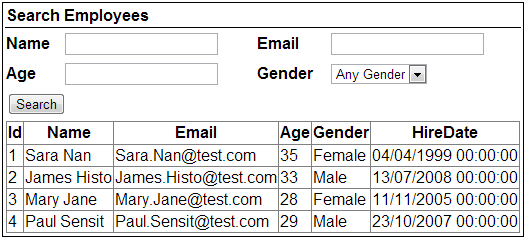
**Parameters of a sql server stored procedure can be made optional by specifying default values.**  
  
**We wil be using table tblEmployee for this Demo.**  
CREATE TABLE tblEmployee  
(  
 Id int IDENTITY PRIMARY KEY,  
 Name nvarchar(50),  
 Email nvarchar(50),  
 Age int,  
 Gender nvarchar(50),  
 HireDate date,  
)  
  
   
  
Insert into tblEmployee values  
('Sara Nan','Sara.Nan@test.com',35,'Female','1999-04-04')  
Insert into tblEmployee values  
('James Histo','James.Histo@test.com',33,'Male','2008-07-13')  
Insert into tblEmployee values  
('Mary Jane','Mary.Jane@test.com',28,'Female','2005-11-11')  
Insert into tblEmployee values  
('Paul Sensit','Paul.Sensit@test.com',29,'Male','2007-10-23')  
  
**Name, Email, Age and Gender** parameters of spSearchEmployees stored procedure are optional. Notice that, we have set defaults for all the parameters, and in the "WHERE" clause we are checking if the respective parameter IS NULL.  
Create Proc spSearchEmployees  
@Name nvarchar(50) = NULL,  
@Email nvarchar(50) = NULL,  
@Age int = NULL,  
@Gender nvarchar(50) = NULL  
as  
Begin  
 Select \* from tblEmployee where  
 (Name = @Name OR @Name IS NULL) AND  
 (Email = @Email OR @Email IS NULL) AND  
 (Age = @Age OR @Age IS NULL) AND  
 (Gender = @Gender OR @Gender IS NULL)   
End  
  
**Testing the stored procedure**  
**1.** Execute spSearchEmployees -- This command will return all the rows  
**2.** Execute spSearchEmployees @Gender = 'Male' -- Retruns only Male employees  
**3.** Execute spSearchEmployees @Gender = 'Male', @Age = 29 -- Retruns Male employees whose age is 29  
  
This stored procedure can be used by a search page that looks as shown below.   
   
  
**WebForm1.aspx:**  
<table style="font-family:Arial; border:1px solid black">  
    <tr>  
        <td colspan="4" style="border-bottom: 1px solid black">  
            <b>Search Employees</b>  
        </td>  
    </tr>  
    <tr>  
        <td>  
            <b>Name</b>  
        </td>  
        <td>  
            <asp:TextBox ID="txtName" runat="server"></asp:TextBox>  
        </td>  
        <td>  
            <b>Email</b>  
        </td>  
        <td>  
            <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>  
        </td>  
    </tr>  
    <tr>  
        <td>  
            <b>Age</b>  
        </td>  
        <td>  
            <asp:TextBox ID="txtAge" runat="server"></asp:TextBox>  
        </td>  
        <td>  
            <b>Gender</b>  
        </td>  
        <td>  
            <asp:DropDownList ID="ddlGender" runat="server">  
                <asp:ListItem Text="Any Gender" Value="-1"></asp:ListItem>  
                <asp:ListItem Text="Male" Value="Male"></asp:ListItem>

                <asp:ListItem Text="Female" Value="Female"></asp:ListItem>  
            </asp:DropDownList>  
        </td>  
    </tr>  
    <tr>  
        <td colspan="4">  
            <asp:Button ID="btnSerach" runat="server" Text="Search"   
                onclick="btnSerach\_Click" />  
        </td>  
    </tr>  
    <tr>  
        <td colspan="4">  
            <asp:GridView ID="gvEmployees" runat="server">  
            </asp:GridView>  
        </td>  
    </tr>  
</table>  
  
**WebForm1.aspx.cs:**  
public partial class WebForm1 : System.Web.UI.Page  
{  
    protected void Page\_Load(object sender, EventArgs e)  
    {  
        if (!IsPostBack)  
        {  
            GetData();  
        }  
    }  
  
    protected void btnSerach\_Click(object sender, EventArgs e)  
    {  
        GetData();  
    }  
  
    private void GetData()  
    {  
        string cs = ConfigurationManager.ConnectionStrings["DBCS"].ConnectionString;  
        using (SqlConnection con = new SqlConnection(cs))  
        {  
            SqlCommand cmd = new SqlCommand("spSearchEmployees", con);  
            cmd.CommandType = CommandType.StoredProcedure;  
  
            AttachParameter(cmd, "@Name", txtName);  
            AttachParameter(cmd, "@Email", txtEmail);  
            AttachParameter(cmd, "@Age", txtAge);  
            AttachParameter(cmd, "@Gender", ddlGender);  
  
            con.Open();  
            gvEmployees.DataSource = cmd.ExecuteReader();  
            gvEmployees.DataBind();  
        }  
    }  
  
    private void AttachParameter(SqlCommand command, string parameterName, Control control)  
    {  
        if (control is TextBox && ((TextBox)control).Text != string.Empty)  
        {  
            SqlParameter parameter = new SqlParameter(parameterName, ((TextBox)control).Text);  
            command.Parameters.Add(parameter);  
        }  
        else if (control is DropDownList && ((DropDownList)control).SelectedValue != "-1")  
        {  
            SqlParameter parameter = new SqlParameter parameterName, ((DropDownList)control).SelectedValue);  
            command.Parameters.Add(parameter);  
        }  
    }  
}  
  
**Make sure you have the following using statements in your code-behind page**  
using System;  
using System.Web;  
using System.Web.UI;  
using System.Web.UI.WebControls;  
using System.Data;  
using System.Data.SqlClient;  
using System.Configuration;