ToInt32(reader("UserID"))
```

```
    Dim role As String = reader("Role").ToString()
```

```
    Session("UserID") = userID
```

```
    Session("UserRole") = role
```

```
    Select Case role.ToLower()
```

```
        Case "teacher"
```

```
            Response.Redirect("TeacherDashboard.aspx", False)
```

```
        Case "student"
```

```
            Response.Redirect("StudentDashboard.aspx", False)
```

```
        Case Else
```

```
            lblError.Text = "User role not recognized."
```

```
            Return
```

```
    End Select
```

```
    Context.ApplicationInstance.CompleteRequest()
```

```
    Return
```

```
Else
```

```
    lblError.Text = "Invalid username or password."
```

```
End If
```

```
End Using
```

```
End Using
```

```
End Using
```

```
Catch ex As Exception
```

```
        lblError.Text = "An error occurred: " & ex.Message
    End Try
End Sub
End Class

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="AdminDashboard.aspx.vb"
Inherits="AdminDashboard" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Admin Dashboard - Manage Users</title>
    <style>
        body {
            font-family: Arial;
            margin: 20px;
            background-color: #f9f9f9;
        }

        h2 {
            color: darkblue;
        }

        table, th, td {
            border: 1px solid black;
            border-collapse: collapse;
```

```
padding: 8px;  
}
```

```
table {  
  width: 100%;  
  margin-top: 10px;  
}
```

```
input[type="text"], input[type="password"], select {  
  padding: 5px;  
  width: 200px;  
  margin-bottom: 5px;  
}
```

```
.btn {  
  padding: 5px 10px;  
  margin-right: 5px;  
}
```

```
.message {  
  margin-top: 10px;  
  font-weight: bold;  
}
```

```
.top-right {  
  float: right;
```

```
margin-top: -40px;

}

</style>

</head>

<body>

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

        <h2>Admin Dashboard - User Management</h2>

        <asp:Button ID="btnLogout" runat="server" Text="Logout" CssClass="btn top-right"
        OnClick="btnLogout_Click" />

        <asp:Label ID="lblMessage" runat="server" CssClass="message"></asp:Label><br />

        <b>Add / Update User:</b><br />

        <asp:HiddenField ID="hfUserID" runat="server" />

        Username:<br />

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

        Password:<br />

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

        Role:<br />

        <asp:DropDownList ID="ddlRole" runat="server">

            <asp:ListItem Text="Student" Value="Student" />

            <asp:ListItem Text="Teacher" Value="Teacher" />

        </asp:DropDownList><br /><br />

        <asp:Button ID="btnSave" runat="server" Text="Save" CssClass="btn"
        OnClick="btnSave_Click" />

    </form>

</body>

</html>
```



```
<asp:Button ID="btnCancel" runat="server" Text="Cancel" CssClass="btn"
OnClick="btnCancel_Click" /><br /><br />
```

```
<h3>All Registered Users (Except Admin)</h3>
```

```
<asp:GridView ID="gvUsers" runat="server" AutoGenerateColumns="False"
DataKeyNames="UserID" OnRowEditing="gvUsers_RowEditing"
OnRowDeleting="gvUsers_RowDeleting">
```

```
<Columns>
```

```
<asp:BoundField DataField="UserID" HeaderText="ID" ReadOnly="True" />
```

```
<asp:BoundField DataField="Username" HeaderText="Username" />
```

```
<asp:BoundField DataField="Password" HeaderText="Password" />
```

```
<asp:BoundField DataField="Role" HeaderText="Role" />
```

```
<asp:CommandField ShowEditButton="True" ShowDeleteButton="True" />
```

```
</Columns>
```

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

```
</form>
```

```
</body>
```

```
</html>
```

```
Imports System.Data
```

```
Imports System.Data.SqlClient
```

```
Partial Class AdminDashboard
```

```
Inherits System.Web.UI.Page
```

```
' Update this with your actual DB connection string
```

QUIZ APPLICATION

```
Private connectionString As String = "Data Source=DESKTOP-6EPGA6H;Initial  
Catalog=QuizDB;Integrated Security=True"
```

```
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
```

```
    If Not IsPostBack Then
```

```
        If Session("UserRole") Is Nothing OrElse Session("UserRole").ToString().ToLower() <>  
"admin" Then
```

```
            Response.Redirect("Login.aspx")
```

```
        End If
```

```
        LoadUsers()
```

```
    End If
```

```
End Sub
```

```
Private Sub LoadUsers()
```

```
    Using con As New SqlConnection(connectionString)
```

```
        ' Filter out admin user from the list
```

```
        Dim cmd As New SqlCommand("SELECT * FROM USERS WHERE Role <> 'Admin'",  
con)
```

```
        Dim da As New SqlDataAdapter(cmd)
```

```
        Dim dt As New DataTable()
```

```
        da.Fill(dt)
```

```
        gvUsers.DataSource = dt
```

```
        gvUsers.DataBind()
```

```
    End Using
```

```
End Sub
```

```
Protected Sub btnSave_Click(sender As Object, e As EventArgs)
```

```
    Dim username = txtUsername.Text.Trim()
```

```
    Dim password = txtPassword.Text.Trim()
```

```
    Dim role = ddlRole.SelectedValue
```

```
    If username = "" OrElse password = "" Then
```

```
        lblMessage.ForeColor = Drawing.Color.Red
```

```
        lblMessage.Text = "Username and password cannot be empty."
```

```
        Return
```

```
    End If
```

```
    Using con As New SqlConnection(connectionString)
```

```
        con.Open()
```

```
        If hfUserID.Value = "" Then
```

```
            ' Insert new user
```

```
            Dim cmd As New SqlCommand("INSERT INTO USERS (Username, Password, Role)  
VALUES (@Username, @Password, @Role)", con)
```

```
            cmd.Parameters.AddWithValue("@Username", username)
```

```
            cmd.Parameters.AddWithValue("@Password", password)
```

```
            cmd.Parameters.AddWithValue("@Role", role)
```

```
            Try
```

```
                cmd.ExecuteNonQuery()
```

```
                lblMessage.ForeColor = Drawing.Color.Green
```

```
                lblMessage.Text = "User added successfully."
```

```
            Catch ex As SqlException
```

```
lblMessage.ForeColor = Drawing.Color.Red

If ex.Number = 2627 Then

    lblMessage.Text = "Username already exists."

Else

    lblMessage.Text = "Error: " & ex.Message

End If

End Try

Else

    ' Update existing user

    Dim cmd As New SqlCommand("UPDATE USERS SET Username=@Username,
Password=@Password, Role=@Role WHERE UserID=@UserID", con)

    cmd.Parameters.AddWithValue("@Username", username)
    cmd.Parameters.AddWithValue("@Password", password)
    cmd.Parameters.AddWithValue("@Role", role)
    cmd.Parameters.AddWithValue("@UserID", hfUserID.Value)
    cmd.ExecuteNonQuery()

    lblMessage.ForeColor = Drawing.Color.Green

    lblMessage.Text = "User updated successfully."

End If

End Using

ClearForm()

LoadUsers()

End Sub

Protected Sub gvUsers_RowEditing(sender As Object, e As GridViewEditEventArgs)
```

QUIZ APPLICATION

```
Dim userID As Integer = Convert.ToInt32(gvUsers.DataKeys(e.NewEditIndex).Value)

Using con As New SqlConnection(connectionString)

    Dim cmd As New SqlCommand("SELECT * FROM USERS WHERE UserID=@UserID",
con)

    cmd.Parameters.AddWithValue("@UserID", userID)

    con.Open()

    Dim rdr As SqlDataReader = cmd.ExecuteReader()

    If rdr.Read() Then

        hfUserID.Value = rdr("UserID").ToString()

        txtUsername.Text = rdr("Username").ToString()

        txtPassword.Text = rdr("Password").ToString()

        ddlRole.SelectedValue = rdr("Role").ToString()

    End If

End Using

End Sub
```

```
Protected Sub gvUsers_RowDeleting(sender As Object, e As GridViewDeleteEventArgs)

    Dim userID As Integer = Convert.ToInt32(gvUsers.DataKeys(e.RowIndex).Value)

    Using con As New SqlConnection(connectionString)

        Dim cmd As New SqlCommand("DELETE FROM USERS WHERE UserID=@UserID",
con)

        cmd.Parameters.AddWithValue("@UserID", userID)

        con.Open()

        cmd.ExecuteNonQuery()

    End Using

    lblMessage.ForeColor = Drawing.Color.Green
```

```
lblMessage.Text = "User deleted successfully."
```

```
LoadUsers()
```

```
End Sub
```

```
Protected Sub btnCancel_Click(sender As Object, e As EventArgs)
```

```
ClearForm()
```

```
End Sub
```

```
Private Sub ClearForm()
```

```
txtUsername.Text = ""
```

```
txtPassword.Text = ""
```

```
ddlRole.SelectedIndex = 0
```

```
hfUserID.Value = ""
```

```
End Sub
```

```
' *** Logout button event handler ***
```

```
Protected Sub btnLogout_Click(sender As Object, e As EventArgs)
```

```
Session.Clear()
```

```
Session.Abandon()
```

```
Response.Redirect("Login.aspx")
```

```
End Sub
```

```
End Class
```

```
<%@ Page Language="VB" AutoEventWireup="false"
CodeFile="TeacherDashboard.aspx.vb" Inherits="TeacherDashboard" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

    <title>Teacher Dashboard</title>

    <style>

        .btn { padding: 8px 16px; background-color: #007ACC; color: white; border: none;
cursor: pointer; }

        .btn:hover { background-color: #005A9E; }

        .top-right { position: absolute; top: 10px; right: 10px; }

        .container { max-width: 800px; margin: 50px auto; font-family: Arial, sans-serif; }

        h2 { margin-bottom: 20px; }

        .table { width: 100%; border-collapse: collapse; margin-bottom: 20px; }

        .table th, .table td { border: 1px solid #ddd; padding: 8px; text-align: left; }

        .table th { background-color: #f4f4f4; }

    </style>

</head>

<body>

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

        <div class="container">

            <asp:Button ID="btnLogout" runat="server" Text="Logout" CssClass="btn top-right"
OnClick="btnLogout_Click" />

            <h2>Welcome, Teacher</h2>
```

QUIZ APPLICATION

```
<asp:Button ID="btnCreateQuiz" runat="server" Text="Create New Quiz"
CssClass="btn" OnClick="btnCreateQuiz_Click" /><br /><br />
```

```
<asp:GridView ID="gvQuizzes" runat="server" AutoGenerateColumns="False"
CssClass="table"
```

```
    DataKeyNames="QuizID" OnRowCommand="gvQuizzes_RowCommand">
```

```
    <Columns>
```

```
        <asp:BoundField DataField="QuizID" HeaderText="Quiz ID" />
```

```
        <asp:BoundField DataField="QuizTitle" HeaderText="Quiz Title" />
```

```
        <asp:ButtonField Text="Edit Questions" ButtonType="Button"
CommandName="EditQuestions" />
```

```
    </Columns>
```

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

```
</div>
```

```
</form>
```

```
</body>
```

```
</html>
```

```
Imports System.Data
```

```
Imports System.Data.SqlClient
```

```
Partial Class TeacherDashboard
```

```
    Inherits System.Web.UI.Page
```

```
    ' Replace YOUR_SERVER_NAME and QuizDB with your actual server and database
```


QUIZ APPLICATION

```
Private connectionString As String = "Data Source=DESKTOP-6EPGA6H;Initial  
Catalog=QuizDB;Integrated Security=True"
```

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles  
Me.Load
```

```
    If Session("UserID") Is Nothing OrElse Session("UserRole") Is Nothing OrElse  
Session("UserRole").ToString() <> "Teacher" Then
```

```
        Response.Redirect("Login.aspx")
```

```
    End If
```

```
    If Not IsPostBack Then
```

```
        LoadQuizzes()
```

```
    End If
```

```
End Sub
```

```
Private Sub LoadQuizzes()
```

```
    Dim teacherUserID As Integer = Convert.ToInt32(Session("UserID"))
```

```
    Dim dt As New DataTable()
```

```
    Using con As New SqlConnection(connectionString)
```

```
        Using cmd As New SqlCommand("SELECT QuizID, QuizTitle FROM QUIZZES WHERE  
CreatedBy = @TeacherID ORDER BY QuizID DESC", con)
```

```
            cmd.Parameters.AddWithValue("@TeacherID", teacherUserID)
```

```
            Using sda As New SqlDataAdapter(cmd)
```

```
                sda.Fill(dt)
```

```
            End Using
```

```
        End Using
```

End Using

gvQuizzes.DataSource = dt

gvQuizzes.DataBind()

End Sub

Protected Sub gvQuizzes_RowCommand(sender As Object, e As
GridViewCommandEventArgs)

If e.CommandName = "EditQuestions" Then

Dim index As Integer = Convert.ToInt32(e.CommandArgument)

Dim quizID As Integer = Convert.ToInt32(gvQuizzes.DataKeys(index).Value)

Response.Redirect("AddQuestions.aspx?QuizID=" & quizID)

End If

End Sub

Protected Sub btnCreateQuiz_Click(sender As Object, e As EventArgs)

Response.Redirect("CreateQuiz.aspx")

End Sub

Protected Sub btnLogout_Click(sender As Object, e As EventArgs)

Session.Clear()

Session.Abandon()

Response.Redirect("Login.aspx")

End Sub

End Class

```
<%@ Page Language="VB" AutoEventWireup="false"
CodeFile="StudentDashboard.aspx.vb" Inherits="StudentDashboard" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

    <title>Student Dashboard - Attempt Quiz</title>

    <style>

        body { font-family: Arial; padding: 20px; }

        .question-box { border: 1px solid #ccc; padding: 15px; margin-bottom: 20px; border-
radius: 5px; }

        .option { margin-left: 20px; }

        .submit-button { padding: 10px 20px; background-color: #4CAF50; color: white; border:
none; border-radius: 5px; cursor: pointer; }

        .submit-button:hover { background-color: #45a049; }

    </style>

</head>

<body>

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

        <asp:Panel ID="pnlQuiz" runat="server">

            <asp:Literal ID="litQuestions" runat="server"></asp:Literal>

            <asp:Button ID="btnSubmit" runat="server" Text="Submit Quiz" CssClass="submit-
button" OnClick="btnSubmit_Click" />

        </asp:Panel>

        <asp:Panel ID="pnlResult" runat="server" Visible="false">
```

```
<h2>Quiz Completed</h2>

<asp:Label ID="lblResult" runat="server" Font-Bold="true"></asp:Label>

</asp:Panel>

</form>

</body>

</html>

Imports System
Imports System.Data
Imports System.Data.SqlClient

Partial Class StudentDashboard
    Inherits System.Web.UI.Page

    Dim connStr As String = "Data Source=.;Initial Catalog=QuizDB;Integrated Security=True"

    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs)
        Handles Me.Load

        If Not IsPostBack Then
            LoadQuestions()
        End If
    End Sub

    Private Sub LoadQuestions()

        Dim con As New SqlConnection(connStr)
```

QUIZ APPLICATION

```
Dim cmd As New SqlCommand("SELECT * FROM Questions", con)
```

```
Dim da As New SqlDataAdapter(cmd)
```

```
Dim dt As New DataTable()
```

```
da.Fill(dt)
```

```
' Shuffle questions
```

```
Dim rnd As New Random()
```

```
Dim shuffledRows = dt.Select().OrderBy(Function(r) rnd.Next()).ToList()
```

```
Dim html As String = ""
```

```
Dim index As Integer = 1
```

```
For Each row As DataRow In shuffledRows
```

```
    html &= "<div class='question-box'>"
```

```
    html &= "<strong>Q" & index & ": " & row("QuestionText") & "</strong><br/>"
```

```
    Dim options As New List(Of String) From {
```

```
        row("OptionA").ToString(),
```

```
        row("OptionB").ToString(),
```

```
        row("OptionC").ToString(),
```

```
        row("OptionD").ToString()
```

```
    }
```

```
    options = options.OrderBy(Function(x) rnd.Next()).ToList()
```

```
    For Each opt As String In options
```

QUIZ APPLICATION

```
html &= "<div class='option'><input type='radio' name='q' & row("QuestionID") & "
value="" & opt & "" /> " & opt & "</div>"
```

```
Next
```

```
html &= "</div>"
```

```
index += 1
```

```
Next
```

```
litQuestions.Text = html
```

```
End Sub
```

```
Protected Sub btnSubmit_Click(ByVal sender As Object, ByVal e As EventArgs)
```

```
Dim con As New SqlConnection(connStr)
```

```
Dim cmdQ As New SqlCommand("SELECT QuestionID, CorrectAnswer FROM
Questions", con)
```

```
Dim da As New SqlDataAdapter(cmdQ)
```

```
Dim dt As New DataTable()
```

```
da.Fill(dt)
```

```
Dim total As Integer = dt.Rows.Count
```

```
Dim correct As Integer = 0
```

```
For Each row As DataRow In dt.Rows
```

```
Dim qid As String = row("QuestionID").ToString()
```

```
Dim correctAns As String = row("CorrectAnswer").ToString()
```

```
Dim userAns As String = Request.Form("q" & qid)
```

```
If Not String.IsNullOrEmpty(userAns) AndAlso userAns = correctAns Then
    correct += 1
End If
Next

Dim score As Integer = correct

' Save result

Dim insertCmd As New SqlCommand("INSERT INTO StudentResults(StudentID, Score,
AttemptDate) VALUES(@sid, @score, @date)", con)

insertCmd.Parameters.AddWithValue("@sid", 1) ' Replace with session-based ID later
insertCmd.Parameters.AddWithValue("@score", score)
insertCmd.Parameters.AddWithValue("@date", DateTime.Now)

con.Open()
insertCmd.ExecuteNonQuery()
con.Close()

pnlQuiz.Visible = False
pnlResult.Visible = True

lblResult.Text = "You scored " & score & " out of " & total & "."

End Sub

End Class
```

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="CreateQuiz.aspx.vb"
Inherits="CreateQuiz" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head runat="server">

    <title>Create Quiz</title>

    <style>

        body { font-family: Arial; margin: 40px; }

        .container { max-width: 400px; padding: 20px; border: 1px solid #ccc; border-radius:
10px; background: #f9f9f9; }

        .form-group { margin-bottom: 15px; }

        .form-group label { display: block; margin-bottom: 5px; font-weight: bold; }

        .form-group input { width: 100%; padding: 8px; }

        .btn { background: #4CAF50; color: white; padding: 10px 15px; border: none; border-
radius: 5px; cursor: pointer; }

        .btn:hover { background: #45a049; }

        .message { margin-top: 10px; font-weight: bold; color: green; }

    </style>

</head>

<body>

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

        <div class="container">

            <h2>Create New Quiz</h2>

            <div class="form-group">

                <label for="txtQuizTitle">Quiz Title:</label>
```


QUIZ APPLICATION

```
<asp:TextBox ID="txtQuizTitle" runat="server" CssClass="form-control"></asp:TextBox>

</div>

<asp:Button ID="btnSave" runat="server" Text="Create Quiz" CssClass="btn"
OnClick="btnSave_Click" />

<br />

<asp:Label ID="lblMessage" runat="server" CssClass="message" />

</div>

</form>

</body>

</html>
```

```
Imports System.Data.SqlClient
```

```
Partial Class CreateQuiz
```

```
Inherits System.Web.UI.Page
```

```
' Your connection string here
```

```
Private connectionString As String = "Data Source=DESKTOP-6EPGA6H;Initial
Catalog=QuizDB;Integrated Security=True"
```

```
Protected Sub btnSave_Click(sender As Object, e As EventArgs) Handles btnSave.Click
```

```
Dim quizTitle As String = txtQuizTitle.Text.Trim()
```

```
Dim teacherUserID As Integer
```

```
' Validate input
```

```
If String.IsNullOrEmpty(quizTitle) Then
```

```
    lblMessage.Text = "Please enter a quiz title."
```

```
    lblMessage.ForeColor = System.Drawing.Color.Red
```

```
    Return
```

```
End If
```

```
' Assume teacher UserID is stored in Session after login
```

```
If Session("UserID") Is Nothing OrElse Session("Role") Is Nothing OrElse  
Session("Role").ToString() <> "Teacher" Then
```

```
    lblMessage.Text = "Unauthorized access. Please login as Teacher."
```

```
    lblMessage.ForeColor = System.Drawing.Color.Red
```

```
    Return
```

```
End If
```

```
teacherUserID = Convert.ToInt32(Session("UserID"))
```

```
' Insert new quiz into QUIZZES table
```

```
Using con As New SqlConnection(connectionString)
```

```
    Using cmd As New SqlCommand("INSERT INTO QUIZZES (Title, CreatedBy) VALUES  
(@Title, @CreatedBy)", con)
```

```
        cmd.Parameters.AddWithValue("@Title", quizTitle)
```

```
        cmd.Parameters.AddWithValue("@CreatedBy", teacherUserID)
```

```
Try
```

```
con.Open()

cmd.ExecuteNonQuery()

lblMessage.Text = "Quiz created successfully."

lblMessage.ForeColor = System.Drawing.Color.Green

txtQuizTitle.Text = ""

Catch ex As Exception

    lblMessage.Text = "Error: " & ex.Message

    lblMessage.ForeColor = System.Drawing.Color.Red

End Try

End Using

End Using

End Sub

End Class

<%@ Page Language="vb" AutoEventWireup="false" CodeFile="AddQuestions.aspx.vb"
Inherits="AddQuestions" %>

<!DOCTYPE html>

<html>

<head>

    <title>Add Questions</title>

    <style>

        body { font-family: Arial, sans-serif; margin: 30px; }

        label, input, textarea, button { display: block; margin-bottom: 10px; }

        textarea { width: 400px; height: 80px; padding: 6px; }
```

```
input[type=text] { width: 300px; padding: 6px; }

button {

    background-color: #4CAF50; color: white; padding: 8px 16px; border: none;

    cursor: pointer; border-radius: 4px;

}

button:hover { background-color: #45a049; }

.message { color: green; margin-top: 15px; }

.option-group { margin-bottom: 10px; }

.option-label { display: inline-block; width: 20px; }

</style>

</head>

<body>

    <h2>Add Question to Quiz ID: <asp:Label ID="lblQuizID" runat="server" /></h2>

    <asp:Label ID="lblMessage" runat="server" CssClass="message"></asp:Label>

    <asp:Label Text="Question Text:" AssociatedControlID="txtQuestionText"
runat="server"></asp:Label>

    <asp:TextBox ID="txtQuestionText" runat="server" TextMode="MultiLine"></asp:TextBox>

    <h3>Options (Select the correct one):</h3>

    <asp:RadioButtonList ID="rblCorrectOption" runat="server" RepeatDirection="Vertical">

        <asp:ListItem Value="1">Option 1</asp:ListItem>

        <asp:ListItem Value="2">Option 2</asp:ListItem>

        <asp:ListItem Value="3">Option 3</asp:ListItem>

    </asp:RadioButtonList>

</body>

</html>
```

```
<asp:ListItem Value="4">Option 4</asp:ListItem>
```

```
</asp:RadioButtonList>
```

```
<asp:TextBox ID="txtOption1" runat="server" placeholder="Option 1"></asp:TextBox>
```

```
<asp:TextBox ID="txtOption2" runat="server" placeholder="Option 2"></asp:TextBox>
```

```
<asp:TextBox ID="txtOption3" runat="server" placeholder="Option 3"></asp:TextBox>
```

```
<asp:TextBox ID="txtOption4" runat="server" placeholder="Option 4"></asp:TextBox>
```

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

```
<br />
```

```
<asp:HyperLink ID="hlBack" runat="server"
NavigateUrl="TeacherDashboard.aspx">Back to Dashboard</asp:HyperLink>
```

```
</body>
```

```
</html>
```

```
Imports System.Data.SqlClient
```

```
Partial Class AddQuestions
```

```
Inherits System.Web.UI.Page
```

```
Dim connectionString As String = "Data Source=DESKTOP-6EPGA6H;Initial
Catalog=QuizDB;Integrated Security=True"
```

```
Dim quizID As Integer = 0
```

```
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
```

```
    If Not IsPostBack Then
```

```
        If Integer.TryParse(Request.QueryString("QuizID"), quizID) Then
```

```
            lblQuizID.Text = quizID.ToString()
```

```
        Else
```

```
            Response.Redirect("TeacherDashboard.aspx")
```

```
        End If
```

```
    Else
```

```
        Integer.TryParse(Request.QueryString("QuizID"), quizID)
```

```
    End If
```

```
End Sub
```

```
Protected Sub btnSubmit_Click(sender As Object, e As EventArgs)
```

```
    Dim questionText As String = txtQuestionText.Text.Trim()
```

```
    Dim options As New List(Of String) From {
```

```
        txtOption1.Text.Trim(),
```

```
        txtOption2.Text.Trim(),
```

```
        txtOption3.Text.Trim(),
```

```
        txtOption4.Text.Trim()
```

```
    }
```

```
    Dim correctOptionValue As String = rblCorrectOption.SelectedValue
```

```
    ' Validate inputs
```

```
    If String.IsNullOrEmpty(questionText) Then
```

```
        lblMessage.Text = "Question text cannot be empty."
```

```
        lblMessage.ForeColor = Drawing.Color.Red
```

Return

End If

If options.Any(Function(opt) String.IsNullOrEmpty(opt)) Then

lblMessage.Text = "All options must be filled."

lblMessage.ForeColor = Drawing.Color.Red

Return

End If

If String.IsNullOrEmpty(correctOptionValue) Then

lblMessage.Text = "Please select the correct option."

lblMessage.ForeColor = Drawing.Color.Red

Return

End If

Dim correctOptionIndex As Integer = Convert.ToInt32(correctOptionValue) ' 1-based index

' Insert question and options in database

Using conn As New SqlConnection(connectionString)

conn.Open()

Dim trans As SqlTransaction = conn.BeginTransaction()

Try

' Insert question

QUIZ APPLICATION

```
Dim insertQuestionQuery As String = "INSERT INTO QUESTIONS (QuizID,  
QuestionText) OUTPUT INSERTED.QuestionID VALUES (@QuizID, @QuestionText)"
```

```
Dim questionID As Integer
```

```
Using cmd As New SqlCommand(insertQuestionQuery, conn, trans)
```

```
cmd.Parameters.AddWithValue("@QuizID", quizID)
```

```
cmd.Parameters.AddWithValue("@QuestionText", questionText)
```

```
questionID = Convert.ToInt32(cmd.ExecuteScalar())
```

```
End Using
```

```
' Insert options
```

```
Dim insertOptionQuery As String = "INSERT INTO OPTIONS (QuestionID,  
OptionText, IsCorrect) VALUES (@QuestionID, @OptionText, @IsCorrect)"
```

```
For i As Integer = 0 To 3
```

```
Using cmdOpt As New SqlCommand(insertOptionQuery, conn, trans)
```

```
cmdOpt.Parameters.AddWithValue("@QuestionID", questionID)
```

```
cmdOpt.Parameters.AddWithValue("@OptionText", options(i))
```

```
cmdOpt.Parameters.AddWithValue("@IsCorrect", If(i + 1 = correctOptionIndex,  
1, 0))
```

```
cmdOpt.ExecuteNonQuery()
```

```
End Using
```

```
Next
```

```
trans.Commit()
```

```
lblMessage.ForeColor = Drawing.Color.Green
```

```
lblMessage.Text = "Question and options added successfully."
```


' Clear inputs

txtQuestionText.Text = ""

txtOption1.Text = ""

txtOption2.Text = ""

txtOption3.Text = ""

txtOption4.Text = ""

rblCorrectOption.ClearSelection()

Catch ex As Exception

trans.Rollback()

lblMessage.ForeColor = Drawing.Color.Red

lblMessage.Text = "Error: " & ex.Message

End Try

End Using

End Sub

End Class