



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA
FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
(FSKTM)
SEMESTER I 2024/2025

DOTNET PROGRAMMING
BIE33103
SECTION 04

LAB 3
WEB FORM WITH CRUD

LECTURER'S NAME
MADAM NORHANIM BINTI SELAMAT

| NAME | MATRIC NUMBER |
|---|-----------------|
| NURKHAIRINA BALQIS BINTI MOHAMMAD JOE | AI220206 |
| TUAN KHALIDAH SYAZWANA BINTI TUAN MOHD KASMAWI | AI220118 |

Exercise

1. Extend the program into the following:

Food Allergies:

- ☐ None
- ☐ Dairy Product
- ☐ Peanut and Tree Nuts
- ☐ Soybean
- ☐ Wheat

Submit

Hello friends! The time is now 29/3/2024 7:15:02 AM

2. Add a search functionality to find registered child by name.
3. Explore and learn how to style your web app better.

Submission

Before extending the program:

Register Child | Registration List

Kindergarten Registration Form

First Name:

Second Name:

Race:

Gender:

- ☐ Boy
- ☒ Girl

Food Allergies:

- ☐ None
- ☐ Dairy Products
- ☐ Peanuts and Tree Nuts
- ☐ Soybean
- ☐ Wheat

Register

After extending the program:

[Register Child](#) | [Registration List](#)

Kindergarten Registration Form

First Name:

Second Name:

Race:

Gender:

☐ Boy

☐ Girl

Food Allergies:

☐ None

☐ Dairy Products

☐ Peanuts and Tree Nuts

☐ Soybean

☐ Wheat

Submit

Hello friends! The time is now 27/11/2024 11:10:06 PM

Register a child with a submit button, dynamic message, date and time:

[Register Child](#) | [Registration List](#)

Kindergarten Registration Form

First Name:

Second Name:

Race:

Gender:

☒ Boy

☐ Girl

Food Allergies:

☒ None

☐ Dairy Products

☐ Peanuts and Tree Nuts

☒ Soybean

☒ Wheat

Submit

Hello friends! The time is now 27/11/2024 11:13:15 PM

After registration, it will add the information to the registration list:

Registration List

Search by Name: Search

| First Name | Second Name | Race | Gender | Food Allergies | | |
|------------|-------------|---------|--------|-------------------------|----------------------|------------------------|
| Sophia | James | Other | Girl | Dairy products | Edit | Delete |
| Vihaan | Jai | Indian | Boy | Peanuts and tree nuts | Edit | Delete |
| Emily | Tan | Chinese | Girl | Soybean | Edit | Delete |
| Zara | Wong | Chinese | Girl | None | Edit | Delete |
| Adam | Lim | Chinese | Boy | Wheat | Edit | Delete |
| Nurul | Athirah | Malay | Girl | Dairy products, Soybean | Edit | Delete |
| Sanjay | Amit | Indian | Boy | None | Edit | Delete |
| Chloe | Lee | Chinese | Girl | Peanuts and tree nuts | Edit | Delete |
| Ryan | Bakri | Malay | Boy | None | Edit | Delete |
| khalidah | syazwana | Chinese | Girl | None | Edit | Delete |
| fatini | fatini | Malay | Girl | Peanuts and Tree Nuts | Edit | Delete |
| kamarul | zaman | Malay | Boy | None | Edit | Delete |
| joe | ramly | Chinese | Boy | Dairy Products, Soybean | Edit | Delete |
| khai | joe | Indian | Boy | None, Soybean, Wheat | Edit | Delete |

Edit button with save button:

Edit Registration

First Name:

Second Name:

Race: Indian ▼

Gender:

- ☒ Boy
- ☐ Girl

Food Allergies:

- ☐ None
- ☐ Dairy Products
- ☐ Peanuts and Tree Nuts
- ☒ Soybean
- ☒ Wheat

Save

It will update after we click the save button:

Register Child | Registration List

Registration List

Search by Name: [Search](#)

| First Name | Second Name | Race | Gender | Food Allergies | | |
|------------|-------------|---------|--------|-------------------------|----------------------|------------------------|
| Sophia | James | Other | Girl | Dairy products | Edit | Delete |
| Vihaan | Jai | Indian | Boy | Peanuts and tree nuts | Edit | Delete |
| Emily | Tan | Chinese | Girl | Soybean | Edit | Delete |
| Zara | Wong | Chinese | Girl | None | Edit | Delete |
| Adam | Lim | Chinese | Boy | Wheat | Edit | Delete |
| Nurul | Athirah | Malay | Girl | Dairy products, Soybean | Edit | Delete |
| Sanjay | Amit | Indian | Boy | None | Edit | Delete |
| Chloe | Lee | Chinese | Girl | Peanuts and tree nuts | Edit | Delete |
| Ryan | Bakri | Malay | Boy | None | Edit | Delete |
| khalidah | syazwana | Chinese | Girl | None | Edit | Delete |
| fatin | fatini | Malay | Girl | Peanuts and Tree Nuts | Edit | Delete |
| kamarul | zaman | Malay | Boy | None | Edit | Delete |
| joe | ramly | Chinese | Boy | Dairy Products, Soybean | Edit | Delete |
| khai | joe | Indian | Boy | Soybean, Wheat | Edit | Delete |

Delete button will immediately delete and update the registration list:

Register Child | Registration List

Registration List

Search by Name: [Search](#)

| First Name | Second Name | Race | Gender | Food Allergies | | |
|------------|-------------|---------|--------|-------------------------|----------------------|------------------------|
| Sophia | James | Other | Girl | Dairy products | Edit | Delete |
| Vihaan | Jai | Indian | Boy | Peanuts and tree nuts | Edit | Delete |
| Emily | Tan | Chinese | Girl | Soybean | Edit | Delete |
| Zara | Wong | Chinese | Girl | None | Edit | Delete |
| Adam | Lim | Chinese | Boy | Wheat | Edit | Delete |
| Nurul | Athirah | Malay | Girl | Dairy products, Soybean | Edit | Delete |
| Sanjay | Amit | Indian | Boy | None | Edit | Delete |
| Chloe | Lee | Chinese | Girl | Peanuts and tree nuts | Edit | Delete |
| Ryan | Bakri | Malay | Boy | None | Edit | Delete |
| khalidah | syazwana | Chinese | Girl | None | Edit | Delete |
| fatin | fatini | Malay | Girl | Peanuts and Tree Nuts | Edit | Delete |
| kamarul | zaman | Malay | Boy | None | Edit | Delete |
| joe | ramly | Chinese | Boy | Dairy Products, Soybean | Edit | Delete |

Search button using first name or last name:

Register Child | Registration List

Registration List

Search by Name:

Search

| First Name | Second Name | Race | Gender | Food Allergies | | |
|------------|-------------|--------|--------|-----------------------|----------------------|------------------------|
| Vihaan | Jai | Indian | Boy | Peanuts and tree nuts | Edit | Delete |

RegisterChild.aspx

```
spx.cs EditRegistration.aspx RegisterChild.aspx RegistrationList.aspx.cs RegistrationList.aspx
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="RegisterChild.aspx.cs"
Inherits="TinyTotsWebApp.RegisterChild" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>Kindergarten Registration Form</title>
<style>
/* Style the title */
.pink-title {
color: lightpink;
text-align:center;
}

/* Standardize the gap between the elements in the form */
.form-element {
margin-bottom: 10px; /* Adjust the spacing as needed */
}

/* Style the navigation menu */
.nav-menu {
background-color: #f1f1f1;
padding: 10px;
text-align:center;
}
.nav-menu a {
margin: 0 15px;
text-decoration: none;
font-weight: bold;
color: #333;
}
.nav-menu a:hover {
color: green;
}

/* This will center the GridView */
.grid-container {
display: flex;
```

```

justify-content: center;
}
.grid-container .gridview-style {
width: 80%; /* Set a desired width, adjust as necessary */
}
/* Style the submit button */
.submit-button {
display: inline-block;
background-color: pink;
padding: 10px 20px;
border: none;
border-radius: 5px;
font-size: 16px;
font-weight: bold;
cursor: pointer;
transition: background-color 0.3s ease;
}

</style>
</head>
<body>
<form runat="server" class="form-container">
<div class="nav-menu">
<a href="RegisterChild.aspx">Register Child</a> |
<a href="RegistrationList.aspx">Registration List</a>
</div>
<div>
<h1 class="pink-title">Kindergarten Registration Form</h1>
<asp:HiddenField ID="hfRegistrationId" runat="server" />
<label for="txtFirstName">First Name:</label>
<asp:TextBox ID="txtFirstName" runat="server" placeholder="First Name" CssClass="form-element"></asp:TextBox><br />
<label for="txtSecondName">Second Name:</label>
<asp:TextBox ID="txtSecondName" runat="server" placeholder="Second Name"

```

```

CssClass="form-element"></asp:TextBox><br />
<label for="ddlRace">Race:</label>
<asp:DropDownList ID="ddlRace" runat="server" CssClass="form-element">
<asp:ListItem>Select</asp:ListItem>
<asp:ListItem Value="Malay">Malay</asp:ListItem>
<asp:ListItem Value="Chinese">Chinese</asp:ListItem>
<asp:ListItem Value="Indian">Indian</asp:ListItem>
<asp:ListItem Value="Other">Other</asp:ListItem>
</asp:DropDownList><br />
<label for="rblGender">Gender:</label>
<asp:RadioButtonList ID="rblGender" runat="server" CssClass="form-element">
<asp:ListItem Value="Boy">Boy</asp:ListItem>
<asp:ListItem Value="Girl">Girl</asp:ListItem>
</asp:RadioButtonList><br />

<label for="cblAllergies" >Food Allergies:</label>
<asp:CheckBoxList ID="cblAllergies" runat="server" CssClass="form-element">
<asp:ListItem Value="None">None</asp:ListItem>
<asp:ListItem Value="Dairy">Dairy Products</asp:ListItem>
<asp:ListItem Value="Peanuts">Peanuts and Tree Nuts</asp:ListItem>
<asp:ListItem Value="Soybean">Soybean</asp:ListItem>
<asp:ListItem Value="Wheat">Wheat</asp:ListItem>
</asp:CheckBoxList><br />

<asp:Button ID="btnSubmit" runat="server" Text="Submit" CssClass="submit-button"
OnClick="btnSubmit_Click" />
<div id="dynamicMessage" runat="server" style="margin-top: 20px; font-size: 16px; color: purple;">
<!-- Message will be generated dynamically -->
</div>
</div>
</form>
</body>
</html>

```

RegisterChild.aspx.cs

```

using System;
// Include using directive at the top
using TinyTotsWebApp.Models;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace TinyTotsWebApp
{
    2 references
    public partial class RegisterChild : System.Web.UI.Page
    {
        0 references
        protected void Page_Load(object sender, EventArgs e)
        {
            // Display the dynamic message with the current date and time
            dynamicMessage.InnerHtml = $"<strong>Hello friends!</strong> The time is now {DateTime.Now.ToString("dd/MM/yyyy h:mm:ss tt")}";
        }
        0 references
        protected void btnSubmit_Click(object sender, EventArgs e)
        {
            using (var db = new TinyTotsDbContext())
            {
                var registration = new TinyTots
                {
                    FirstName = txtFirstName.Text,
                    SecondName = txtSecondName.Text,
                    Race = ddlRace.SelectedValue,
                    Gender = rblGender.SelectedValue,
                    FoodAllergies = string.Join(" ", cblAllergies.Items.Cast<ListItem>().Where(i => i.Selected).Select(i => i.Text))
                };
                db.TinyTotsTable.Add(registration);
                db.SaveChanges();
            }
        }
    }
}

```

RegistrationList.aspx

```
spx.cs EditRegistration.aspx RegisterChild.aspx RegistrationList.aspx.cs RegistrationList.aspx
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="RegistrationList.aspx.cs"
Inherits="TinyTotsWebApp.RegistrationList" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>Registration List</title>
<style>
/* Style the title */
.pink-title {
    color: lightpink;
    text-align: center;
}

/* Standardize the gap between the elements in the form */
.form-element {
    margin-bottom: 10px;
}

/* Style the navigation menu */
.nav-menu {
    background-color: #f1f1f1;
    padding: 10px;
    text-align: center;
}

.nav-menu a {
    margin: 0 15px;
    text-decoration: none;
    font-weight: bold;
    color: #333;
}

.nav-menu a:hover {
    color: pink;
}

```



```

asp.cs  EditRegistration.aspx  RegisterChild.aspx  RegistrationList.aspx.cs  RegistrationList.aspx
/* This will center the GridView */
.grid-container {
    display: flex;
    justify-content: center;
}

.grid-container .gridview-style {
    width: 80%; /* Set a desired width, adjust as necessary */
}

/* Style for search section */
.search-section {
    text-align: center;
    margin-bottom: 20px;
}

.search-button {
    padding: 5px 10px;
    background-color: hotpink;
    color: white;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    font-weight: bold;
}
</style>
</head>
<body>
<form id="form1" runat="server">
    <div class="nav-menu">
        <a href="RegisterChild.aspx">Register Child</a> |
        <a href="RegistrationList.aspx">Registration List</a>
    </div>
    <div>
        <h1 class="pink-title">Registration List</h1>

```

```

<!-- Search Section -->
<div class="search-section">
    <label for="txtSearch">Search by Name:</label>
    <asp:TextBox ID="txtSearch" runat="server" placeholder="Enter first or last name"></asp:TextBox>
    <asp:Button ID="btnSearch" runat="server" Text="Search" CssClass="search-button" OnClick="btnSearch_Click" />
</div>

<!-- GridView to display data -->
<div class="grid-container">
    <asp:GridView ID="gvRegistrations" runat="server" AutoGenerateColumns="False"
        DataKeyNames="RegistrationId" EmptyDataText="No registrations found."
        OnRowDeleting="gvRegistrations_RowDeleting">
        <Columns>
            <asp:BoundField DataField="FirstName" HeaderText="First Name" />
            <asp:BoundField DataField="SecondName" HeaderText="Second Name" />
            <asp:BoundField DataField="Race" HeaderText="Race" />
            <asp:BoundField DataField="Gender" HeaderText="Gender" />
            <asp:BoundField DataField="FoodAllergies" HeaderText="Food Allergies" />
            <asp:HyperLinkField Text="Edit" DataNavigateUrlFields="RegistrationId"
                DataNavigateUrlFormatString="EditRegistration.aspx?RegistrationId={0}" />
            <asp:CommandField ShowDeleteButton="True" />
        </Columns>
    </asp:GridView>
</div>
</form>
</body>
</html>

```

RegistrationList.aspx.cs

```
cs | EditRegistration.aspx | RegisterChild.aspx | RegistrationList.aspx.cs | RegistrationList.aspx | RegisterChild.aspx.cs | Config
TinyTotsWebApp.RegistrationList
using System;
using System.Linq;
using TinyTotsWebApp.Models;

namespace TinyTotsWebApp
{
    2 references
    public partial class RegistrationList : System.Web.UI.Page
    {
        0 references
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                BindGrid(); // Load all data initially
            }
        }

        3 references
        private void BindGrid(string searchQuery = null)
        {
            using (var db = new TinyTotsDbContext())
            {
                var query = db.TinyTotsTable.AsQueryable();

                // Apply search filter if a query is provided
                if (!string.IsNullOrEmpty(searchQuery))
                {
                    query = query.Where(t => t.FirstName.Contains(searchQuery) || t.SecondName.Contains(searchQuery));
                }

                gvRegistrations.DataSource = query.ToList();
                gvRegistrations.DataBind();
            }
        }

        0 references
        protected void btnSearch_Click(object sender, EventArgs e)
        {
            string searchQuery = txtSearch.Text.Trim();
            BindGrid(searchQuery); // Bind the GridView with filtered data
        }

        0 references
        protected void gvRegistrations_RowDeleting(object sender, System.Web.UI.WebControls.GridViewDeleteEventArgs e)
        {
            int registrationId = Convert.ToInt32(gvRegistrations.DataKeys[e.RowIndex].Value);

            using (var db = new TinyTotsDbContext())
            {
                var record = db.TinyTotsTable.Find(registrationId);
                if (record != null)
                {
                    db.TinyTotsTable.Remove(record);
                    db.SaveChanges();
                }
            }

            BindGrid(); // Reload the GridView
        }
    }
}
```

EditRegistration.aspx

```
on.aspx.cs EditRegistration.aspx RegisterChild.aspx RegistrationList.aspx.cs RegistrationList.aspx
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="EditRegistration.aspx.cs"
Inherits="TinyTotsWebApp.EditRegistration" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>Edit Registration</title>
<style>
/* Style the title */
.pink-title {
color: lightpink;
text-align:center;
}
/* Standardize the gap between the elements in the form */
.form-element {
margin-bottom: 10px; /* Adjust the spacing as needed */
}
/* Style the navigation menu */
.nav-menu {
background-color: #f1f1f1;
padding: 10px;
text-align: center;
}
.nav-menu a {
margin: 0 15px;
text-decoration: none;
font-weight: bold;
color: #333;
}
.nav-menu a:hover {
color: pink;
}
/* This will center the GridView */
.grid-container {
display: flex;
justify-content: center;
}
```

```

.grid-container .gridview-style {
width: 80%; /* Set a desired width, adjust as necessary */
}
</style>
</head>
<body>
<form id="form1" runat="server">
<div class="nav-menu">
<a href="RegisterChild.aspx">Register Child</a> |
<a href="RegistrationList.aspx">Registration List</a>
</div>
<div>
<h1 class="pink-title">Edit Registration</h1>
<asp:HiddenField ID="hfRegistrationId" runat="server" />
<label for="txtFirstName">First Name:</label>
<asp:TextBox ID="txtFirstName" runat="server" placeholder="First Name" CssClass="form-element"></asp:TextBox><br />
<label for="txtSecondName">Second Name:</label>
<asp:TextBox ID="txtSecondName" runat="server" placeholder="Second Name"
CssClass="form-element"></asp:TextBox><br />
<label for="ddlRace">Race:</label>
<asp:DropDownList ID="ddlRace" runat="server" CssClass="form-element">
<asp:ListItem>Select</asp:ListItem>
<asp:ListItem Value="Malay">Malay</asp:ListItem>
<asp:ListItem Value="Chinese">Chinese</asp:ListItem>
<asp:ListItem Value="Indian">Indian</asp:ListItem>
<asp:ListItem Value="Other">Other</asp:ListItem>
</asp:DropDownList><br />
<label for="rblGender">Gender:</label>
<asp:RadioButtonList ID="rblGender" runat="server" CssClass="form-element">
<asp:ListItem Value="Boy">Boy</asp:ListItem>
<asp:ListItem Value="Girl">Girl</asp:ListItem>
</asp:RadioButtonList><br />
<label for="cblAllergies">Food Allergies:</label>
<asp:CheckBoxList ID="cblAllergies" runat="server" CssClass="form-element">
<asp:ListItem Value="None">None</asp:ListItem>
<asp:ListItem Value="Dairy">Dairy Products</asp:ListItem>
<asp:ListItem Value="Peanuts">Peanuts and Tree Nuts</asp:ListItem>
<asp:ListItem Value="Soybean">Soybean</asp:ListItem>
<asp:ListItem Value="Wheat">Wheat</asp:ListItem>
</asp:CheckBoxList><br />
<asp:Button ID="btnEdit" runat="server" Text="Save" CssClass="form-element"
OnClick="btnEdit_Click" />
</div>
</form>
</body>
</html>

```

EditRegistration.aspx.cs

```
EditRegistration.aspx.cs EditRegistration.aspx RegisterChild.aspx RegistrationList.aspx.cs RegistrationList.aspx RegisterChild.aspx.cs
TinyTotsWebApp TinyTotsWebApp.EditRegistration
1 using System;
2 using System.Linq;
3 using System.Web.UI.WebControls;
4 using TinyTotsWebApp.Models;
5 namespace TinyTotsWebApp
6 {
7     2 references
8     public partial class EditRegistration : System.Web.UI.Page
9     {
10         0 references
11         protected void Page_Load(object sender, EventArgs e)
12         {
13             if (!IsPostBack)
14             {
15                 // Get the RegistrationId from the query string
16                 int registrationId = Convert.ToInt32(Request.QueryString["RegistrationId"]);
17                 // Load the data for the specific registration
18                 LoadRegistration(registrationId);
19             }
20             // Method to load the registration data
21             1 reference
22             private void LoadRegistration(int registrationId)
23             {
24                 using (var db = new TinyTotsDbContext())
25                 {
26                     // Find the record in the database
27                     var registration = db.TinyTotsTable.SingleOrDefault(c => c.RegistrationId == registrationId);
28                     if (registration != null)
29                     {
30                         // Populate form fields with the existing data
31                         hfRegistrationId.Value = registration.RegistrationId.ToString();
32                         txtFirstName.Text = registration.FirstName;
33                         txtSecondName.Text = registration.SecondName;
34                         ddlRace.SelectedValue = registration.Race;
35                         rblGender.SelectedValue = registration.Gender;
```

```

        // Populate the allergies CheckBoxList
        string[] allergies = registration.FoodAllergies.Split(new[] { ", " }, StringSplitOptions.None);
        foreach (ListItem item in cblAllergies.Items)
        {
            if (allergies.Contains(item.Value))
            {
                item.Selected = true;
            }
        }
    }
}

// Method to handle the Save button click event
0 references
protected void btnEdit_Click(object sender, EventArgs e)
{
    int registrationId = Convert.ToInt32(hfRegistrationId.Value);
    using (var db = new TinyTotsDbContext())
    {
        // Find the existing registration record
        var registrationToUpdate = db.TinyTotsTable.SingleOrDefault(c => c.RegistrationId ==
registrationId);
        if (registrationToUpdate != null)
        {
            // Update the properties with the values from the form fields
            registrationToUpdate.FirstName = txtFirstName.Text;
            registrationToUpdate.SecondName = txtSecondName.Text;
            registrationToUpdate.Race = ddlRace.SelectedValue;
            registrationToUpdate.Gender = rblGender.SelectedValue;
            // Update the Food Allergies
            registrationToUpdate.FoodAllergies = string.Join(", ",
cblAllergies.Items.Cast<ListItem>().Where(i => i.Selected).Select(i => i.Value));
            // Save changes to the database
            db.SaveChanges();
            // Show success message (you can replace this with any message control on your form if needed)
            ClientScript.RegisterStartupScript(this.GetType(), "alert", "alert('Update successful!');", true);
        }
    }
}

```

```

        // Redirect to RegistrationList.aspx after update
        Response.Redirect("RegistrationList.aspx");
    }
}
}
}
}

```