

Social Media Platform

Default.aspx

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

```
<!DOCTYPE html>
```

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

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

```
<title>Database Lab Project</title>
```

```
<style>
```

```
body {
```

```
    font-family: Arial, sans-serif;
```

```
    margin: 20px;
```

```
    line-height: 1.6;
```

```
}
```

```
.problem-statement {
```

```
    background-color: #f8f9fa;
```

```
    border-left: 4px solid #4285f4;
```

```
    padding: 15px;
```

```
    margin-bottom: 20px;
```

```
}
```

```
.demo-button {
```

```
    display: inline-block;
```

```
    background-color: #4285f4;
```

```
    color: white;
```

```
    padding: 10px 15px;
```

```
text-decoration: none;

border-radius: 4px;

margin: 10px 0;

font-weight: bold;

}
```

```
.demo-button:hover {

    background-color: #3367d6;

}
```

```
.pdf-link {

    display: inline-block;

    background-color: #f44336;

    color: white;

    padding: 10px 15px;

    text-decoration: none;

    border-radius: 4px;

    margin: 10px 0 20px 0;

    font-weight: bold;

}
```

```
.pdf-link:hover {

    background-color: #d32f2f;

}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<div>
```

```
<h1>Semester Project</h1>
```

```
<div class="problem-statement">

    <h2>Social Media Platform</h2>

    <p>A social Media Platform Where Users can create post like them and comment on
them</p>

</div>

<a href="Feed.aspx" class="demo-button">Demo</a>

<br />

<a href="" class="pdf-link">Code Page</a>

</div>

</form>

</body>

</html>
```

Default.aspx.vb

Partial Class _Default

Inherits System.Web.UI.Page

End Class

Admin.aspx

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

```
<!DOCTYPE html>
```

```
<html>
```

```
<head runat="server">

    <title>Admin Dashboard</title>

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <!-- Bootstrap CSS -->

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

    <!-- Font Awesome for icons -->

    <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css"
rel="stylesheet">

<style>

    body {

        background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);

        min-height: 100vh;

        font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

    }

    .dashboard-container {

        background: rgba(255, 255, 255, 0.95);

        backdrop-filter: blur(10px);

        border-radius: 20px;

        box-shadow: 0 15px 35px rgba(0, 0, 0, 0.1);

        margin: 20px;

        padding: 30px;

    }

    .dashboard-header {

        background: linear-gradient(135deg, #4facfe 0%, #00f2fe 100%);

        color: white;

        padding: 25px;

        border-radius: 15px;

        margin-bottom: 30px;

    }
```

```
text-align: center;

box-shadow: 0 8px 25px rgba(0, 0, 0, 0.15);

}
```

```
.section-header {

background: linear-gradient(135deg, #fa709a 0%, #fee140 100%);

color: white;

padding: 15px 25px;

border-radius: 10px;

margin: 30px 0 20px 0;

box-shadow: 0 5px 15px rgba(0, 0, 0, 0.1);

}
```

```
.section-header h2 {

margin: 0;

font-weight: 600;

}
```

```
.custom-table {

background: white;

border-radius: 15px;

overflow: hidden;

box-shadow: 0 8px 25px rgba(0, 0, 0, 0.1);

margin-bottom: 30px;

}
```

```
.custom-table table {

margin: 0;

}
```

```
.custom-table th {
```

```
background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
color: white;
font-weight: 600;
border: none;
padding: 15px 12px;
}
```

```
.custom-table td {
padding: 12px;
border-bottom: 1px solid #f0f0f0;
vertical-align: middle;
}
```

```
.custom-table tr:hover {
background-color: #f8f9ff;
transform: translateY(-1px);
transition: all 0.3s ease;
}
```

```
.btn-delete {
background: linear-gradient(135deg, #ff6b6b 0%, #ee5a52 100%);
border: none;
padding: 8px 15px;
border-radius: 8px;
color: white;
font-weight: 500;
transition: all 0.3s ease;
box-shadow: 0 4px 15px rgba(255, 107, 107, 0.3);
}
```

```
.btn-delete:hover {
```

```
transform: translateY(-2px);  
  
box-shadow: 0 6px 20px rgba(255, 107, 107, 0.4);  
  
background: linear-gradient(135deg, #ff5252 0%, #d32f2f 100%);  
}
```

```
.alert-custom {  
  border-radius: 15px;  
  border: none;  
  padding: 20px;  
  margin-bottom: 25px;  
  box-shadow: 0 5px 15px rgba(0, 0, 0, 0.1);  
}
```

```
.stats-card {  
  background: linear-gradient(135deg, #84fab0 0%, #8fd3f4 100%);  
  color: white;  
  padding: 25px;  
  border-radius: 15px;  
  text-align: center;  
  margin-bottom: 20px;  
  box-shadow: 0 8px 25px rgba(0, 0, 0, 0.1);  
}
```

```
.stats-number {  
  font-size: 2.5rem;  
  font-weight: bold;  
  margin-bottom: 5px;  
}
```

```
.content-preview {  
  max-width: 200px;
```

```
        overflow: hidden;

        text-overflow: ellipsis;

        white-space: nowrap;
    }

    .loading-spinner {
        display: none;

        text-align: center;

        padding: 20px;
    }

    @media (max-width: 768px) {
        .dashboard-container {
            margin: 10px;

            padding: 20px;
        }

        .custom-table {
            font-size: 0.9rem;
        }

        .content-preview {
            max-width: 150px;
        }
    }
</style>
</head>

<body>

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

        <div class="container-fluid">
```

```

<div class="dashboard-container">

    <!-- Header -->

    <div class="dashboard-header">

        <h1><i class="fas fa-tachometer-alt me-3"></i>Admin Dashboard</h1>

        <p class="mb-0">Manage users and posts efficiently</p>

    </div>


    <!-- Error Alert -->

    <asp:Panel ID="pnlError" runat="server" Visible="false" CssClass="alert alert-danger alert-
custom">

        <i class="fas fa-exclamation-triangle me-2"></i>

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

    </asp:Panel>


    <!-- Success Alert -->

    <asp:Panel ID="pnlSuccess" runat="server" Visible="false" CssClass="alert alert-success
alert-custom">

        <i class="fas fa-check-circle me-2"></i>

        <asp:Label ID="lblSuccess" runat="server" />

    </asp:Panel>


    <!-- Statistics Cards -->

    <div class="row mb-4">

        <div class="col-md-6">

            <div class="stats-card">

                <div class="stats-number">

                    <asp:Label ID="lblUserCount" runat="server" Text="0" />

                </div>

                <div>Total Users</div>

            </div>

        </div>

        <div class="col-md-6">

```

```

<div class="stats-card">
    <div class="stats-number">
        <asp:Label ID="lblPostCount" runat="server" Text="0" />
    </div>
    <div>Total Posts</div>
</div>
</div>
</div>

```

```

<!-- Users Section -->

```

```

<div class="section-header">
    <h2><i class="fas fa-users me-2"></i>Users Management</h2>
</div>

```

```

<div class="custom-table">
    <asp:GridView ID="gvUsers" runat="server" AutoGenerateColumns="False"
        CssClass="table table-hover mb-0" OnRowCommand="gvUsers_RowCommand">
        <Columns>
            <asp:BoundField DataField="id" HeaderText="ID" />
            <asp:BoundField DataField="user_name" HeaderText="Name" />
            <asp:BoundField DataField="user_email" HeaderText="Email" />
            <asp:BoundField DataField="username" HeaderText="Username" />
            <asp:BoundField DataField="location" HeaderText="Location" />
            <asp:BoundField DataField="created_at" HeaderText="Created At"
                DataFormatString="{0:yyyy-MM-dd}" />
            <asp:TemplateField HeaderText="Actions">
                <ItemTemplate>
                    <asp:Button ID="btnDeleteUser" runat="server"
                        CommandName="DeleteUser"
                        CommandArgument='<%# Eval("id") %>'
                        Text="Delete"

```

```
                CssClass="btn btn-delete btn-sm"

                OnClientClick="return confirm('Are you sure you want to delete this user? This
action cannot be undone.');" />
```

```
            </ItemTemplate>

        </asp:TemplateField>

    </Columns>

    <EmptyDataTemplate>

        <div class="text-center p-4">

            <i class="fas fa-users fa-3x text-muted mb-3"></i>

            <p class="text-muted">No users found</p>

        </div>

    </EmptyDataTemplate>

</asp:GridView>

</div>
```

```
<!-- Posts Section -->

<div class="section-header">

    <h2><i class="fas fa-file-alt me-2"></i>Posts Management</h2>

</div>
```

```
<div class="custom-table">

    <asp:GridView ID="gvPosts" runat="server" AutoGenerateColumns="False"

        CssClass="table table-hover mb-0" OnRowCommand="gvPosts_RowCommand">

        <Columns>

            <asp:BoundField DataField="post_id" HeaderText="Post ID" />

            <asp:TemplateField HeaderText="Content">

                <ItemTemplate>

                    <div class="content-preview" title='<%=# Eval("post_content") %>'>

                        <%=# Eval("post_content") %>

                    </div>

                </ItemTemplate>

            </asp:TemplateField>

        </Columns>

    </asp:GridView>

</div>
```

```

        </asp:TemplateField>

        <asp:BoundField DataField="post_type" HeaderText="Type" />

        <asp:BoundField DataField="post_location" HeaderText="Location" />

        <asp:BoundField DataField="created_at" HeaderText="Created At"
DataFormatString="{0:yyyy-MM-dd}" />

        <asp:BoundField DataField="user_name" HeaderText="User" />

        <asp:TemplateField HeaderText="Actions">

            <ItemTemplate>

                <asp:Button ID="btnDeletePost" runat="server"

                    CommandName="DeletePost"

                    CommandArgument='<%# Eval("post_id") %>'

                    Text="Delete"

                    CssClass="btn btn-delete btn-sm"

                    OnClientClick="return confirm('Are you sure you want to delete this post? This
action cannot be undone.');" />

            </ItemTemplate>

        </asp:TemplateField>

    </Columns>

    <EmptyDataTemplate>

        <div class="text-center p-4">

            <i class="fas fa-file-alt fa-3x text-muted mb-3"></i>

            <p class="text-muted">No posts found</p>

        </div>

    </EmptyDataTemplate>

</asp:GridView>

</div>

<!-- Loading Spinner -->

<div class="loading-spinner">

    <div class="spinner-border text-primary" role="status">

        <span class="visually-hidden">Loading...</span>

    </div>

```

```
        </div>
    </div>
</div>

<!-- Bootstrap JS -->

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></script>

<script>
    // Auto-hide alerts after 5 seconds
    setTimeout(function() {
        var alerts = document.querySelectorAll('.alert');
        alerts.forEach(function(alert) {
            alert.style.transition = 'opacity 0.5s';
            alert.style.opacity = '0';
            setTimeout(function() {
                alert.style.display = 'none';
            }, 500);
        });
    }, 5000);

    // Show loading spinner on form submission
    document.querySelector('form').addEventListener('submit', function() {
        document.querySelector('.loading-spinner').style.display = 'block';
    });
</script>
</form>
</body>
</html>
```

Admin.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Partial Class Admin

Inherits System.Web.UI.Page

Private ReadOnly connString As String =
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

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

' Check if user is logged in

If Session("UserID") Is Nothing Then

 Response.Redirect("Login.aspx")

 Return

End If

' Check user role (assuming role 2 is regular user, not admin)

If Session("UserRole") IsNot Nothing AndAlso Convert.ToInt32(Session("UserRole")) = 2 Then

 Response.Redirect("Feed.aspx")

 Return

End If

If Not IsPostBack Then

 Try

 LoadUsers()

 LoadPosts()

 LoadStatistics()

 HideAlerts()

 Catch ex As SqlException

```

        ShowError("Error loading data: " & ex.Message)
    End Try
End If
End Sub

Private Sub LoadUsers()
    Using conn As New SqlConnection(connString)
        conn.Open()

        Dim cmd As New SqlCommand("SELECT id, user_name, user_email, username, location,
created_at FROM users ORDER BY created_at DESC", conn)

        Dim dt As New DataTable()

        Using da As New SqlDataAdapter(cmd)
            da.Fill(dt)
        End Using

        gvUsers.DataSource = dt
        gvUsers.DataBind()
    End Using
End Sub

Private Sub LoadPosts()
    Using conn As New SqlConnection(connString)
        conn.Open()

        Dim query As String =
            "SELECT p.post_id, p.post_content, p.post_type, p.post_location, p.created_at,
u.user_name " &
            "FROM posts p INNER JOIN users u ON p.user_id = u.id ORDER BY p.created_at DESC"

        Dim cmd As New SqlCommand(query, conn)

        Dim dt As New DataTable()

        Using da As New SqlDataAdapter(cmd)
            da.Fill(dt)
        End Using
    End Using
End Sub

```

```
        gvPosts.DataSource = dt
        gvPosts.DataBind()
    End Using
End Sub
```

```
Private Sub LoadStatistics()
    Using conn As New SqlConnection(connString)
        conn.Open()

        ' Get user count
        Dim userCmd As New SqlCommand("SELECT COUNT(*) FROM users", conn)
        lblUserCount.Text = userCmd.ExecuteScalar().ToString()

        ' Get post count
        Dim postCmd As New SqlCommand("SELECT COUNT(*) FROM posts", conn)
        lblPostCount.Text = postCmd.ExecuteScalar().ToString()
    End Using
End Sub
```

```
Protected Sub gvUsers_RowCommand(sender As Object, e As GridViewCommandEventArgs)
    If e.CommandName = "DeleteUser" Then
        Dim userId As Integer = Convert.ToInt32(e.CommandArgument)
        DeleteUser(userId)
    End If
End Sub
```

```
Protected Sub gvPosts_RowCommand(sender As Object, e As GridViewCommandEventArgs)
    If e.CommandName = "DeletePost" Then
        Dim postId As Integer = Convert.ToInt32(e.CommandArgument)
        DeletePost(postId)
    End If
End Sub
```

End If

End Sub

Private Sub DeleteUser(userId As Integer)

Try

Using conn As New SqlConnection(connString)

conn.Open()

Using trans As SqlTransaction = conn.BeginTransaction()

Try

' First, delete comments on user's posts

Dim deleteCommentsCmd As New SqlCommand(

"DELETE FROM comments WHERE post_id IN (SELECT post_id FROM posts WHERE
user_id = @userId)",

conn, trans)

deleteCommentsCmd.Parameters.AddWithValue("@userId", userId)

Dim commentsDeleted As Integer = deleteCommentsCmd.ExecuteNonQuery()

' Second, delete comments made by the user

Dim deleteUserCommentsCmd As New SqlCommand("DELETE FROM comments
WHERE user_id = @userId", conn, trans)

deleteUserCommentsCmd.Parameters.AddWithValue("@userId", userId)

Dim userCommentsDeleted As Integer = deleteUserCommentsCmd.ExecuteNonQuery()

' Third, delete user's posts

Dim deletePostsCmd As New SqlCommand("DELETE FROM posts WHERE user_id =
@userId", conn, trans)

deletePostsCmd.Parameters.AddWithValue("@userId", userId)

Dim postsDeleted As Integer = deletePostsCmd.ExecuteNonQuery()

' Finally, delete the user

Dim deleteUserCmd As New SqlCommand("DELETE FROM users WHERE id = @userId",
conn, trans)

```

deleteUserCmd.Parameters.AddWithValue("@userId", userId)

Dim rowsAffected As Integer = deleteUserCmd.ExecuteNonQuery()

If rowsAffected > 0 Then
    trans.Commit()

    Dim message As String = String.Format("User deleted successfully. Removed: {0}
posts, {1} comments on posts, {2} user comments.",
                                           postsDeleted, commentsDeleted, userCommentsDeleted)

    ShowSuccess(message)

    LoadUsers()

    LoadPosts()

    LoadStatistics()
Else
    trans.Rollback()

    ShowError("User not found or could not be deleted.")
End If

Catch ex As Exception
    trans.Rollback()

    Throw ex
End Try

End Using

End Using

Catch ex As SqlException
    ShowError("Error deleting user: " & ex.Message)
End Try
End Sub

Private Sub DeletePost(postId As Integer)
    Try
        Using conn As New SqlConnection(connString)
            conn.Open()

```

```

Using trans As SqlTransaction = conn.BeginTransaction()

Try
    ' First delete comments on this post

    Dim deleteCommentsCmd As New SqlCommand("DELETE FROM comments WHERE
post_id = @postId", conn, trans)

    deleteCommentsCmd.Parameters.AddWithValue("@postId", postId)

    Dim commentsDeleted As Integer = deleteCommentsCmd.ExecuteNonQuery()

    ' Then delete the post

    Dim deletePostCmd As New SqlCommand("DELETE FROM posts WHERE post_id =
@postId", conn, trans)

    deletePostCmd.Parameters.AddWithValue("@postId", postId)

    Dim rowsAffected As Integer = deletePostCmd.ExecuteNonQuery()

    If rowsAffected > 0 Then

        trans.Commit()

        Dim message As String = String.Format("Post deleted successfully. Also removed {0}
comments.", commentsDeleted)

        ShowSuccess(message)

        LoadPosts()

        LoadStatistics()

    Else

        trans.Rollback()

        ShowError("Post not found or could not be deleted.")

    End If

Catch ex As Exception

    trans.Rollback()

    Throw ex

End Try

End Using

End Using

Catch ex As SqlException

```

```

        ShowError("Error deleting post: " & ex.Message)
    End Try
End Sub

Private Sub ShowError(message As String)
    lblError.Text = message
    pnlError.Visible = True
    pnlSuccess.Visible = False
End Sub

Private Sub ShowSuccess(message As String)
    lblSuccess.Text = message
    pnlSuccess.Visible = True
    pnlError.Visible = False
End Sub

Private Sub HideAlerts()
    pnlError.Visible = False
    pnlSuccess.Visible = False
End Sub
End Class

```

CreatePost.aspx

```

<%@ Page Language="VB" AutoEventWireup="true" CodeFile="CreatePost.aspx.vb"
Inherits="CreatePost" %>

<!DOCTYPE html>

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

<head runat="server">

    <title>Create New Post</title>

```

```
<!-- Bootstrap CSS -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet" />

<!-- Font Awesome Icons -->

<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css"
rel="stylesheet" />

<!-- Google Fonts -->

<link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600;700&display=swap"
rel="stylesheet" />

<!-- Custom CSS -->

<style>

:root {

  --primary-color: #4e73df;

  --secondary-color: #858796;

  --success-color: #1cc88a;

  --bg-color: #f8f9fc;

  --card-shadow: 0 .15rem 1.75rem 0 rgba(58,59,69,.15);

}

body {

  font-family: 'Poppins', sans-serif;

  background-color: var(--bg-color);

  color: #5a5c69;

  padding-top: 2rem;

  padding-bottom: 2rem;

}

.container {

  max-width: 800px;

}
```

```
.card {  
  border: none;  
  border-radius: 0.75rem;  
  box-shadow: var(--card-shadow);  
}
```

```
.card-header {  
  background-color: #fff;  
  border-bottom: 1px solid #e3e6f0;  
  padding: 1.5rem;  
  border-top-left-radius: 0.75rem !important;  
  border-top-right-radius: 0.75rem !important;  
}
```

```
.form-control:focus {  
  border-color: var(--primary-color);  
  box-shadow: 0 0 0 0.25rem rgba(78, 115, 223, 0.25);  
}
```

```
.btn-primary {  
  background-color: var(--primary-color);  
  border-color: var(--primary-color);  
  padding: 0.5rem 1.5rem;  
  font-weight: 500;  
  transition: all 0.2s;  
}
```

```
.btn-primary:hover {  
  background-color: #4262c5;  
  border-color: #4262c5;  
  transform: translateY(-2px);  
}
```

```
}
```

```
.post-type-wrapper {  
  display: flex;  
  gap: 1rem;  
  margin-bottom: 1rem;  
}
```

```
.post-type-option {  
  flex: 1;  
  text-align: center;  
  padding: 1rem;  
  background-color: #f8f9fc;  
  border-radius: 0.5rem;  
  cursor: pointer;  
  transition: all 0.2s;  
}
```

```
.post-type-option:hover {  
  background-color: #eaecf4;  
}
```

```
.post-type-option.active {  
  background-color: var(--primary-color);  
  color: #fff;  
}
```

```
.post-type-option i {  
  font-size: 1.5rem;  
  margin-bottom: 0.5rem;  
}
```

```
.form-floating {  
  margin-bottom: 1rem;  
}
```

```
.form-control {  
  padding: 1rem;  
  border-radius: 0.5rem;  
}
```

```
.conditional-field {  
  transition: all 0.3s;  
  max-height: 0;  
  overflow: hidden;  
  opacity: 0;  
}
```

```
.conditional-field.active {  
  max-height: 100px;  
  opacity: 1;  
  margin-bottom: 1rem;  
}
```

```
.char-counter {  
  text-align: right;  
  color: var(--secondary-color);  
  font-size: 0.8rem;  
  margin-top: 0.25rem;  
}
```

```
.location-field {
```

```
    position: relative;
}
```

```
.location-field i {
    position: absolute;
    top: 50%;
    transform: translateY(-50%);
    right: 1rem;
    color: var(--secondary-color);
}
```

```
.success-message {
    display: none;
    background-color: var(--success-color);
    color: white;
    padding: 1rem;
    border-radius: 0.5rem;
    margin-top: 1rem;
    text-align: center;
}
```

```
.error-message {
    color: #e74a3b;
    font-weight: 500;
    margin-top: 0.5rem;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<div class="container">
```

```

<div class="card">

  <div class="card-header">

    <h3 class="text-primary mb-0 fw-bold">Create New Post</h3>

  </div>

  <div class="card-body p-4">

    <!-- Post Type Selection -->

    <div class="mb-4">

      <label class="form-label fw-medium">Post Type</label>

      <div class="post-type-wrapper">

        <div class="post-type-option active" data-value="status">

          <i class="fas fa-comment-alt"></i>

          <div>Status</div>

        </div>

        <div class="post-type-option" data-value="link">

          <i class="fas fa-link"></i>

          <div>Link</div>

        </div>

        <div class="post-type-option" data-value="photo">

          <i class="fas fa-image"></i>

          <div>Photo</div>

        </div>

      </div>

      <asp:DropDownList ID="ddlPostType" runat="server" CssClass="d-none">

        <asp:ListItem Text="Status" Value="status"></asp:ListItem>

        <asp:ListItem Text="Link" Value="link"></asp:ListItem>

        <asp:ListItem Text="Photo" Value="photo"></asp:ListItem>

      </asp:DropDownList>

    </div>

    <!-- Post Content -->

    <div class="form-floating mb-4">

```

```
<asp:TextBox ID="txtPostContent" runat="server" TextMode="MultiLine"
CssClass="form-control" style="height: 150px" placeholder="What's on your mind?"></asp:TextBox>
```

```
<label for="txtPostContent">What's on your mind?</label>
```

```
<div class="char-counter"><span id="currentChars">0</span> / 500</div>
```

```
</div>
```

```
<!-- URL Field (Conditional for Link) -->
```

```
<div id="urlField" class="conditional-field">
```

```
<div class="form-floating">
```

```
<asp:TextBox ID="txtPostUrl" runat="server" CssClass="form-control"
placeholder="Enter URL"></asp:TextBox>
```

```
<label for="txtPostUrl">URL</label>
```

```
</div>
```

```
</div>
```

```
<!-- Location Field -->
```

```
<div class="form-floating mb-4 location-field">
```

```
<asp:TextBox ID="txtLocation" runat="server" CssClass="form-control"
placeholder="Add location"></asp:TextBox>
```

```
<label for="txtLocation">Location (optional)</label>
```

```
<i class="fas fa-map-marker-alt"></i>
```

```
</div>
```

```
<!-- Submit Button -->
```

```
<div class="text-end">
```

```
<asp:Button ID="btnCreatePost" runat="server" Text="Create Post" CssClass="btn btn-
primary" OnClick="btnCreatePost_Click" />
```

```
</div>
```

```
<!-- Messages -->
```

```
<asp:Label ID="lblMessage" runat="server" CssClass="error-message d-block mt-
3"></asp:Label>
```

```
<div class="success-message">
```

```
        <i class="fas fa-check-circle me-2"></i>

        Your post has been created successfully!

    </div>

</div>

</div>

</div>

</form>
```

```
<!-- Bootstrap Bundle with Popper -->

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></script>

<!-- Custom JavaScript -->

<script>

    document.addEventListener('DOMContentLoaded', function () {

        // Post Type Selection

        const postTypeOptions = document.querySelectorAll('.post-type-option');

        const ddlPostType = document.getElementById('<%= ddlPostType.ClientID %>');

        const urlField = document.getElementById('urlField');

        const photoField = document.getElementById('photoField');


        // Character Counter

        const txtPostContent = document.getElementById('<%= txtPostContent.ClientID %>');

        const charCounter = document.getElementById('currentChars');


        // Handle post type selection

        postTypeOptions.forEach(option => {

            option.addEventListener('click', function () {

                // Remove active class from all options

                postTypeOptions.forEach(opt => opt.classList.remove('active'));

            });

        });

    });

</script>
```

```

// Add active class to selected option
this.classList.add('active');

// Update hidden dropdown value
const value = this.dataset.value;
for (let i = 0; i < ddlPostType.options.length; i++) {
  if (ddlPostType.options[i].value === value) {
    ddlPostType.selectedIndex = i;
    break;
  }
}

// Show/hide conditional fields
if (value === 'link') {
  urlField.classList.add('active');
  photoField.classList.remove('active');
} else if (value === 'photo') {
  urlField.classList.add('active');
} else {
  urlField.classList.remove('active');
  photoField.classList.remove('active');
}
});
});

// Character counter for post content
txtPostContent.addEventListener('input', function () {
  const length = this.value.length;
  charCounter.textContent = length;

  if (length > 500) {

```

```

        charCounter.style.color = '#e74a3b';
    } else {
        charCounter.style.color = "";
    }
    });

});
</script>
</body>
</html>

```

CreatePost.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Partial Class CreatePost

Inherits System.Web.UI.Page

Protected Sub btnCreatePost_Click(sender As Object, e As EventArgs) Handles btnCreatePost.Click

' Get the current user ID (in a real app, this would come from your authentication system)

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

' Validate input

If String.IsNullOrEmpty(txtPostContent.Text) Then

Return

End If

' Create connection and command

```

Dim connectionString As String =
ConfigurationManager.ConnectionStrings("SocialDBConnection").ConnectionString

Using conn As New SqlConnection(connectionString)

    Dim cmd As New SqlCommand("INSERT INTO POSTS (POST_CONTENT, POST_TYPE, POST_URL,
POST_LOCATION, USER_ID, CREATED_AT) VALUES (@content, @type, @url, @location, @userId,
GETDATE())", conn)

    ' Add parameters

    cmd.Parameters.AddWithValue("@content", txtPostContent.Text)

    cmd.Parameters.AddWithValue("@type", ddlPostType.SelectedValue)

    cmd.Parameters.AddWithValue("@url", If(String.IsNullOrEmpty(txtPostUrl.Text), DBNull.Value,
txtPostUrl.Text))

    cmd.Parameters.AddWithValue("@location", If(String.IsNullOrEmpty(txtLocation.Text),
DBNull.Value, txtLocation.Text))

    cmd.Parameters.AddWithValue("@userId", currentUserId)

Try
    conn.Open()

    cmd.ExecuteNonQuery()

    lblMessage.Text = "Post created successfully!"

    lblMessage.ForeColor = System.Drawing.Color.Green

    ' Clear fields after successful post

    txtPostContent.Text = ""

    txtPostUrl.Text = ""

    txtLocation.Text = ""

Catch ex As Exception

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

End Try

End Using

End Sub

End Class

```

Feed.aspx

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

<!DOCTYPE html>

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

<head runat="server">

    <title>Recent Posts</title>

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <!-- Bootstrap CSS -->

    <link href="https://cdnjs.cloudflare.com/ajax/libs/bootstrap/5.3.0/css/bootstrap.min.css"
rel="stylesheet">

    <!-- Font Awesome for icons -->

    <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css"
rel="stylesheet">

    <!-- Google Fonts -->

    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600;700&display=swap
" rel="stylesheet">

    <!-- Custom CSS -->

    <link rel="stylesheet" href="main.css" />

    <style>

</style>

</head>

<body>

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

        <!-- Navigation Bar -->

        <nav class="navbar navbar-expand-lg sticky-top">

            <div class="container">

                <a class="navbar-brand" href="#">Social Media</a>

                <div class="ms-auto d-flex align-items-center">
```

```
        <asp:Label ID="lblWelcome" runat="server" CssClass="welcome-text me-3 d-none d-sm-block" />
```

```
        <asp:HyperLink ID="lnkLogout" runat="server" NavigateUrl="Logout.aspx" CssClass="btn logout-btn">
```

```
            <i class="fas fa-sign-out-alt"></i> Logout
```

```
        </asp:HyperLink>
```

```
    </div>
```

```
</div>
```

```
</nav>
```

```
<!-- Header Section -->
```

```
<div class="container header-container">
```

```
    <div class="row align-items-center">
```

```
        <div class="col-md-8">
```

```
            <h1 class="header-title">Recent Posts</h1>
```

```
            <p class="text-white-50 mt-2 mb-0">Stay updated with the latest posts from your network</p>
```

```
        </div>
```

```
        <div class="col-md-4 text-md-end mt-3 mt-md-0">
```

```
            <asp:HyperLink ID="lnkCreate" runat="server" NavigateUrl="CreatePost.aspx" CssClass="btn btn-primary create-post-btn">
```

```
                <i class="fas fa-plus-circle"></i> Create Post
```

```
            </asp:HyperLink>
```

```
        </div>
```

```
    </div>
```

```
</div>
```

```
<!-- Posts Container -->
```

```
<div class="container">
```

```
    <asp:ScriptManager ID="ScriptManager1" runat="server"></asp:ScriptManager>
```

```
    <asp:Repeater ID="rptPosts" runat="server">
```

```
        <ItemTemplate>
```

```

<div class="post-container new-post">

    <div class="post-author">

        <i class="fas fa-user-circle"></i>

        <asp:Label ID="lblAuthor" runat="server" Text='<%=# Eval("USER_NAME")
%>'></asp:Label>

    </div>

    <div class="post-date">

        <i class="far fa-clock"></i>

        <asp:Label ID="lblDate" runat="server" Text='<%=# Eval("CREATED_AT", "{0:MMMM
dd, yyyy hh:mm tt}") %>'></asp:Label>

    </div>

    <div class="post-content">

        <asp:Label ID="lblContent" runat="server" Text='<%=# Eval("POST_CONTENT")
%>'></asp:Label>

    </div>

    <div class="post-footer">

        <asp:HyperLink ID="lnkPostUrl" runat="server" CssClass="post-link"

            NavigateUrl='<%=# Eval("POST_URL") %>'

            Visible='<%=# Not String.IsNullOrEmpty(Eval("POST_URL").ToString()) %>'>

            <i class="fas fa-external-link-alt"></i>

            <%=# GetShortUrl(Eval("POST_URL").ToString()) %>

        </asp:HyperLink>

        <asp:Label ID="lblLocation" runat="server" CssClass="post-location"

            Visible='<%=# Not String.IsNullOrEmpty(Eval("POST_LOCATION").ToString()) %>'>

            <i class="fas fa-map-marker-alt"></i>

            <%=# Eval("POST_LOCATION") %>

        </asp:Label>

        <div class="post-actions mt-3">

            <asp:UpdatePanel ID="UpdatePanel1" runat="server">

```

```

        <ContentTemplate>
            <div class="d-flex align-items-center">
                <!-- Like Button -->
                <asp:LinkButton ID="btnLike" runat="server" CssClass="btn-like me-3"
                    CommandName="LikePost" CommandArgument='<%# Eval("POST_ID")
%>'
                    OnCommand="PostAction_Command">
                    <i class='<%# GetLikeIcon(Eval("POST_ID")) %>'></i>
                    <span class="ms-1"><%# GetLikeCount(Eval("POST_ID")) %></span>
                    </asp:LinkButton>

                <!-- Comment Toggle Button -->
                <button type="button" class="btn-comment"
                    onclick='toggleComments(<%# Eval("POST_ID") %>)'>
                    <i class="far fa-comment"></i>
                    <span class="ms-1"><%# GetCommentCount(Eval("POST_ID")) %></span>
                    </button>
            </div>
        </ContentTemplate>
    </asp:UpdatePanel>
</div>

<!-- Comments Section (Hidden by Default) -->
<div id="commentSection_<%# Eval("POST_ID") %>" class="comment-section mt-3"
style="display: none;">
    <asp:UpdatePanel ID="UpdatePanel2" runat="server">
        <ContentTemplate>
            <!-- Existing Comments -->
            <asp:Repeater ID="rptComments" runat="server" DataSource='<%#
GetCommentsForPost(Eval("POST_ID")) %>'>
                <ItemTemplate>
                    <div class="comment-item">

```

```

        <div class="comment-author">
            <i class="fas fa-user-circle"></i>
            <%# Eval("USER_NAME") %>
        </div>
        <div class="comment-content">
            <%# Eval("COMMENT_CONTENT") %>
        </div>
        <div class="comment-date text-muted small">
            <%# Eval("CREATED_AT", "{0:MMM dd, yyyy hh:mm tt}") %>
        </div>
    </div>
</ItemTemplate>
</asp:Repeater>
<!-- Add Comment Form -->
<div class="add-comment-form mt-3">
    <div class="input-group">
        <asp:TextBox ID="txtComment" runat="server"
            CssClass="form-control"
            placeholder="Write a comment..."></asp:TextBox>
        <asp:LinkButton ID="btnSubmitComment" runat="server"
            CssClass="btn btn-primary"
            CommandName="AddComment"
            CommandArgument='<%# Eval("POST_ID") %>'
            OnCommand="PostAction_Command">
            <i class="fas fa-paper-plane"></i>
        </asp:LinkButton>
    </div>
</div>
</ContentTemplate>
</asp:UpdatePanel>
</div>

```

```

        </div>

    </div>

</ItemTemplate>

<FooterTemplate>

    <% If rptPosts.Items.Count = 0 Then %>

    <div class="no-posts-container">

        <i class="far fa-comment-alt fa-3x mb-3"></i>

        <h4>No posts yet</h4>

        <p>Be the first to share something with your network!</p>

    </div>

    <% End If %>

</FooterTemplate>

</asp:Repeater>

</div>

</form>

<!-- Bootstrap Bundle with Popper -->

<script
src="https://cdnjs.cloudflare.com/ajax/libs/bootstrap/5.3.0/js/bootstrap.bundle.min.js"></script>

<!-- Custom JavaScript -->

<script>

    // Add animation delay to each post for staggered effect

    document.addEventListener('DOMContentLoaded', function () {

        window.toggleComments = function (postId) {

            const commentSection = document.getElementById('commentSection_' + postId);

            if (commentSection) {

                commentSection.style.display = commentSection.style.display === 'none' ? 'block' :

'none';

```

```

    }
};

const posts = document.querySelectorAll('.post-container');
posts.forEach((post, index) => {
    post.style.animationDelay = (index * 0.1) + 's';
});

// Add hover effect for posts
posts.forEach(post => {
    post.addEventListener('mouseenter', function () {
        this.style.transform = 'translateY(-10px)';
        this.style.boxShadow = '0 5px 20px rgba(0, 0, 0, 0.12)';
    });

    post.addEventListener('mouseleave', function () {
        this.style.transform = '';
        this.style.boxShadow = '';
    });
});
});
</script>
</body>
</html>

```

Feed.aspx.vb

Imports System.Data

Imports System.Data.SqlClient

Imports System.Net

Partial Class Feed

Inherits System.Web.UI.Page

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

 ' Check if user is logged in

 If Session("UserID") Is Nothing Then

 Response.Redirect("Login.aspx")

 Return

 End If

 ' Check user role

 If Session("UserRole") IsNot Nothing AndAlso Convert.ToInt32(Session("UserRole")) = 1 Then

 Response.Redirect("Admin.aspx")

 Return

 End If

 ' Normal user logic

 lblWelcome.Text = \$"Welcome, {Session("FullName")}"

 If Not IsPostBack Then

 LoadRecentPosts()

 End If

End Sub

Private Sub LoadRecentPosts()

 Dim connectionString As String =
 ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

 Dim query As String = "SELECT TOP 20 p.*, u.USER_NAME " &

```
"FROM POSTS p " &  
"INNER JOIN USERS u ON p.USER_ID = u.ID " &  
"ORDER BY p.CREATED_AT DESC"
```

```
Using conn As New SqlConnection(connectionString)  
    Dim cmd As New SqlCommand(query, conn)  
    Dim adapter As New SqlDataAdapter(cmd)  
    Dim dt As New DataTable()  
  
    Try  
        conn.Open()  
        adapter.Fill(dt)  
        rptPosts.DataSource = dt  
        rptPosts.DataBind()  
    Catch ex As Exception  
        Response.Write("Error loading posts: " & ex.Message)  
    End Try  
End Using  
End Sub  
  
' Handle Like and Comment actions  
Protected Sub PostAction_Command(sender As Object, e As CommandEventArgs)  
    If Session("UserID") Is Nothing Then  
        Response.Redirect("Login.aspx")  
        Return  
    End If  
  
    Dim userId As Integer = Convert.ToInt32(Session("UserID"))  
    Dim postId As Integer = Convert.ToInt32(e.CommandArgument)  
  
    Select Case e.CommandName
```

```

Case "LikePost"

    ToggleLike(postId, userId)

Case "ShowComments"

    ' Toggle comment visibility is handled client-side with JavaScript

    ScriptManager.RegisterStartupScript(Me, Me.GetType(), "ShowComments",
    $"toggleComments({postId});", True)

Case "AddComment"

    ' Find the comment textbox

    Dim repeaterItem As RepeaterItem = TryCast(CType(sender, Control).NamingContainer,
    RepeaterItem)

    If repeaterItem IsNot Nothing Then

        Dim txtComment As TextBox = TryCast(repeaterItem.FindControl("txtComment"),
        TextBox)

        If txtComment IsNot Nothing AndAlso Not String.IsNullOrEmpty(txtComment.Text)
        Then

            AddComment(postId, userId, txtComment.Text)

            txtComment.Text = String.Empty

        End If

    End If

End Select

' Refresh data

LoadRecentPosts()

End Sub

' Toggle like status for a post

Private Sub ToggleLike(postId As Integer, userId As Integer)

    Dim connectionString As String =
    ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

    ' First check if user already liked this post

    Dim alreadyLiked As Boolean = False

```

```

Using conn As New SqlConnection(connectionString)

    Dim checkCmd As New SqlCommand("SELECT COUNT(*) FROM LIKES WHERE POST_ID =
@PostId AND USER_ID = @UserId", conn)

    checkCmd.Parameters.AddWithValue("@PostId", postId)

    checkCmd.Parameters.AddWithValue("@UserId", userId)

Try
    conn.Open()

    Dim likeCount As Integer = Convert.ToInt32(checkCmd.ExecuteScalar())

    alreadyLiked = (likeCount > 0)

    ' If already liked, remove the like

    If alreadyLiked Then

        Dim deleteCmd As New SqlCommand("DELETE FROM LIKES WHERE POST_ID = @PostId
AND USER_ID = @UserId", conn)

        deleteCmd.Parameters.AddWithValue("@PostId", postId)

        deleteCmd.Parameters.AddWithValue("@UserId", userId)

        deleteCmd.ExecuteNonQuery()

        ' Otherwise, add a new like

    Else

        Dim insertCmd As New SqlCommand("INSERT INTO LIKES (POST_ID, USER_ID,
CREATED_AT) VALUES (@PostId, @UserId, @CreatedAt)", conn)

        insertCmd.Parameters.AddWithValue("@PostId", postId)

        insertCmd.Parameters.AddWithValue("@UserId", userId)

        insertCmd.Parameters.AddWithValue("@CreatedAt", DateTime.Now)

        insertCmd.ExecuteNonQuery()

    End If

Catch ex As Exception

    Response.Write("Error processing like: " & ex.Message)

End Try

End Using

End Sub

```

' Add a new comment to a post

Private Sub AddComment(postId As Integer, userId As Integer, commentContent As String)

Dim connectionString As String =
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

Using conn As New SqlConnection(connectionString)

Dim cmd As New SqlCommand("INSERT INTO COMMENTS (COMMENT_CONTENT, POST_ID,
USER_ID, CREATED_AT) VALUES (@Content, @PostId, @UserId, @CreatedAt)", conn)

cmd.Parameters.AddWithValue("@Content", commentContent)

cmd.Parameters.AddWithValue("@PostId", postId)

cmd.Parameters.AddWithValue("@UserId", userId)

cmd.Parameters.AddWithValue("@CreatedAt", DateTime.Now)

Try

conn.Open()

cmd.ExecuteNonQuery()

Catch ex As Exception

Response.Write("Error adding comment: " & ex.Message)

End Try

End Using

End Sub

' Get the current like count for a post

Public Function GetLikeCount(postId As Integer) As Integer

Dim connectionString As String =
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

Dim count As Integer = 0

Using conn As New SqlConnection(connectionString)

Dim cmd As New SqlCommand("SELECT COUNT(*) FROM LIKES WHERE POST_ID = @PostId",
conn)

```
cmd.Parameters.AddWithValue("@PostId", Convert.ToInt32(postId))
```

```
Try
```

```
    conn.Open()
```

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

```
Catch ex As Exception
```

```
    ' Handle error silently to avoid disrupting page load
```

```
End Try
```

```
End Using
```

```
Return count
```

```
End Function
```

```
' Check if the current user has liked a post
```

```
Public Function GetLikeIcon(postId As Object) As String
```

```
    If Session("UserID") Is Nothing Then
```

```
        Return "far fa-heart"
```

```
    End If
```

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

```
Dim connectionString As String =
```

```
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString
```

```
Dim hasLiked As Boolean = False
```

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

```
    Dim cmd As New SqlCommand("SELECT COUNT(*) FROM LIKES WHERE POST_ID = @PostId  
AND USER_ID = @UserId", conn)
```

```
    cmd.Parameters.AddWithValue("@PostId", Convert.ToInt32(postId))
```

```
    cmd.Parameters.AddWithValue("@UserId", userId)
```

```
Try
```

```
    conn.Open()
```

```

        Dim count As Integer = Convert.ToInt32(cmd.ExecuteScalar())

        hasLiked = (count > 0)

    Catch ex As Exception

        ' Handle error silently

    End Try

End Using

Return If(hasLiked, "fas fa-heart active", "far fa-heart")

End Function

' Get comments count for a post
Public Function GetCommentCount(postId As Object) As Integer

    Dim connectionString As String =
    ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

    Dim count As Integer = 0

    Using conn As New SqlConnection(connectionString)

        Dim cmd As New SqlCommand("SELECT COUNT(*) FROM COMMENTS WHERE POST_ID =
        @PostId", conn)

        cmd.Parameters.AddWithValue("@PostId", Convert.ToInt32(postId))

        Try

            conn.Open()

            count = Convert.ToInt32(cmd.ExecuteScalar())

        Catch ex As Exception

            ' Handle error silently

        End Try

    End Using

    Return count

End Function

```

' Get comments for a specific post

Public Function GetCommentsForPost(postId As Object) As DataTable

Dim connectionString As String =
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

Dim dt As New DataTable()

Using conn As New SqlConnection(connectionString)

Dim query As String = "SELECT c.*, u.USER_NAME " &
"FROM COMMENTS c " &
"INNER JOIN USERS u ON c.USER_ID = u.ID " &
"WHERE c.POST_ID = @PostId " &
"ORDER BY c.CREATED_AT ASC"

Dim cmd As New SqlCommand(query, conn)

cmd.Parameters.AddWithValue("@PostId", Convert.ToInt32(postId))

Dim adapter As New SqlDataAdapter(cmd)

Try

conn.Open()

adapter.Fill(dt)

Catch ex As Exception

' Handle error silently

End Try

End Using

Return dt

End Function

Public Function GetShortUrl(url As String) As String

If String.IsNullOrEmpty(url) Then Return String.Empty

```

Dim shortUrl As String = url

' Remove http:// or https://
If shortUrl.StartsWith("http://") Then
    shortUrl = shortUrl.Substring(7)
ElseIf shortUrl.StartsWith("https://") Then
    shortUrl = shortUrl.Substring(8)
End If

' Remove www. if present
If shortUrl.StartsWith("www.") Then
    shortUrl = shortUrl.Substring(4)
End If

' Truncate if too long
If shortUrl.Length > 30 Then
    shortUrl = shortUrl.Substring(0, 27) & "..."
End If

Return shortUrl
End Function
End Class

```

Login.aspx

```

<%@ 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;
        margin: 20px;
        line-height: 1.6;
    }
    .login-form {
        max-width: 400px;
        margin: 0 auto;
        padding: 20px;
        border: 1px solid #ddd;
        border-radius: 5px;
        background-color: #f9f9f9;
    }
    .form-group {
        margin-bottom: 15px;
    }
    label {
        font-weight: bold;
        display: block;
        margin-bottom: 5px;
    }
    input[type="text"],
    input[type="password"] {
        width: 100%;
        padding: 8px;
        border: 1px solid #ddd;
        border-radius: 4px;
    }
}
```

```
.btn-submit {
    background-color: #4CAF50;
    color: white;
    padding: 10px 15px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    font-size: 16px;
}

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

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

</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="login-form">
            <h2>Login</h2>

            <div class="form-group">
                <label for="txtUsername">Username:</label>
                <asp:TextBox ID="txtUsername" runat="server" MaxLength="50"></asp:TextBox>
                <asp:RequiredFieldValidator ID="rfvUsername" runat="server"
                    ControlToValidate="txtUsername" ErrorMessage="Username is required"
                    CssClass="error-message"></asp:RequiredFieldValidator>
            </div>
```

```

<div class="form-group">

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

    <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
MaxLength="100"></asp:TextBox>

    <asp:RequiredFieldValidator ID="rfvPassword" runat="server"

        ControlToValidate="txtPassword" ErrorMessage="Password is required"

        CssClass="error-message"></asp:RequiredFieldValidator>

</div>


<div class="form-group">

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

</div>


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

</div>
</form>
<table>

    <style>

        table {

            border-collapse: separate;

            border-spacing: 0;

            border: 3px double black; /* outer double border */

        }

        th, td {

            border: 2px double gray; /* inner double borders */

            padding: 10px;

            text-align: left;

        }

    </style>

<tr>

```

```
<th>Username</th>
<th>Password</th>
</tr>
<tr>
<td>naveed</td>
<td>12</td>
</tr>
<tr>
<td>admin</td>
<td>admin</td>
</tr>
</table>
</body>
</html>
```

Login.aspx.vb

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

```
Imports System.Configuration
```

```
Imports System.Security.Cryptography
```

```
Imports System.Text
```

```
Partial Class Login
```

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

```
    Protected Sub btnLogin_Click(sender As Object, e As EventArgs) Handles btnLogin.Click
```

```
        If Page.IsValid Then
```

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

```
            Dim password As String = txtPassword.Text
```

```
Dim hashedPassword As String = HashPassword(password)
```

```
Dim connStr As String =  
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString
```

```
Dim query As String = "
```

```
    SELECT U.ID, U.USER_NAME, R.role_id, RL.role_name
```

```
    FROM USERS U
```

```
    LEFT JOIN user_roles R ON U.ID = R.user_id
```

```
    LEFT JOIN roles RL ON R.role_id = RL.role_id
```

```
    WHERE U.USERNAME = @Username AND U.USER_PASSWORD = @Password"
```

```
Using conn As New SqlConnection(connStr)
```

```
Using cmd As New SqlCommand(query, conn)
```

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

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

```
conn.Open()
```

```
Using reader As SqlDataReader = cmd.ExecuteReader()
```

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

```
        Session("UserID") = reader("ID")
```

```
        Session("FullName") = reader("USER_NAME")
```

```
        Session("UserRole") = If(IsDBNull(reader("role_id")), 2,  
Convert.ToInt32(reader("role_id")))
```

```
        Session("UserRoleName") = If(IsDBNull(reader("role_name")), "user",  
reader("role_name").ToString().ToLower())
```

```
    If Session("UserRoleName") = "admin" Then
```

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

```
    Else
```

```
        Response.Redirect("Feed.aspx")
    End If

Else

    lblMessage.Text = "Invalid username or password."
    lblMessage.CssClass = "error-message"

End If

End Using

End Using

End Using

End If

End Sub

Private Function HashPassword(password As String) As String
    Using sha256 As New SHA256Managed()
        Dim bytes As Byte() = Encoding.UTF8.GetBytes(password)
        Dim hash As Byte() = sha256.ComputeHash(bytes)
        Return Convert.ToBase64String(hash)
    End Using
End Function

End Class
```

Logout.aspx

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

Logout.aspx

Partial Class Logout

Inherits System.Web.UI.Page

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

' Kill session variables

Session.Clear()

Session.Abandon()

' Optional: Clear authentication cookie (if used)

Response.Cookies.Clear()

' Redirect to login

Response.Redirect("Login.aspx")

End Sub

End Class

Register.aspx

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

```
<!DOCTYPE html>
```

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

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

```
<title>User Registration</title>
```

```
<style>
```

```
body {
```

```
    font-family: Arial, sans-serif;
```

```
    margin: 20px;
```

```
    line-height: 1.6;
```

```
}
```

```
.registration-form {
```

```
    max-width: 600px;
```

```
    margin: 0 auto;
```

```
    padding: 20px;
```

```
    border: 1px solid #ddd;
```

```
    border-radius: 5px;
```

```
    background-color: #f9f9f9;
```

```
}
```

```
.form-group {
```

```
    margin-bottom: 15px;
```

```
}
```

```
label {
```

```
    display: block;
```

```
    margin-bottom: 5px;
```

```
    font-weight: bold;
```

```
}
```

```
input[type="text"],
```

```
input[type="email"],
```

```
input[type="password"],
```

```
input[type="date"] {
```

```
    width: 100%;
```

```
    padding: 8px;
```

```
        border: 1px solid #ddd;

        border-radius: 4px;

        box-sizing: border-box;
    }

    .btn-submit {

        background-color: #4CAF50;

        color: white;

        padding: 10px 15px;

        border: none;

        border-radius: 4px;

        cursor: pointer;

        font-size: 16px;
    }

    .btn-submit:hover {

        background-color: #45a049;
    }

    .validation-error {

        color: red;

        font-size: 12px;
    }

    .success-message {

        color: green;

        font-weight: bold;

        margin-top: 10px;
    }
</style>
</head>
<body>

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

        <div class="registration-form">

            <h2>User Registration</h2>
```

```
<div class="form-group">
  <label for="txtName">Full Name:</label>
  <asp:TextBox ID="txtName" runat="server" MaxLength="100"></asp:TextBox>
  <asp:RequiredFieldValidator ID="rfvUserName" runat="server"
    ControlToValidate="txtName" ErrorMessage="Full Name is required"
    CssClass="validation-error"></asp:RequiredFieldValidator>
</div>
```

```
<div class="form-group">
  <label for="txtEmail">Email:</label>
  <asp:TextBox ID="txtEmail" runat="server" TextMode="Email"
MaxLength="100"></asp:TextBox>
  <asp:RequiredFieldValidator ID="rfvEmail" runat="server"
    ControlToValidate="txtEmail" ErrorMessage="Email is required"
    CssClass="validation-error"></asp:RequiredFieldValidator>
  <asp:RegularExpressionValidator ID="revEmail" runat="server"
    ControlToValidate="txtEmail" ErrorMessage="Invalid email format"
    ValidationExpression="^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$"
    CssClass="validation-error"></asp:RegularExpressionValidator>
</div>
```

```
<div class="form-group">
  <label for="txtUserName">Username:</label>
  <asp:TextBox ID="txtUserName" runat="server" MaxLength="50"></asp:TextBox>
  <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
    ControlToValidate="txtUsername" ErrorMessage="Username is required"
    CssClass="validation-error"></asp:RequiredFieldValidator>
</div>
```

```
<div class="form-group">
```

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

<asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
MaxLength="100"></asp:TextBox>

<asp:RequiredFieldValidator ID="rfvPassword" runat="server"
    ControlToValidate="txtPassword" ErrorMessage="Password is required"
    CssClass="validation-error"></asp:RequiredFieldValidator>
</div>

<div class="form-group">

    <label for="txtBirthDate">Birth Date:</label>

    <asp:TextBox ID="txtBirthDate" runat="server" TextMode="Date"></asp:TextBox>
</div>

<div class="form-group">

    <label for="txtLocation">Location:</label>

    <asp:TextBox ID="txtLocation" runat="server" MaxLength="100"></asp:TextBox>
</div>

<div class="form-group">

    <asp:Button ID="btnRegister" runat="server" Text="Register" CssClass="btn-submit"
OnClick="btnRegister_Click" />
</div>

<asp:Label ID="lblMessage" runat="server" CssClass="success-message"></asp:Label>
</div>
</form>
</body>
</html>
```

Register.aspx.vb

Imports System.Data.SqlClient

Imports System.Configuration

Imports Microsoft.VisualBasic.ApplicationServices

Partial Class Register

Inherits System.Web.UI.Page

Protected Sub btnRegister_Click(sender As Object, e As EventArgs) Handles btnRegister.Click

If Page.IsValid Then

Try

If txtName.Text IsNot Nothing AndAlso Not String.IsNullOrEmpty(txtName.Text) Then

Dim newUserId As Integer = RegisterUser()

If newUserId > 0 Then

Session("UserID") = newUserId

Response.Redirect("Feed.aspx")

Else

lblMessage.Text = "Registration failed. No user ID was returned."

lblMessage.CssClass = "error-message"

End If

End If

Catch ex As SqlException

Catch ex As Exception

lblMessage.Text = \$"An unexpected error occurred: {ex.Message}"

lblMessage.CssClass = "error-message"

End Try

End If

End Sub

```

Private Function RegisterUser() As Integer

    Dim userId = 0

    Dim connectionString As String =
ConfigurationManager.ConnectionStrings("SocialDBconnection").ConnectionString

    Dim query As String = "INSERT INTO USERS (USER_NAME, USER_EMAIL, USERNAME,
USER_PASSWORD, BIRTH_DATE, LOCATION, CREATED_AT) " &
        "VALUES (@Name, @Email, @Username, @Password, @BirthDate, @Location,
@CreatedAt); " &
        "SELECT SCOPE_IDENTITY();"

    Using conn As New SqlConnection(connectionString)

        Using cmd As New SqlCommand(query, conn)

            ' Let SQL Server handle the ID with IDENTITY column

            cmd.Parameters.AddWithValue("@Name", txtName.Text.Trim())

            cmd.Parameters.AddWithValue("@Email", txtEmail.Text.Trim())

            cmd.Parameters.AddWithValue("@Username", txtUserName.Text.Trim()) ' Fixed: using
txtUserName to match form control

            Session("FullName") = txtUserName.Text.Trim()

            cmd.Parameters.AddWithValue("@Password", HashPassword(txtPassword.Text))

            ' Handle optional fields

            If String.IsNullOrEmpty(txtBirthDate.Text) Then

                cmd.Parameters.AddWithValue("@BirthDate", DBNull.Value)

            Else

                cmd.Parameters.AddWithValue("@BirthDate", DateTime.Parse(txtBirthDate.Text))

            End If

            cmd.Parameters.AddWithValue("@Location", If(String.IsNullOrEmpty(txtLocation.Text),
DBNull.Value, txtLocation.Text))

            cmd.Parameters.AddWithValue("@CreatedAt", DateTime.Now)

            conn.Open()

```

```

        ' Get the auto-generated ID
        userId = Convert.ToInt32(cmd.ExecuteScalar())
    End Using

    Dim insertRoleQuery As String = "
        INSERT INTO USER_ROLES (user_id, role_id)
        VALUES (@UserId, @RoleId);"

    Using roleCmd As New SqlCommand(insertRoleQuery, conn)

        Dim role = 2

        roleCmd.Parameters.AddWithValue("@UserId", userId)

        Session("UserRole") = role

        roleCmd.Parameters.AddWithValue("@RoleId", role) ' 2 = user
        roleCmd.ExecuteNonQuery()

    End Using

End Using

Return userId

End Function

Private Function HashPassword(password As String) As String
    ' Using SHA256 - in production consider PBKDF2, bcrypt or Argon2
    Using sha256 As New System.Security.Cryptography.SHA256Managed()

        Dim bytes As Byte() = System.Text.Encoding.UTF8.GetBytes(password)

        Dim hash As Byte() = sha256.ComputeHash(bytes)

        Return Convert.ToBase64String(hash)

    End Using

End Function

End Class

```

main.css

```
body {  
  font-family: 'Poppins', sans-serif;  
  background-color: #f8f9fa;  
  color: #333;  
  padding-bottom: 40px;  
}  
  
.navbar {  
  background-color: #fff;  
  box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);  
  padding: 15px 0;  
}  
  
.navbar-brand {  
  font-weight: 700;  
  color: #5046e5;  
  font-size: 1.6rem;  
}  
  
.header-container {  
  background: linear-gradient(135deg, #5046e5 0%, #6e64ff 100%);  
  color: white;  
  border-radius: 0 0 15px 15px;  
  padding: 40px 20px;  
  margin-bottom: 30px;  
  box-shadow: 0 4px 20px rgba(0, 0, 0, 0.1);  
}  
  
.header-title {
```

```
font-weight: 600;
margin-bottom: 0;
}
```

```
.post-container {
  background-color: #fff;
  border-radius: 10px;
  box-shadow: 0 3px 15px rgba(0, 0, 0, 0.08);
  padding: 25px;
  margin-bottom: 25px;
  transition: transform 0.3s ease, box-shadow 0.3s ease;
}
```

```
.post-container:hover {
  transform: translateY(-5px);
  box-shadow: 0 5px 20px rgba(0, 0, 0, 0.12);
}
```

```
.post-author {
  font-weight: 600;
  font-size: 1.1rem;
  color: #333;
  display: flex;
  align-items: center;
}
```

```
.post-author i {
  color: #5046e5;
  margin-right: 8px;
}
```

```
.post-date {  
  color: #6c757d;  
  font-size: 0.85rem;  
  margin-bottom: 15px;  
  display: flex;  
  align-items: center;  
}
```

```
.post-date i {  
  margin-right: 5px;  
}
```

```
.post-content {  
  margin: 15px 0;  
  line-height: 1.6;  
  color: #444;  
}
```

```
.post-footer {  
  padding-top: 15px;  
  border-top: 1px solid #eee;  
  margin-top: 15px;  
  display: flex;  
  flex-wrap: wrap;  
  gap: 15px;  
}
```

```
.post-link, .post-location {  
  display: inline-flex;  
  align-items: center;  
  font-size: 0.9rem;
```

```
color: #5046e5;
text-decoration: none;
}
```

```
.post-link i, .post-location i {
    margin-right: 5px;
}
```

```
.post-location {
    color: #6c757d;
}
```

```
.create-post-btn {
    background: linear-gradient(135deg, #5046e5 0%, #6e64ff 100%);
    border: none;
    padding: 12px 24px;
    font-weight: 500;
    border-radius: 50px;
    transition: all 0.3s ease;
    box-shadow: 0 4px 12px rgba(80, 70, 229, 0.3);
}
```

```
.create-post-btn:hover {
    transform: translateY(-2px);
    box-shadow: 0 6px 15px rgba(80, 70, 229, 0.4);
    background: linear-gradient(135deg, #4239cc 0%, #5c51ff 100%);
}
```

```
.create-post-btn i {
    margin-right: 8px;
}
```

```
.logout-btn {  
  color: #5046e5;  
  background-color: transparent;  
  border: 1px solid #5046e5;  
  border-radius: 50px;  
  padding: 8px 20px;  
  transition: all 0.3s ease;  
  font-weight: 500;  
}
```

```
.logout-btn:hover {  
  background-color: #5046e5;  
  color: white;  
}
```

```
.logout-btn i {  
  margin-right: 5px;  
}
```

```
.welcome-text {  
  font-weight: 500;  
  color: #495057;  
}
```

```
.no-posts-container {  
  text-align: center;  
  padding: 40px 0;  
  color: #6c757d;  
}
```

```
/* Animation for new posts */
@keyframes fadeIn {
  from {
    opacity: 0;
    transform: translateY(20px);
  }

  to {
    opacity: 1;
    transform: translateY(0);
  }
}

.new-post {
  animation: fadeIn 0.8s ease-out forwards;
}

/* Responsive adjustments */
@media (max-width: 768px) {
  .header-container {
    padding: 30px 15px;
  }

  .post-container {
    padding: 20px;
  }
}
```

```
.btn-like, .btn-comment {  
    display: inline-flex;  
    align-items: center;  
    color: #6c757d;  
    text-decoration: none;  
    font-weight: 500;  
    transition: all 0.2s ease;  
    background: none;  
    border: none;  
    padding: 6px 12px;  
    border-radius: 20px;  
}
```

```
.btn-like:hover, .btn-comment:hover {  
    background-color: rgba(0,0,0,0.05);  
    color: #0d6efd;  
}
```

```
.btn-like.active {  
    color: #dc3545;  
}
```

```
.btn-like.active i {  
    animation: likeAnimation 0.5s ease;  
}
```

```
/* Comment Section Styles */
```

```
.comment-section {  
    background-color: #f8f9fa;  
    border-radius: 10px;  
    padding: 15px;
```

```
    margin-top: 15px;
}
```

```
.comment-item {
    padding: 10px 0;
    border-bottom: 1px solid rgba(0,0,0,0.05);
}
```

```
.comment-item:last-child {
    border-bottom: none;
}
```

```
.comment-author {
    font-weight: 600;
    font-size: 0.9rem;
    margin-bottom: 3px;
}
```

```
.comment-content {
    margin-bottom: 5px;
}
```

```
.comment-date {
    font-size: 0.8rem;
}
```

```
.add-comment-form .form-control {
    border-radius: 20px 0 0 20px;
}
```

```
.add-comment-form .btn {
```

```
border-radius: 0 20px 20px 0;  
}
```

```
@keyframes likeAnimation {  
  0% {  
    transform: scale(1);  
  }  
  
  50% {  
    transform: scale(1.3);  
  }  
  
  100% {  
    transform: scale(1);  
  }  
}
```