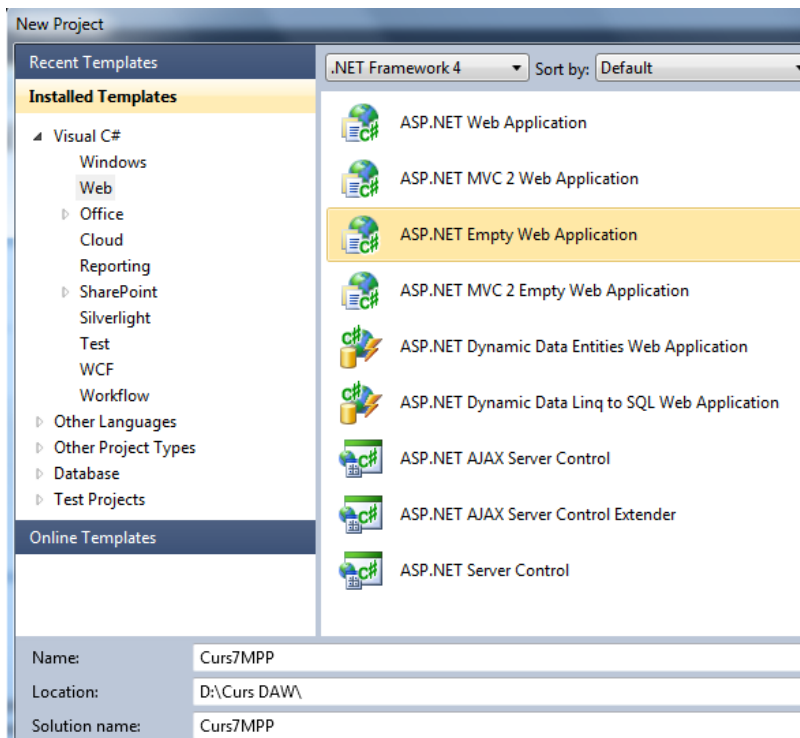


CURS 7 Medii de proiectare si programare: proiectarea si implementarea aplicatiilor web cu ASP.Net

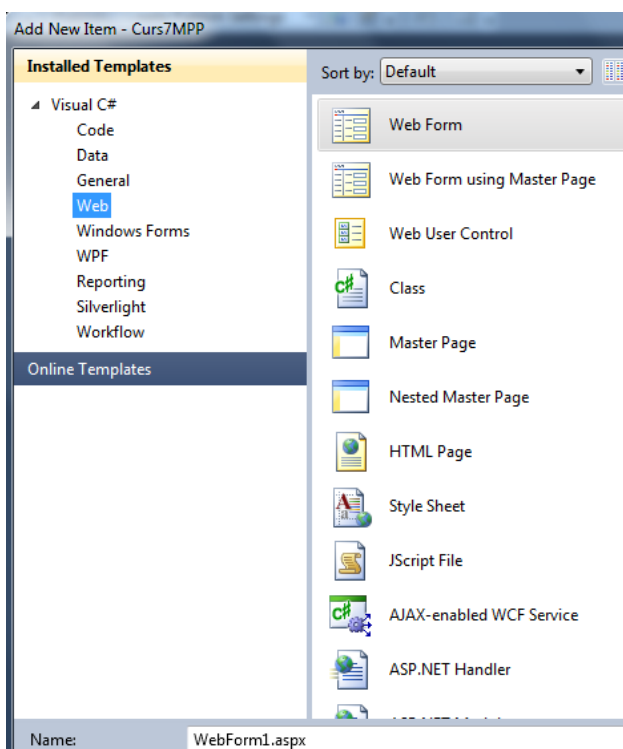
- Crearea unei aplicatii web
- Afisarea datelor dintr-o tabela a unei baze de date, folosind controlul GridView
- Afisarea datelor dintr-o tabela a unei baze de date, folosind controlul GridView cu posibilitatea selectiei unei linii din grid si utilizarea unor proprietati ale liniei selectate
- Afisarea datelor dintr-o baza de date, ce necesita mai multe tabele, folosind controlul GridView
- Utilizarea paginarii pt. grid-uri

1. Crearea unei aplicatii web

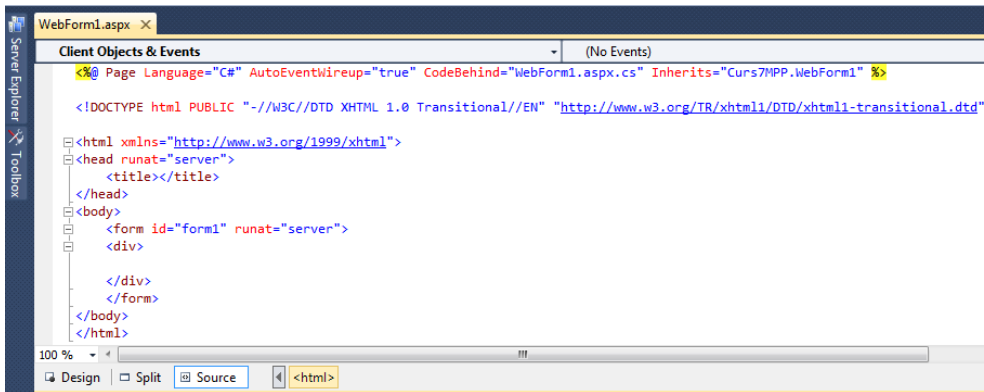


Pas 1. Alegem categoria Web si tipul ASP.NET Empty Web Application.

Pas 2. Adaugam aplicatiei (Click dr pe numele aplicatiei in solution explorer) o componenta Web Form



Se genereaza o pagina cu numele WebForm1.aspx



Pagina poate fi proiectata in modurile Design, Source sau Split.

- Modul Design este similar modului design pt. Windows Forms Application.
- Modul Source dispune de un editor pt. textul paginii.
- Modul Split permite utilizarea simultana a celor doua moduri: Design si Source.
- Exista si un al 4-lea mod: Code, prin care editam codul C# asociat paginii (Click dr, View Code)

Pas 3. Adaugam paginii (in modul Source) un titlu in sectiunea title (APLICATIE WEB) si stergem sectiunea div.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="Curs7MPP.WebForm1" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>APLICATIE WEB</title>
</head>
<body>
<form id="form1" runat="server">
</form>
</body>
</html>
```

Pas 4. Adaugam aplicatiei (modul Design sau Source) o componenta Label. Punem cursorul in interiorul form-ului, selectam Label din ToolBox si facem dublu click pe Label. Obtinem:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="Curs7Web.WebForm1" %>

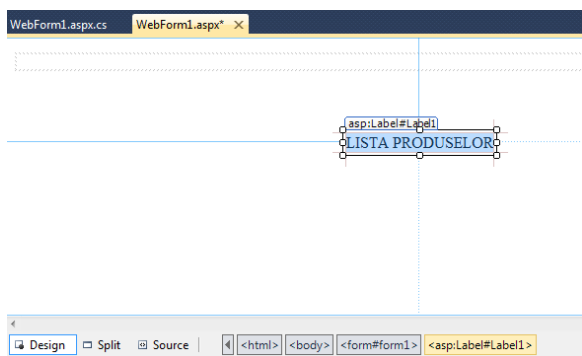
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>APLICATIE WEB</title>
</head>
<body>
<form id="form1" runat="server">
<asp:Label ID="Label1" runat="server" Text="LISTA PRODUSELOR"></asp:Label>
</form>
</body>
</html>
```

Pas 5. Adaugam componentei Label, optiunea **style="position: absolute"**

```
<form id="form1" runat="server">
<asp:Label ID="Label1" runat="server" Text="LISTA PRODUSELOR" style="position: absolute"></asp:Label>
</form>
```

Aceasta optiune ne permite ca in modul design sa plasam componenta in pozitia dorita.



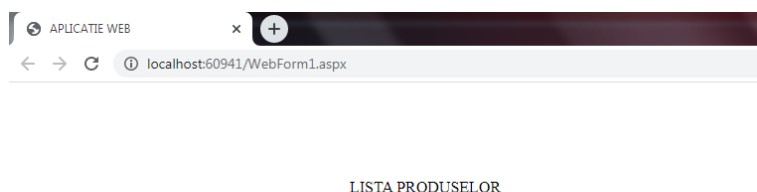
Se va retine pozitia acestuia:

```
<form id="form1" runat="server">
  <asp:Label ID="Label1" runat="server" Text="LISTA PRODUSELOR"
    style="position: absolute; top: 97px; left: 346px;"></asp:Label>
</form>
```

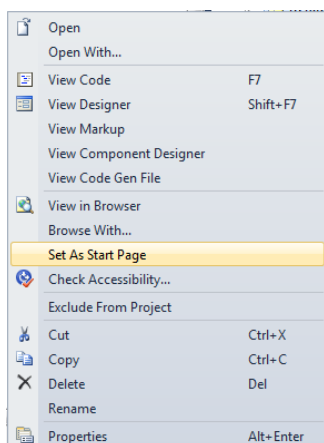
Vom folosi aceasta facilitate pt. toate componentele grafice.

Executia aplicatiei (CTRL-F5) se face in browser-ul implicit.

Visual studio foloseste un server web propriu ASP.NET Development Server.



Obs. Daca avem mai multe componente WebForm, in cadrul aplicatiei, declaram form-ul de start facand click dr pe el in fereastra Solution Explorer si selectand optiunea Set As Start Page.

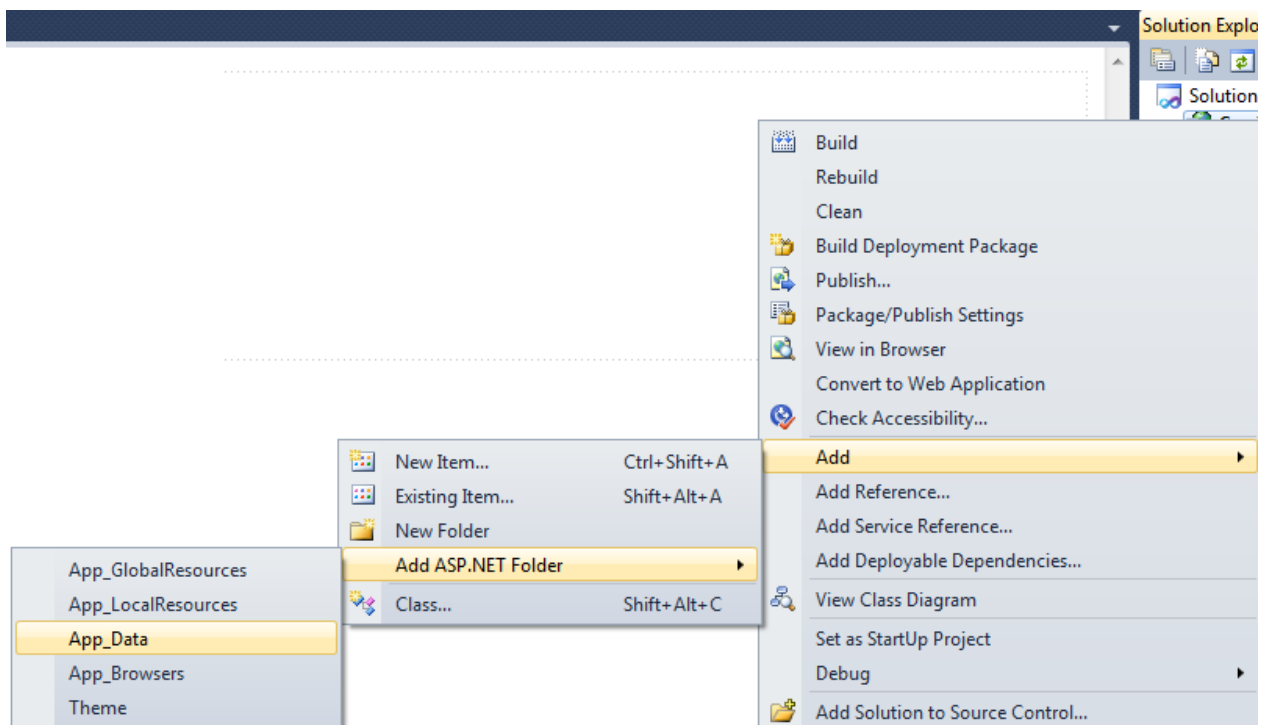


2. Afisarea datelor dintr-o tabela a unei baze de date, folosind controlul GridView

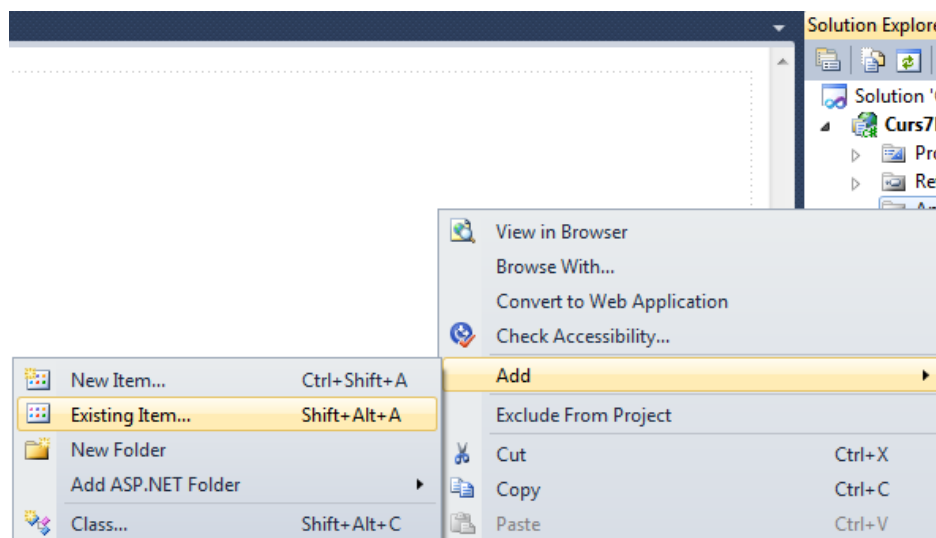
Pas 1. Cream o baza de date Access, BD1.accdb cu o tabela Produse:

Produse		Produse				
Field Name	Data Type	IdProdus	DProdus	UM	CotaTVA	PretVanzare
IdProdus	AutoNumber	1	Produs 1	Kg	19.00	10.00
DProdus	Short Text	2	Produs 2	Buc	19.00	20.00
UM	Short Text	3	Produs 3	MP	19.00	30.00
CotaTVA	Currency	4	Produs 4	Buc	9.00	40.00
PretVanzare	Currency					

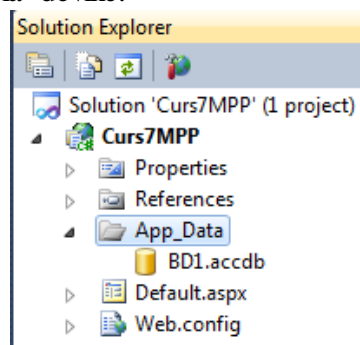
Pas 2. Cream directorul App_Data in cadrul aplicatiei. Click_dr pe numele aplicatiei:



Pas 3. Copiem baza de date in directorul App_Data. Click_dr pe App_Data:

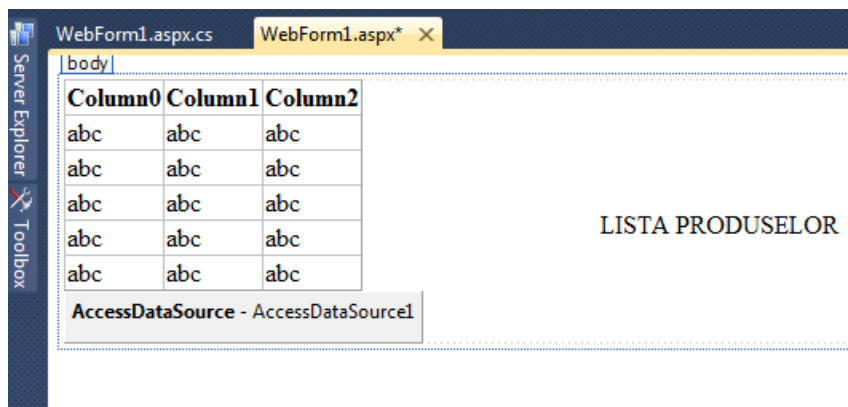


Aplicatia devine:



Pas 4. Adaugam aplicatiei un gridView si un AccessDataSource (din toolbox).

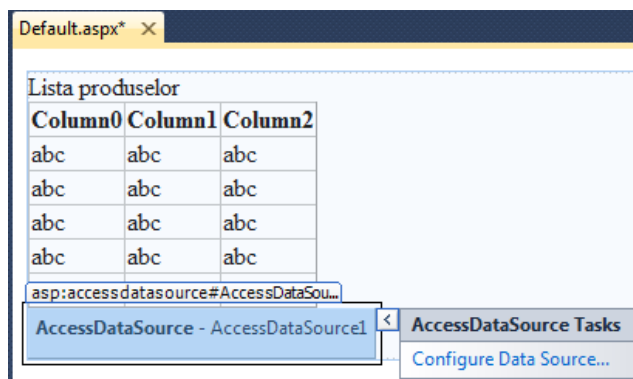
Pagina devine (modul Design):



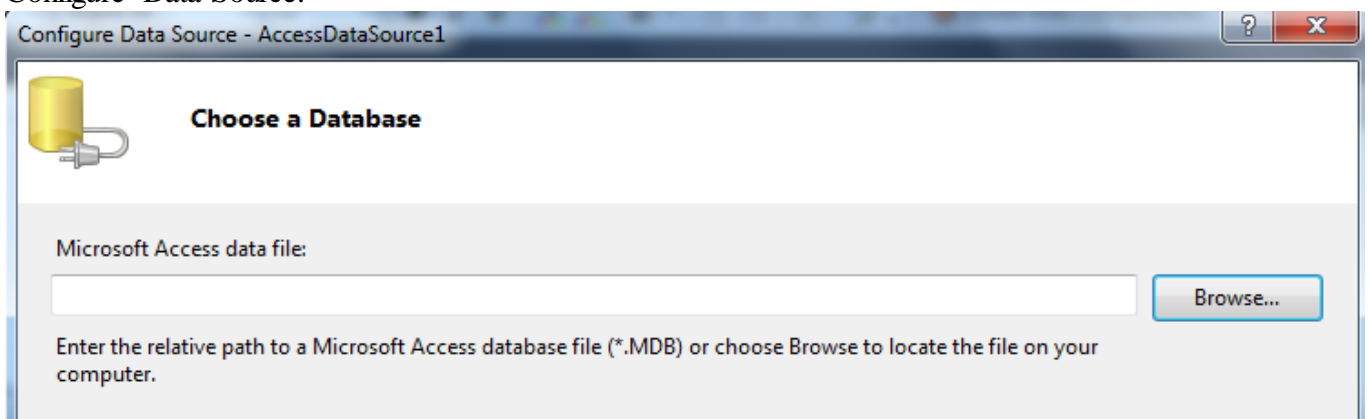
Iar in modul Source:

```
<form id="form1" runat="server">
<asp:Label ID="Label1" runat="server" Text="LISTA PRODUSELOR"
  style="position: absolute; top: 97px; left: 346px;"></asp:Label>
<asp:GridView ID="GridView1" runat="server">
</asp:GridView>
<asp:AccessDataSource ID="AccessDataSource1" runat="server">
</asp:AccessDataSource>
</form>
```

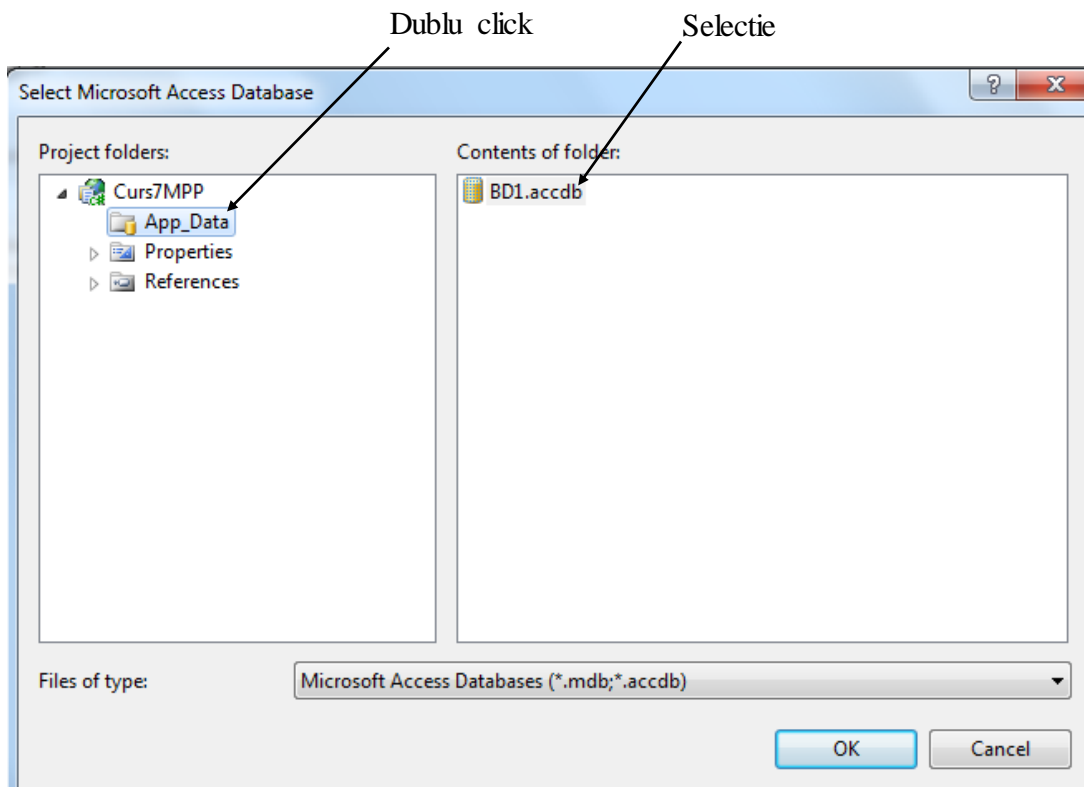
Pas 5. Configuram AccessDataSource:



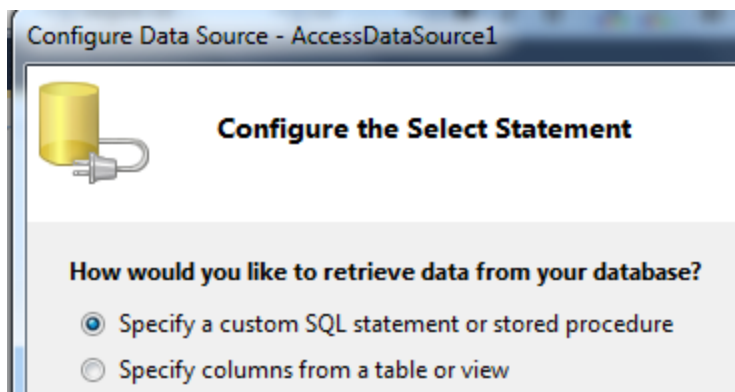
Configure Data Source:



Click pe butonul Browse:



Next:



Next => Query Builder

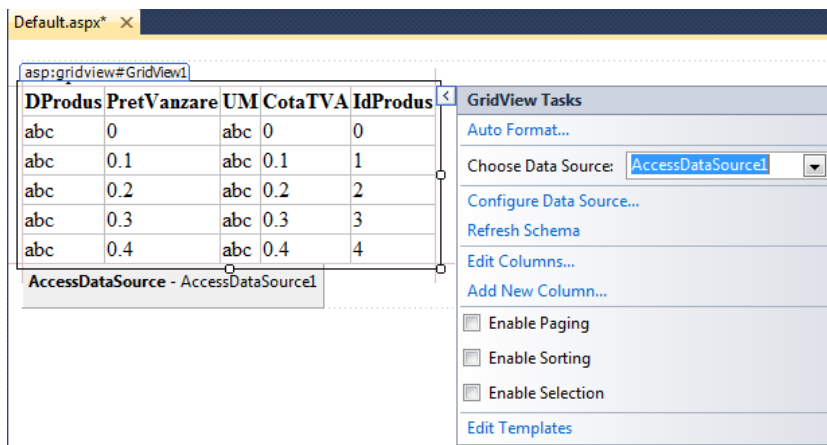
```
SELECT      DProdus, PretVanzare, UM, CotaTVA, IdProdus
FROM        Produce
ORDER BY DProdus
```

Next => Finish

Vedem configurarea componentei AccessDataSource in modul Source:

```
<asp:AccessDataSource ID="AccessDataSource1" runat="server"
    DataFile="~/App_Data/BD1.accdb"
    SelectCommand="SELECT DProdus, PretVanzare, UM, CotaTVA, IdProdus FROM Produce ORDER BY DProdus">
</asp:AccessDataSource>
```

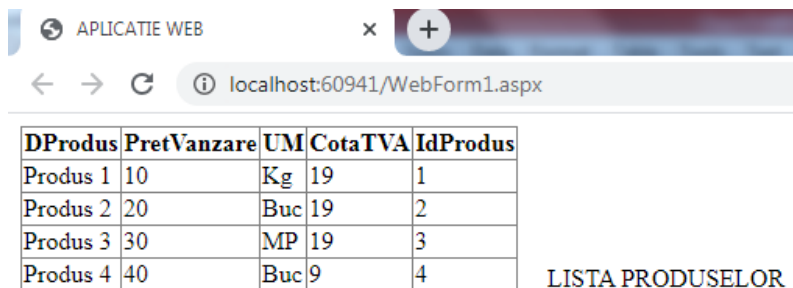
Pas 6. Configuram grid-ul:



Vedem configurarea grid-ului in modul Source:

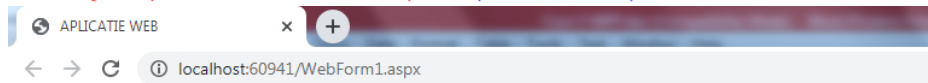
```
<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
    DataKeyNames="IdProdus" DataSourceID="AccessDataSource1">
    <Columns>
        <asp:BoundField DataField="DProdus" HeaderText="DProdus"
            SortExpression="DProdus" />
        <asp:BoundField DataField="PretVanzare" HeaderText="PretVanzare"
            SortExpression="PretVanzare" />
        <asp:BoundField DataField="UM" HeaderText="UM" SortExpression="UM" />
        <asp:BoundField DataField="CotaTVA" HeaderText="CotaTVA"
            SortExpression="CotaTVA" />
        <asp:BoundField DataField="IdProdus" HeaderText="IdProdus"
            InsertVisible="False" ReadOnly="True" SortExpression="IdProdus" />
    </Columns>
</asp:GridView>
```

Executam aplicatia (Ctrl-F5):



Pas 7. Pozitionam grid-ul:

```
<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
    DataKeyNames="IdProdus" DataSourceID="AccessDataSource1"
    style="position: absolute; top: 149px; left: 298px;">
```

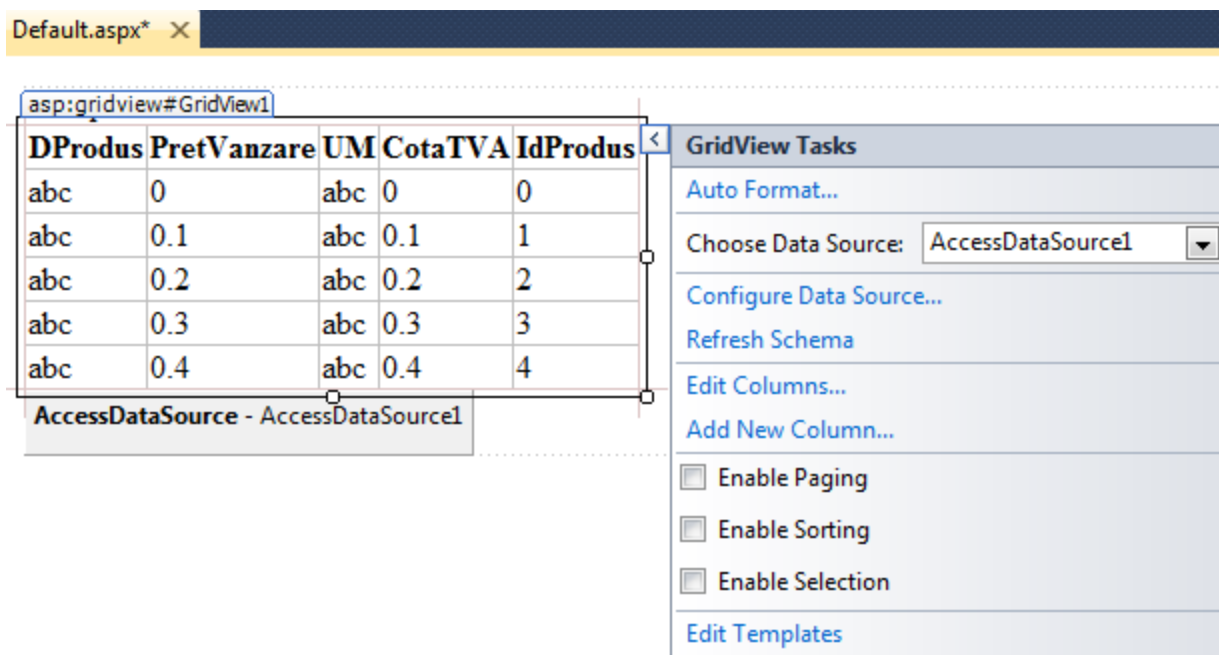


LISTA PRODUSELOR

DProdus	PretVanzare	UM	CotaTVA	IdProdus
Produs 1	10	Kg	19	1
Produs 2	20	Buc	19	2
Produs 3	30	MP	19	3
Produs 4	40	Buc	9	4

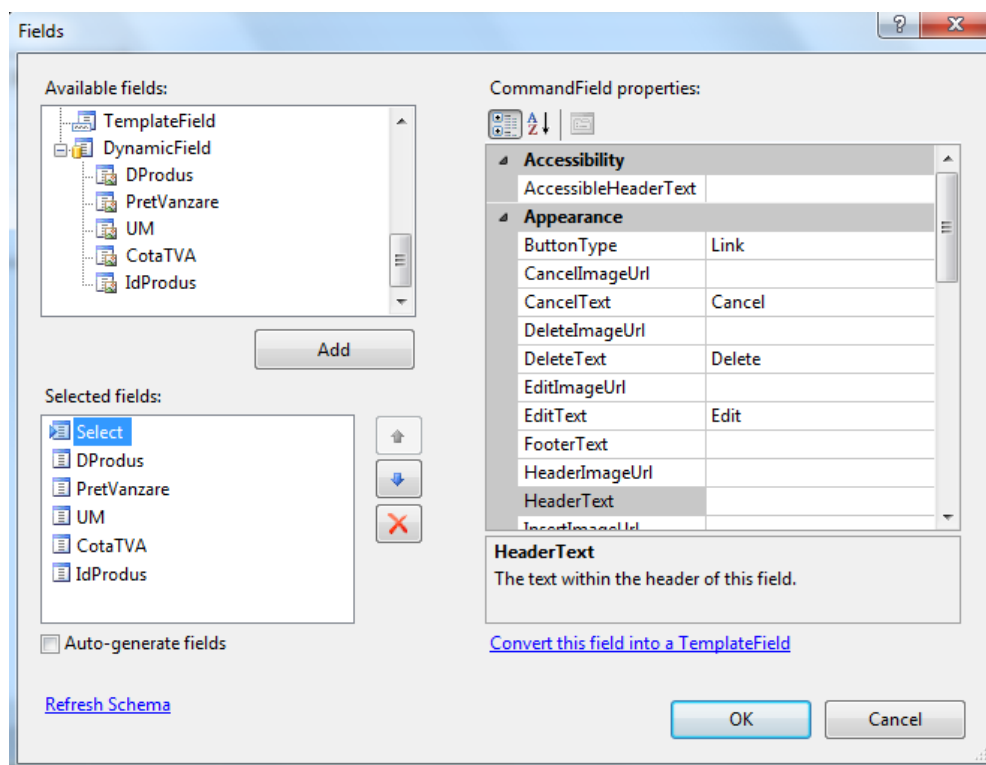
3. Afisarea datelor dintr-o tabela a unei baze de date, folosind controlul GridView cu posibilitatea selectiei unei linii din grid si utilizarea unor proprietati ale liniei selectate

Configurarea controlului grid-ului:



Bifam Enable Selection

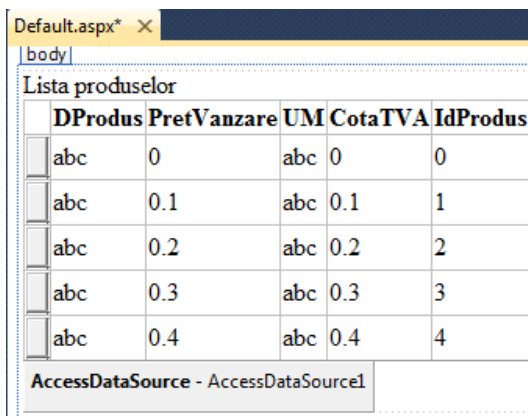
Edit Columns:



Button Type => Button (in loc de Link)

Select Text => sir vid (in loc de Select)

Pagina devine (modul Design)



Pentru marcarea liniei selectate, setam proprietatea BackColor din grupa SelectedRowType din proprietatile grid-ului.

Plasam 3 controale de tip label: Label1, Label2, Label3 in modul Design (din ToolBox)

LISTA PRODUSELOR

	DProdus	PretVanzare	UM	CotaTVA	IdProdus	
<input type="checkbox"/>	abc	0	abc	0	0	Label
<input type="checkbox"/>	abc	0.1	abc	0.1	1	Label
<input type="checkbox"/>	abc	0.2	abc	0.2	2	Label
<input type="checkbox"/>	abc	0.3	abc	0.3	3	
<input type="checkbox"/>	abc	0.4	abc	0.4	4	

Se creaza metoda eveniment GridView1_SelectedIndexChanged (dublu click pe grid, in modul design). Completam metoda cu codul urmatoare:

```
protected void GridView1_SelectedIndexChanged(object sender, EventArgs e) {
    Label2.Text = "Id-ul produsului selectat este " + GridView1.SelectedValue;
    Label3.Text = "Indexul elementului selectat este " + GridView1.SelectedIndex;
    Label4.Text = "Pretul de vanzare al produsului selectat este " +
        GridView1.SelectedRow.Cells[5].Text ;
}
```

Executie:

LISTA PRODUSELOR

	DProdus	PretVanzare	UM	CotaTVA	IdProdus	
<input type="checkbox"/>	Produs 1	10	Kg	19	1	Label
<input type="checkbox"/>	Produs 2	20	Buc	19	2	Label
<input type="checkbox"/>	Produs 3	30	MP	19	3	
<input type="checkbox"/>	Produs 4	40	Buc	9	4	Label

Selectand linia 3 (Click in coloana de selectie) obtinem:

LISTA PRODUSELOR

	DProdus	PretVanzare	UM	CotaTVA	IdProdus	
<input type="checkbox"/>	Produs 1	10	Kg	19	1	Id-ul produsului selectat este 3
<input type="checkbox"/>	Produs 2	20	Buc	19	2	Indexul elementului selectat este 2
<input checked="" type="checkbox"/>	Produs 3	30	MP	19	3	Pretul de vanzare al produsului selectat este 3
<input type="checkbox"/>	Produs 4	40	Buc	9	4	

Daca dorim ca la afisarea initiala a paginii sa fie selectat primul produs din grid si sa afisam totodata mesajele in cele 3 etichete, scriem codul urmator in procedura eveniment Page_Load:

```
protected void Page_Load(object sender, EventArgs e) {  
    if (!IsPostBack) {  
        GridView1.DataBind();  
        GridView1.SelectedIndex = 0;  
        Label2.Text = "Id-ul produsului selectat este " + GridView1.SelectedValue;  
        Label3.Text = "Indexul elementului selectat este " + GridView1.SelectedIndex;  
        Label4.Text = "Pretul de vanzare al produsului selectat este " +  
            GridView1.SelectedRow.Cells[5].Text;  
    }  
}
```

Obs. Pt. a beneficia de proprietatea SelectedValue a grid-ului, acesta trebuie sa aiba proprietatea DataKeysNames setata pe IdProdus. Fiind cheie in baza de date, proprietatea ar trebui sa fie setata automat de catre visual studio.

4. Afisarea datelor dintr-o baza de date, ce necesita mai multe tabele, folosind controlul GridView

Sa presupunem ca avem urmatoarele tabele intr-o baza de date:

Produse(IdProdus, DProdus, Um, CotaTVA, PretVanzare, IdCategorie)

Categorii(IdCategorie, DCategorie)

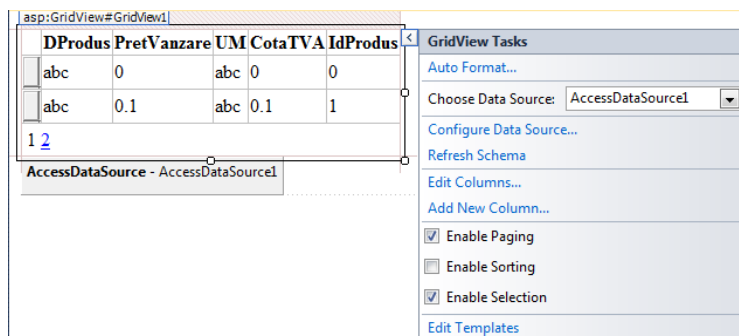
Vrem sa afisam intr-o pagina WEB informatiile: IdProdus, DProdus, Um, CotaTVA, PretVanzare, DCategorie.

Solutia este similara cu cea de la sectiunea 2, doar ca la pas 5 avem cererea SQL:

```
SELECT Produse.IdProdus, Produse.DProdus, Produse.Um, Produse.CotaTva,  
       Produse.PretVanzare, Categorii.DCategorie  
FROM (Produs LEFT OUTER JOIN Categorii  
      ON Produse.IdCategorie = Categorii.IdCategorie)
```

5. Utilizarea paginarii pt. grid-uri

Bifam Enable Paging in GridView Tasks



Setam proprietatea gridului PageSize => numarul de linii din pagina (2 in cazul de fata)

Executie:

localhost:60941/WebForm2.aspx x +

localhost:60941/WebForm2.aspx

	DProdus	PretVanzare	UM	CotaTVA	IdProdus
<input type="checkbox"/>	Produs 1	10	Kg	19	1
<input type="checkbox"/>	Produs 2	20	Buc	19	2

1 2

localhost:60941/WebForm2.aspx x +

localhost:60941/WebForm2.aspx

	DProdus	PretVanzare	UM	CotaTVA	IdProdus
<input type="checkbox"/>	Produs 3	30	MP	19	3
<input type="checkbox"/>	Produs 4	40	Buc	9	4

1 2