



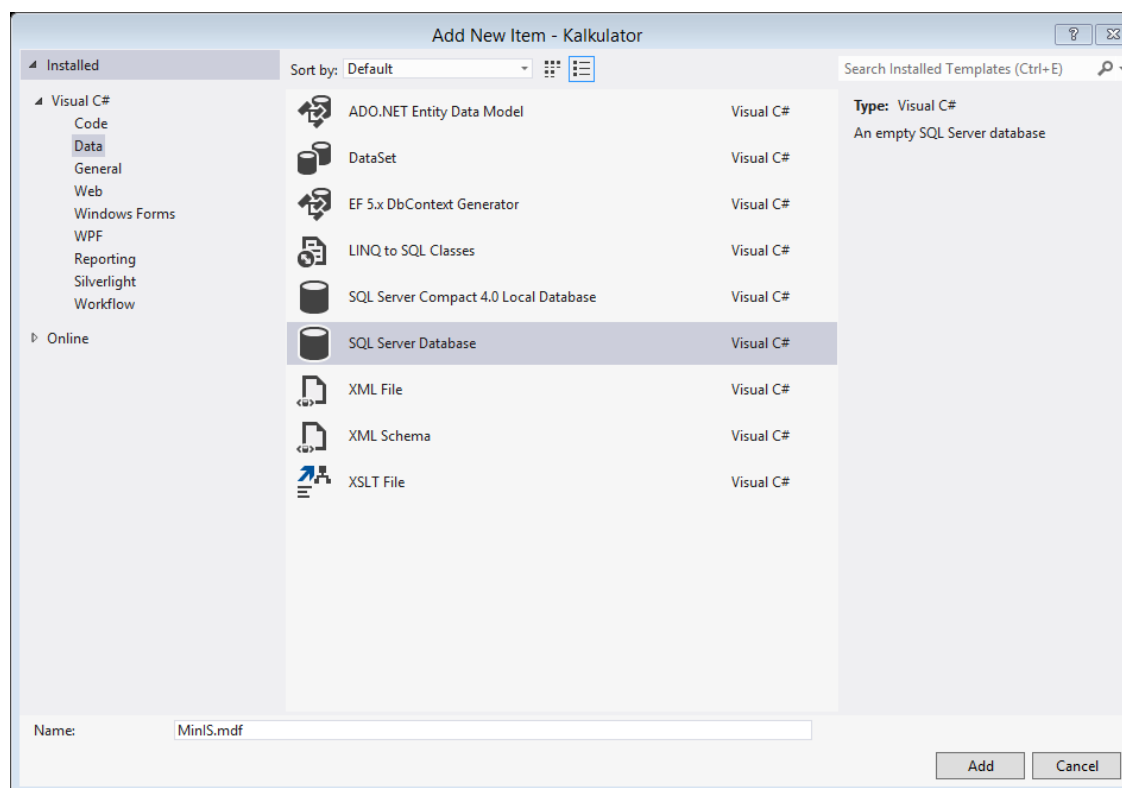
Izdelava podatkovne baze

Delo s podatki



Nova podatkovna baza (1)

Project → Add New Item → SQL Server Database





Nova podatkovna baza (2)

- Nova baza se privzeto doda v mapo App_Data
 - Datoteka *.mdf – podatkovna baza (SQL Server)
 - Datoteka *.ldf – transakcijski dnevnik podatkovne baze

Pri morebitnem prenosu podatkovne baze na drug projekt je potrebno prenesti oz. prekopirati obe datoteki!



Nova podatkovna baza (3)

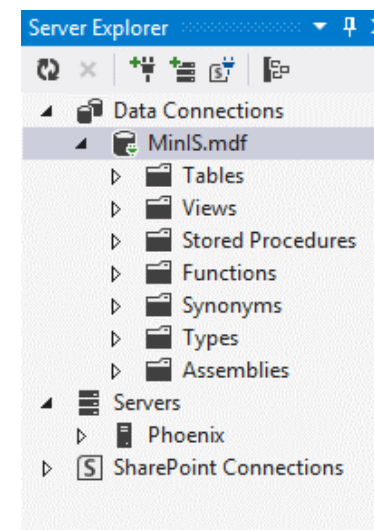
- Nastavitev povezave s podatkovno bazo
 - Datoteka **Web.config**
 - *connectionString*

```
<connectionStrings>
  <add name="ConnectionString" connectionString="Data Source=.
\SQLEXPRESS;AttachDbFilename=MinIS.mdf;Integrated Security=True;User
Instance=True" providerName="System.Data.SqlClient" />
</connectionStrings>
```



Delo s podatkovnimi bazami (1)

- Server Explorer
 - Pregled strukture
 - Pregled podatkov
- Imenski prostor System.Data



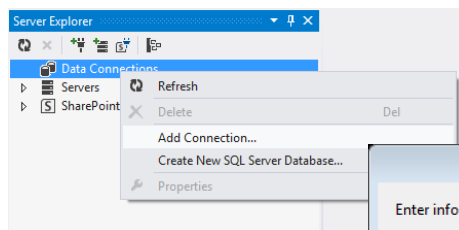


Povezava s podatkovno bazo

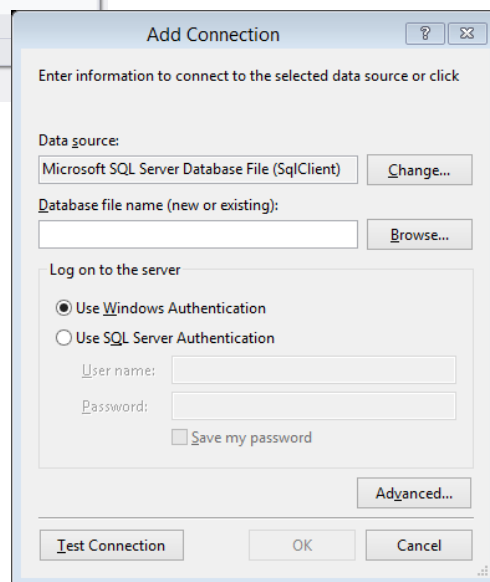
Bazo prenesemo na lokalni disk in dodamo novo povezavo

–Na disk je potrebno prenesti dve datoteki NazivBaze.**mdf**
in NazivBaze.**ldf** !

1.



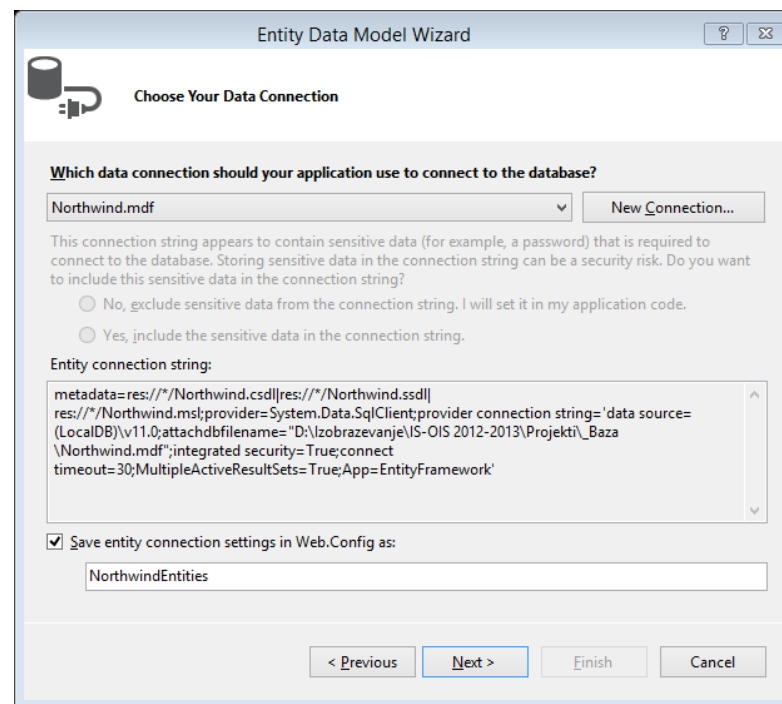
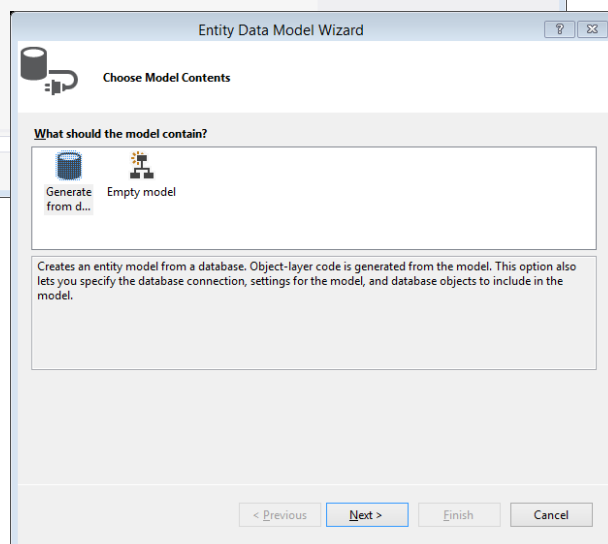
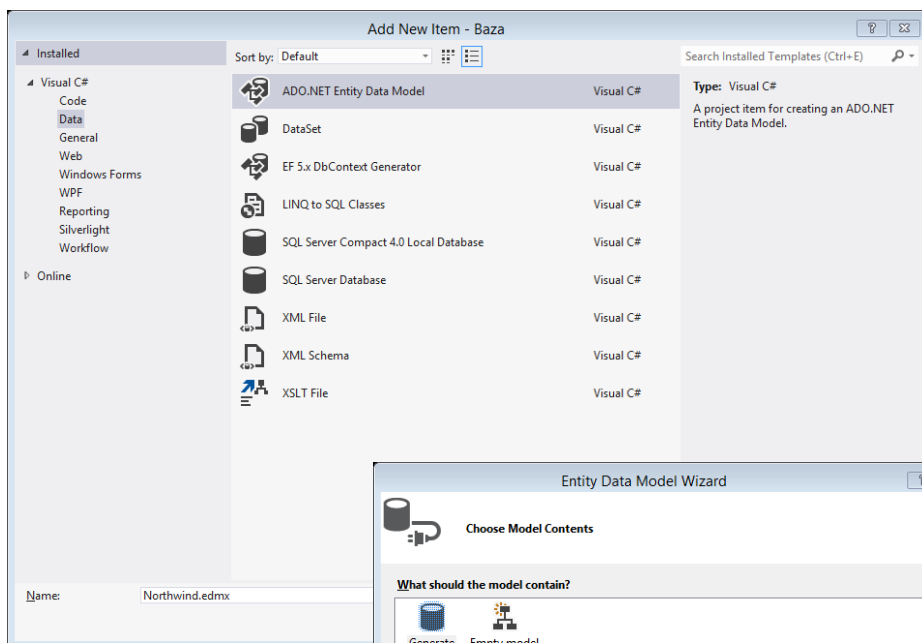
2.





Podatkovni model (1)

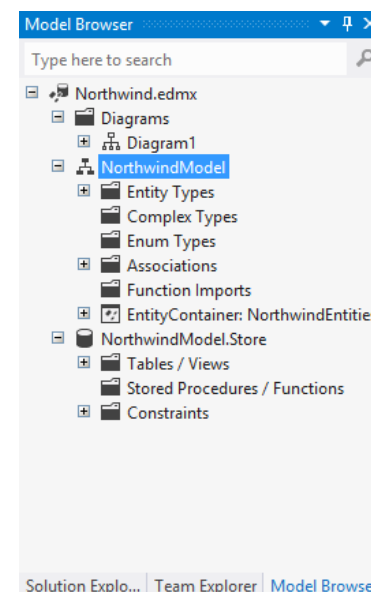
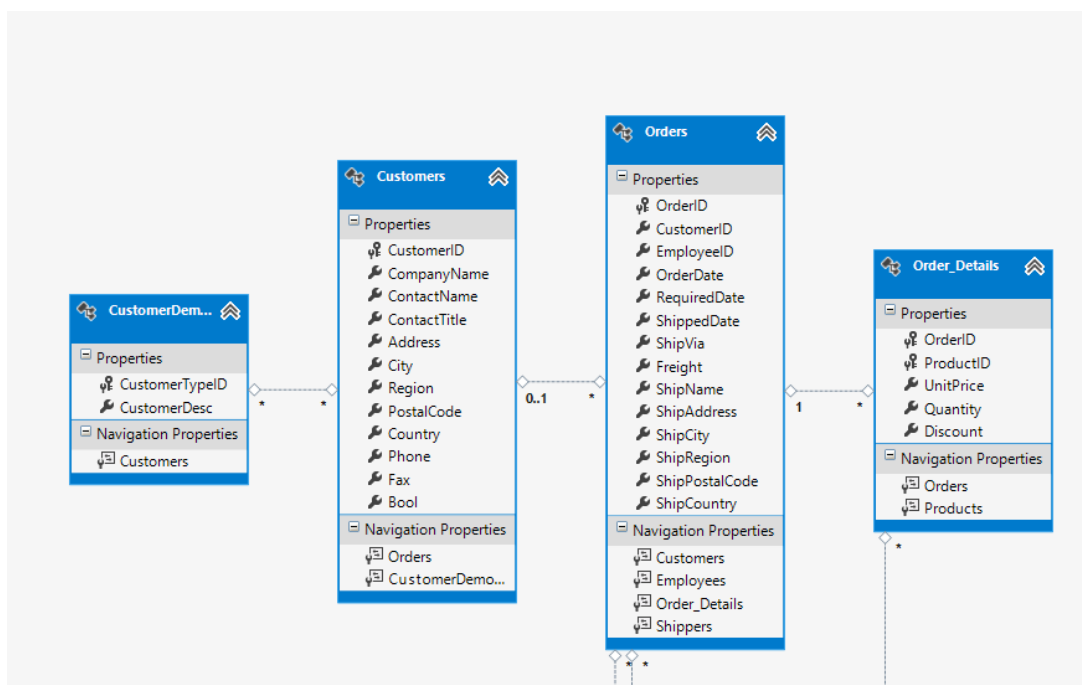
Project → Add New Item → ADO.NET Entity Data Model





Podatkovni model (2)

Entitetni podatkovni model (Entity Designer)





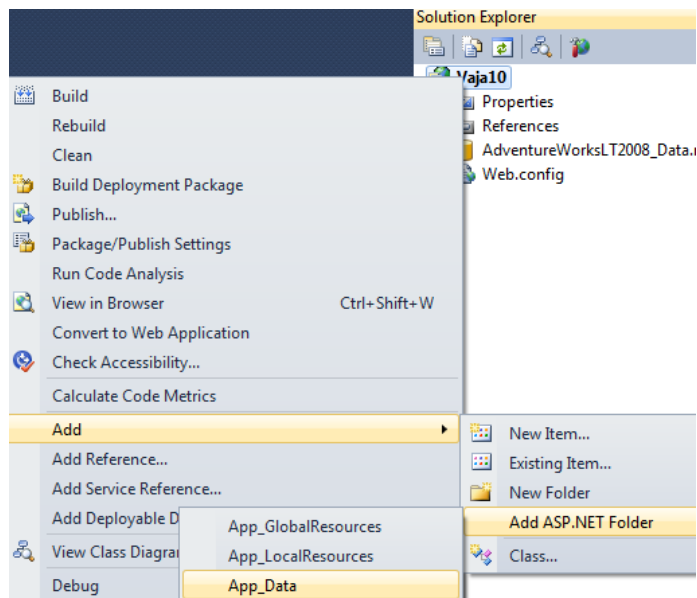
Gradnik SqlDataSource

Delo s podatki

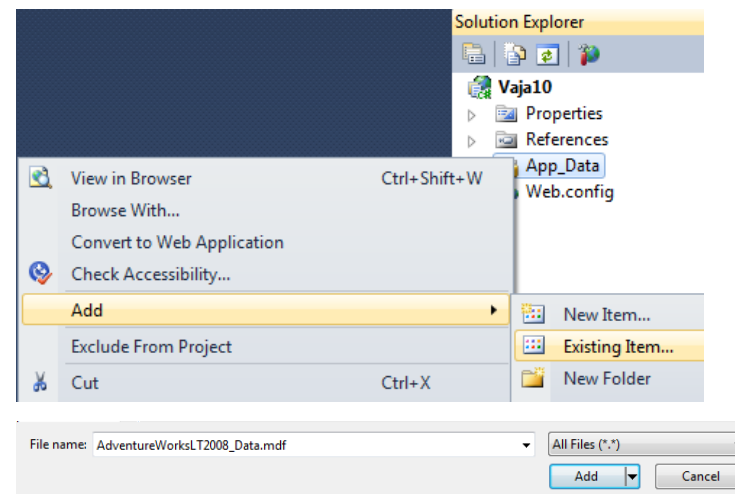
Vključitev obstoječe baze na projekt

- Bazo prenesemo na lokalni disk in jo vključimo na projekt v mapo App_Data
 - Na disk je potrebno prenesti dve datoteki NazivBaze.mdf in NazivBaze.Idf !
 - Če mapo App_Data ne obstaja, jo dodamo [1]

1.



2.



Izberemo **mdf** datoteko!



Gradnik SqlDataSource

- Povezava s podatkovno bazo
 - Ena ali več tabel
- Enostavno povezovanje parametrov z različnimi viri
 - Gradniki
 - Parametri v naslovu
 - Piškotki
 - Sejne spremenljivke
 - Itd.

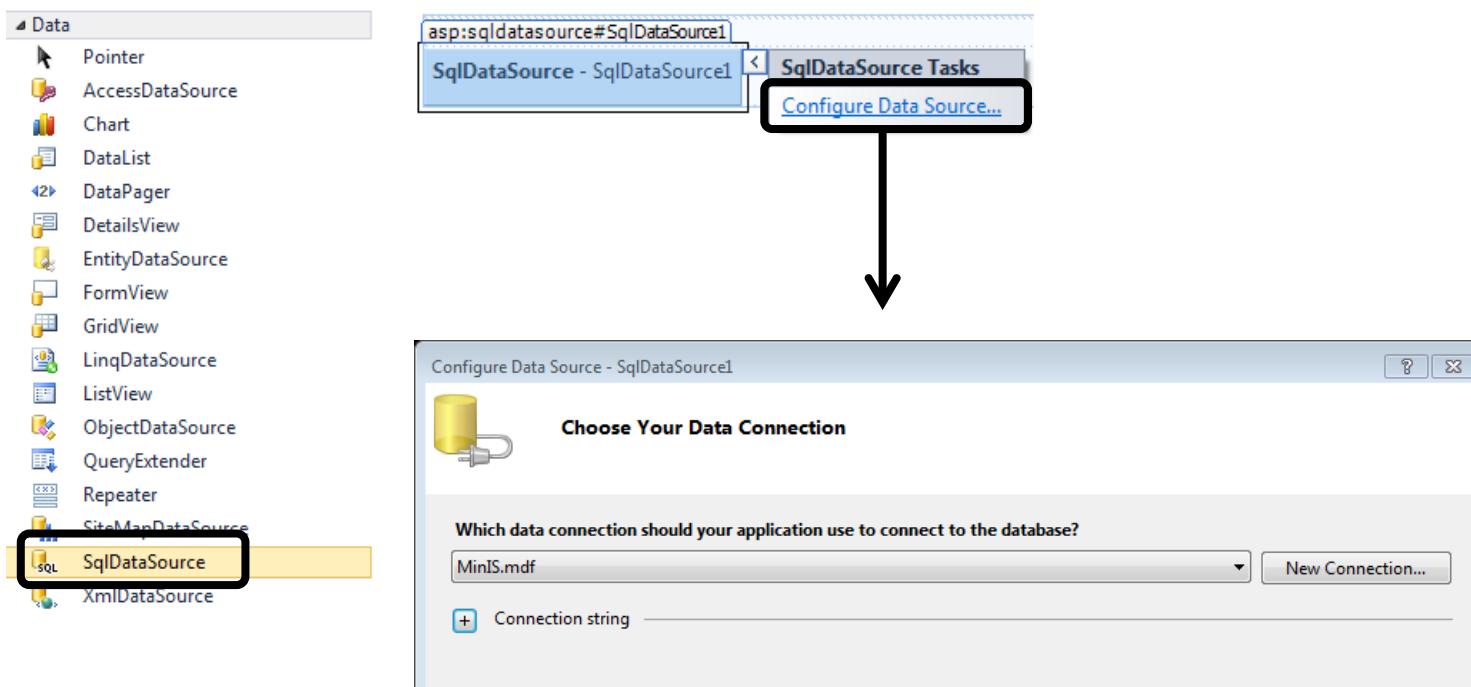


Potek dela

- Določitev virov za parametre
 - Gradniki
 - Sejne spremenljivke
 - Parametri v naslovu
 - Itd.
- Dodajanje gradnikov za prikaz podatkov
- Dodajanje gradnika SqlDataSource
 - Povezovanje parametrov z viri



Dodajanje gradnika SqlDataSource (1)





Dodajanje gradnika SqlDataSource (2)

Configure Data Source - SqlDataSource1

Configure the Select Statement

How would you like to retrieve data from your database?

☐ Specify a custom SQL statement or stored procedure

☒ Specify columns from a table or view

Name:
Oseba

Columns:

- ☒ *
- ☐ ID
- ☐ Ime
- ☐ Priimek

☐ Return only unique rows

WHERE...

ORDER BY...

Advanced...

SELECT statement:
SELECT * FROM [Oseba]

< Previous Next > Finish Cancel

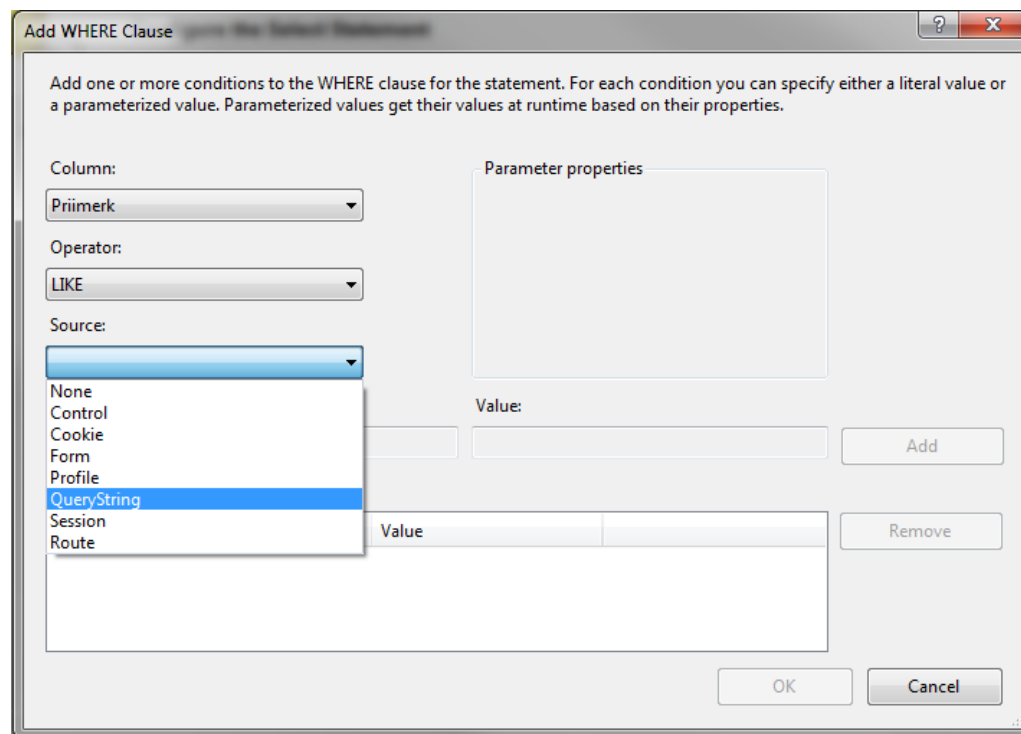
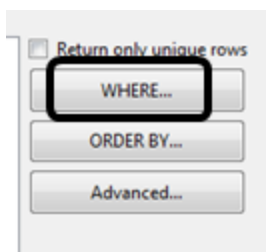
Če imajo stolpci presledek v imenu, jih je potrebno izbrati posebej!





Dodajanje gradnika SqlDataSource (3)

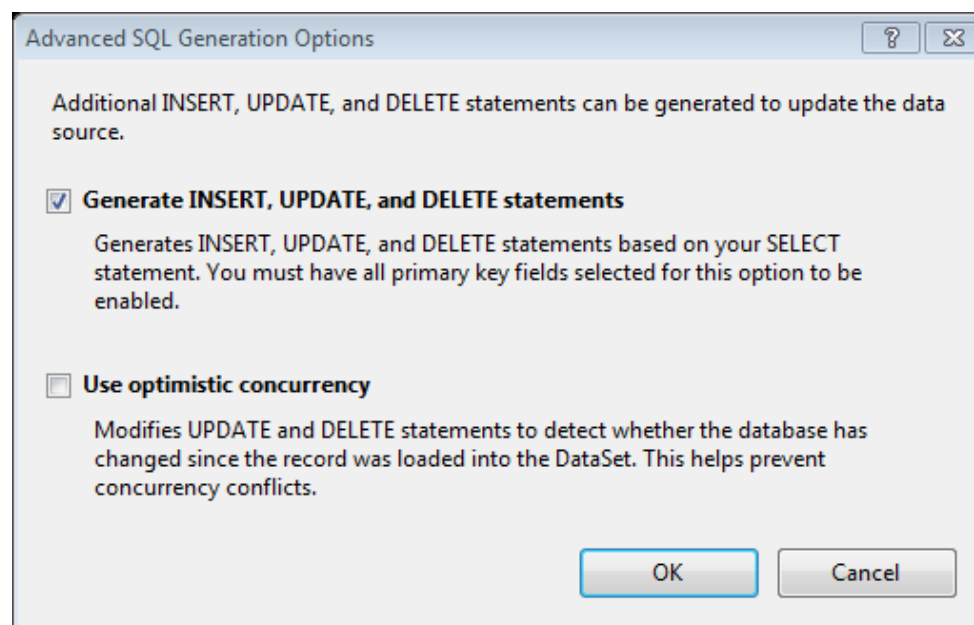
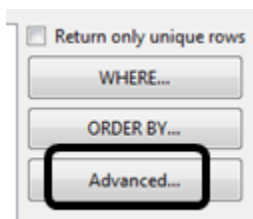
- Povezava parametrov WHERE stavka z različnimi viri





Dodajanje gradnika SqlDataSource (4)

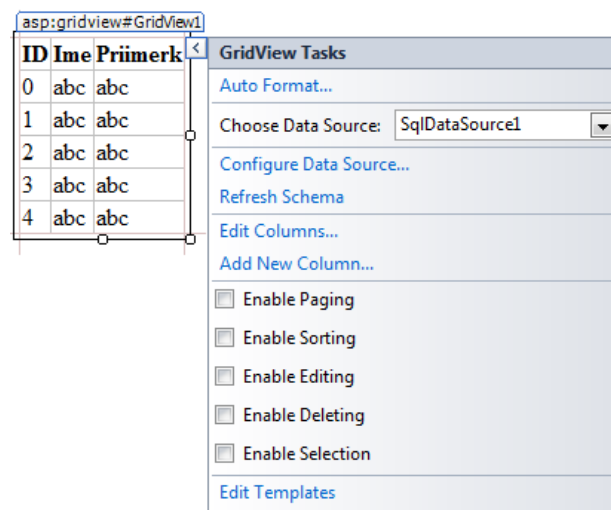
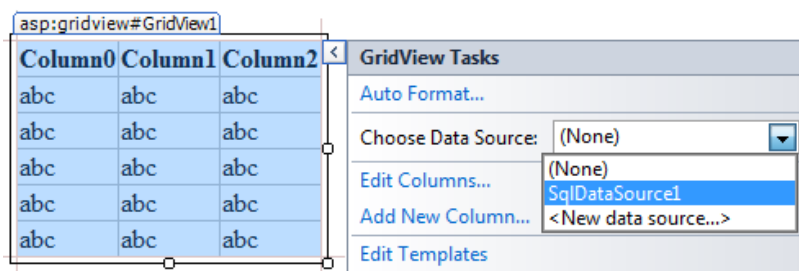
- Generiranje stavkov SQL za posodabljanje podatkovne baze na osnovi stavka SELECT (če je to mogoče)





Gradnik GridView

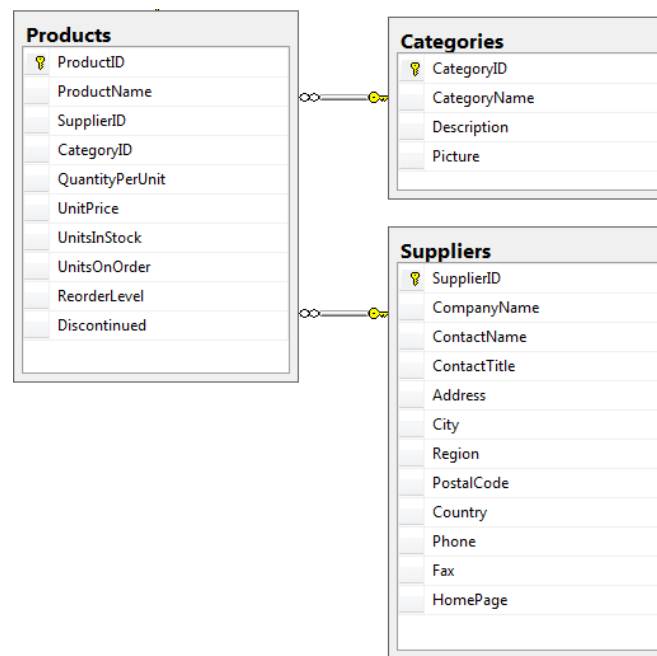
- Omogoča prikaz večje količine podatkov v tabelarični obliki
- Podatkovni vir: SqlDataSource





Vaja 8 (1)

- Na projekt dodajte podatkovno bazo NorthWind, ki jo najdete na eUčilnici
- S pomočjo gradnika GridView izdelajte spletni obrazec preko katerega bo mogoče pregledovati zalogo izdelkov (tabela Product)





Vaja 8 (2)

Prikazani podatki

•(tabele Product, Categories, Suppliers):

ID	Naziv Izdelka	Naziv Kategorije	Naziv dobavitelja	Zaloga

- Na izdelanem spletnem obrazcu omogočite filtriranje prikazanih izdelkov glede na naziv izdelka
 - Filtriranje realizirajte preko parametra v URL naslovu (QueryString)

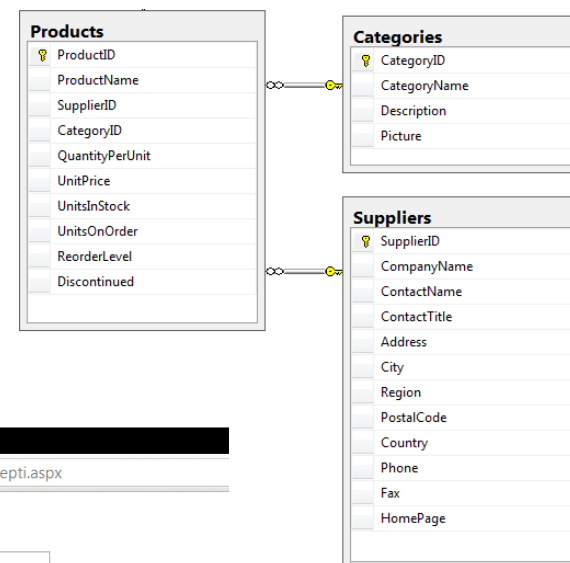


Lookup, Master/Detail in Sestavljena polja

Koncepti

Koncept Lookup (1)

- Zagotavljanje referenčne integritete
- Črpanje podatkov iz „lookup-tabele“ oz. šifrantov
- Olajšanje dela uporabnikom?



The screenshot shows a web browser window with the URL `localhost:16067/Koncepti.aspx`. The page displays a form for adding or editing a product. The fields are as follows:

- ProductID: 1
- ProductName: Chai
- SupplierID: Pavlova, Ltd. (dropdown)
- CategoryID: Beverages (dropdown)
- QuantityPerUnit: 10 boxes x 20 bags
- UnitPrice: 18,0000
- UnitsInStock: 39
- UnitsOnOrder: 0
- ReorderLevel: 10
- Discontinued: ☐

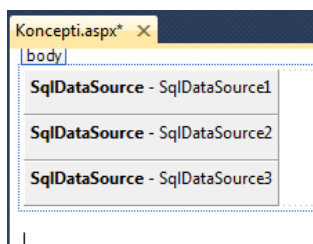
Below the form are links for [Update](#) and [Cancel](#), followed by a pagination bar showing `1 2 3 4 5 6 7 8 9 10 ...`. A red box highlights the **CategoryID** dropdown menu, which is open and shows the following list of categories: Beverages, Condiments, Confections, Dairy Products, Grains/Cereals, Meat/Poultry, Produce, and Seafood.



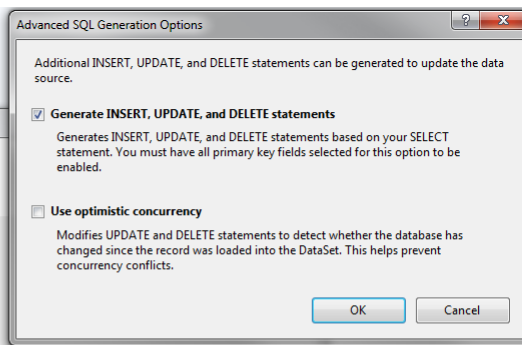
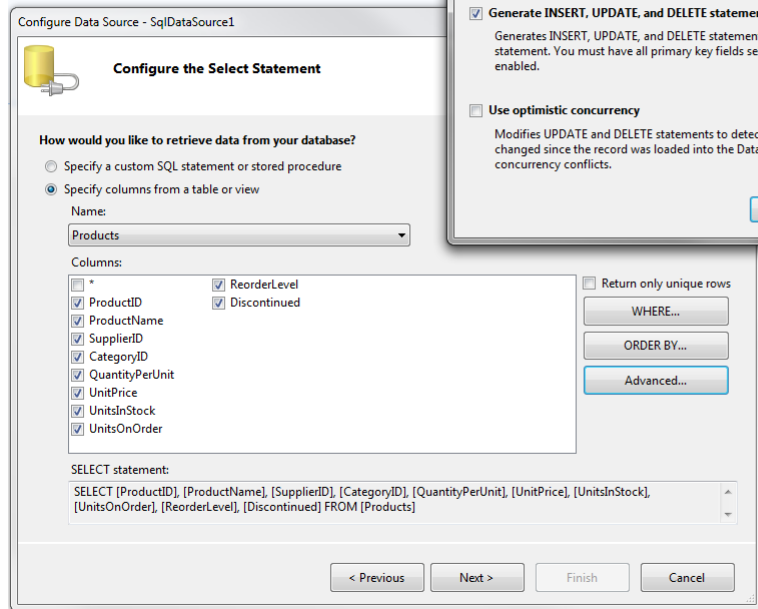
Koncept Lookup (2)

Dodamo in nastavimo
SqlDataSource za vsako tabelo

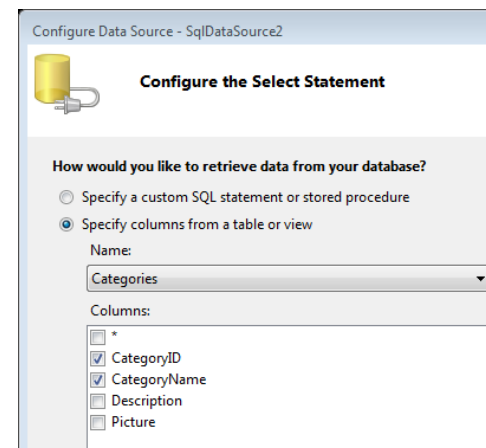
1.



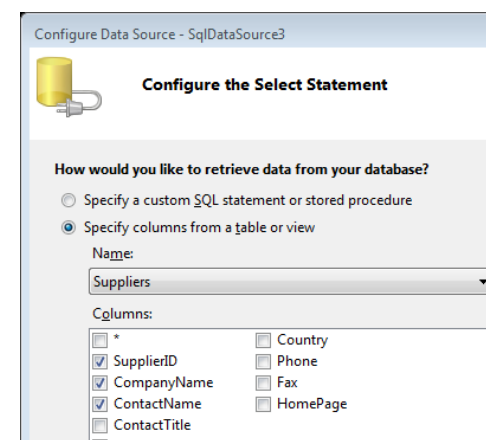
2.



3.



4.





Konzept Lookup (3)

•Gradnik FormView

asp:formview#FormView1

ProductID: 0	FormView Tasks
ProductName: abc	Auto Format...
SupplierID: 0	Choose Data Source: SqlDataSource1
CategoryID: 0	Configure Data Source...
QuantityPerUnit: abc	Refresh Schema
UnitPrice: 0	<input type="checkbox"/> Enable Dynamic Data support
UnitsInStock: 0	<input checked="" type="checkbox"/> Enable Paging
UnitsOnOrder: 0	Edit Templates
ReorderLevel: 0	
Discontinued: <input type="checkbox"/>	
Edit Delete New	
1 2	

asp:formview#FormView1

FormView1 - ItemTemplate

ItemTemplate

ProductID: [ProductIDLabel]
ProductName: [ProductNameLabel]
SupplierID: [SupplierIDLabel]
CategoryID: [CategoryIDLabel]
QuantityPerUnit: [QuantityPerUnitLabel]
UnitPrice: [UnitPriceLabel]
UnitsInStock: [UnitsInStockLabel]
UnitsOnOrder: [UnitsOnOrderLabel]
ReorderLevel: [ReorderLevelLabel]
Discontinued: ☐
[DiscontinuedCheckBox]
[Edit](#) [Delete](#) [New](#)

FormView Tasks

Template Editing Mode

Display: ItemTemplate

End Template

ItemTemplate
FooterTemplate
EditItemTemplate
InsertItemTemplate
HeaderTemplate
EmptyDataTemplate
PagerTemplate

CheckBoxList
DropDownList
FileUpload
HiddenField
HyperLink
Image
ImageButton
ImageMap
Label
LinkButton
ListBox
Literal

FormView1 - EditItemTemplate

EditItemTemplate

ProductID: [ProductIDLabel1]
ProductName:
SupplierID:
CategoryID:
QuantityPerUnit:
UnitPrice:
UnitsInStock:
UnitsOnOrder:

asp:dropdownlist#DropDownList2

DropDownList Tasks

Edit DataBindings...
Choose Data Source...
Edit Items...
☐ Enable AutoPostBack



Koncept Lookup (4)

FormView povežemo z Lookup tabelo

Data Source Configuration Wizard

Choose a Data Source

Select a data source:
SqlDataSource2

Select a data field to display in the DropDownList:
CategoryName

Select a data field for the value of the DropDownList:
CategoryID

DropDownList2 DataBindings

Select the property to bind to. You can then bind it by selecting a field. Alternatively, you can bind it using a custom code expression.

Bindable properties:

- DataSource
- Enabled
- SelectedIndex
- SelectedValue
- Visible

☐ Show all properties

Binding for SelectedValue

☒ **Field binding:**

Bound to: CategoryID

Format:

Sample:

☒ Two-way databinding

☐ **Custom binding:**

Code expression: Bind("CategoryID")

[Refresh Schema](#) OK Cancel



Vaja 9

- Na projekt dodajte podatkovno bazo NorthWind, ki jo najdete na eUčilnici
- S pomočjo gradnika FormView in koncepta Lookup izdelajte spletni obrazec, ki bo omogočal vnos podatkov v tabelo Product

localhost:16067/Koncepti.aspx

ProductID: 1
ProductName: Chai
SupplierID: Pavlova, Ltd.
CategoryID: Beverages
QuantityPerUnit: 10 boxes x 20 bags
UnitPrice: 18,0000
UnitsInStock: 39
UnitsOnOrder: 0
ReorderLevel: 10
Discontinued: ☐
[Update](#) [Cancel](#)
1 2 3 4 5 6 7 8 9 10 ...



Koncept Master/Detail (1)

- Relacija 1:N
- Osnovni zapis [1]
 - (*ang. master*)
 - Podrejeni zapisi [N]
 - (*ang. detail*)
- Primeri?

BISTRO KRESNICA
Kresnica d.o.o.
Zigonova 12, Ljubljana
ID: SI94054380

RACUN št. 7699 za mizo št. 50

koli	artikel	d	cena	znesek
1	LEDENA TORTA	2	2.54	2.54
2	INDIJANCEK	2	2.11	4.22
1	EMB.ZA TORT.6K	1	0.34	0.34

Za plačilo **7.10 EUR**

d	vrednost	st.DDV	znesek DDV
1	0,34	20.0%	0,06
2	6,76	8.5%	0,53

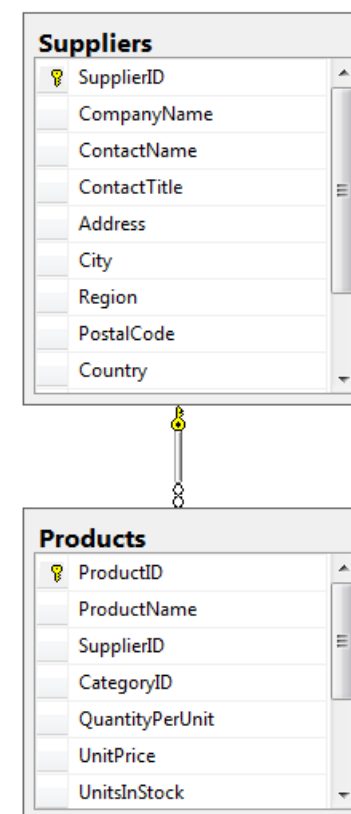
Datum: 13.11.07 Natakark: MARJETKA
Kraj : Ljubljana

Hvala za obisk
Nasvidenje



Koncept Master/Detail (2)

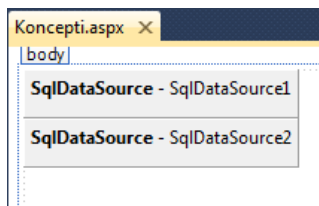
- Master/Detail
 - Dva gradnika SqlDataSource
 - Dva gradnika za prikaz
 - (npr. GridView)
- Povezava Master in Detail
 - Master: Lastnost SelectedValue gradnika GridView
 - Detail: Parameter za tuji ključ gradnika SqlDataSource



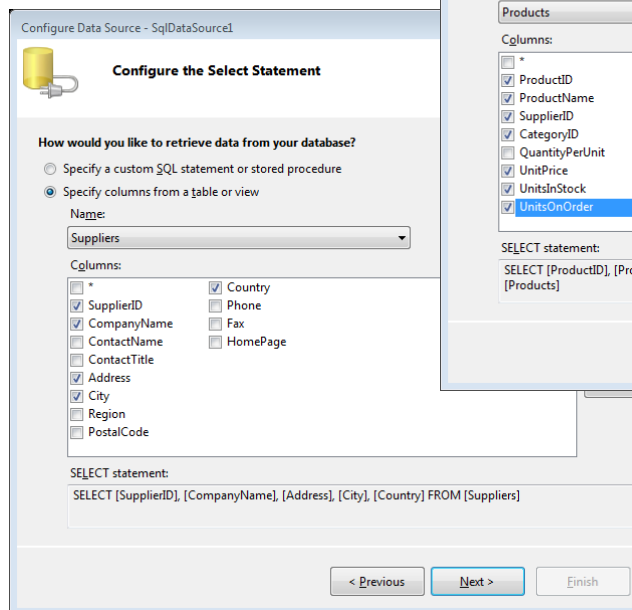


Koncept Master/Detail (3)

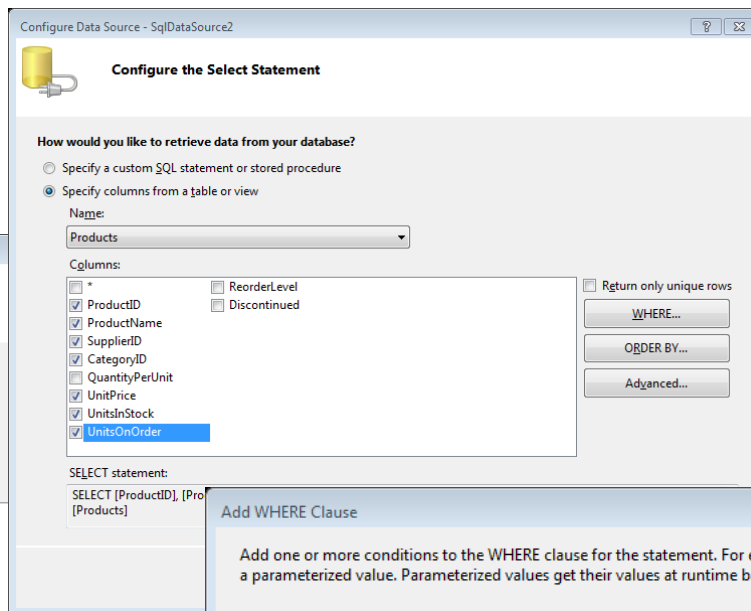
1.



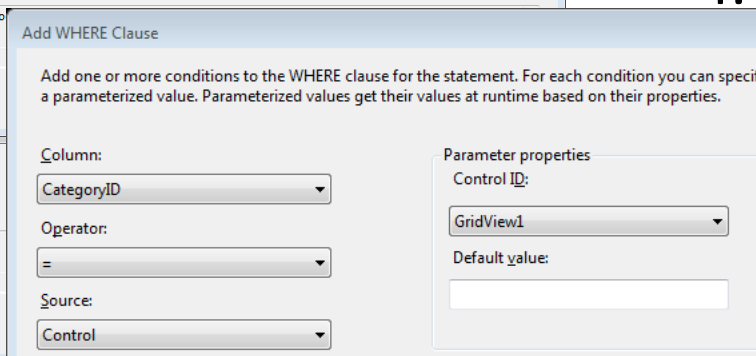
2.



3.



4.





Konzept Master/Detail (4)

asp:gridview#GridView1

	SupplierID	CompanyName	Address	City	Country
Select	Databound	Databound	Databound	Databound	Databound
Select	Databound	Databound	Databound	Databound	Databound
Select	Databound	Databound	Databound	Databound	Databound
Select	Databound	Databound	Databound	Databound	Databound
Select	Databound	Databound	Databound	Databound	Databound

ProductID	ProductName	SupplierID	CategoryID	UnitPrice	UnitsInS
0	abc	0	0	0	0
1	abc	1	1	0,1	1
2	abc	2	2	0,2	2
3	abc	3	3	0,3	3
4	abc	4	4	0,4	4

GridView Tasks

- [Auto Format...](#)
- Choose Data Source:
- [Configure Data Source...](#)
- [Refresh Schema](#)
- [Edit Columns...](#)
- [Add New Column...](#)
- ☐ Enable Paging
- ☐ Enable Sorting
- ☒ Enable Selection
- [Edit Templates](#)





Koncept Sestavljena polja

- Sestavljanje obstoječih podatkov v nova polja
–V sklopu SQL stavka

```
SELECT CustomerID, CompanyName + ' (' + City + ', ' + Country + ')' AS Customer  
FROM Customers
```

- Programsko, s sprotno oz. naknadno obdelavo rezultatov poizvedb
- Primeri?
- Zakaj ne v podatkovni bazi?

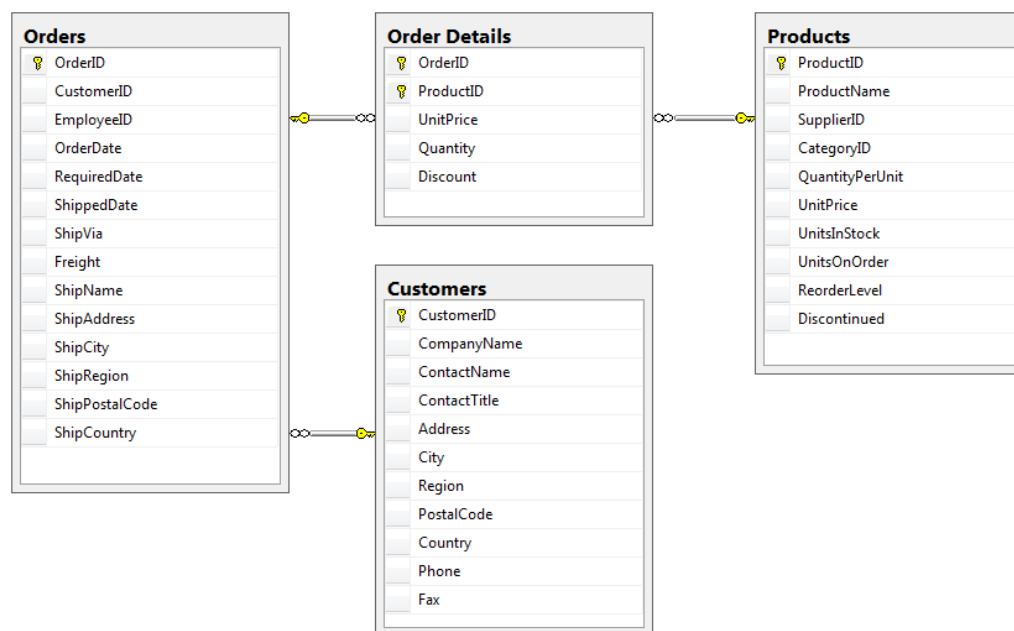


SAMOSTOJNO DELO 1



Vaja 10 (1)

- Nad bazo Northwind izdelajte spletni obrazec, ki bo omogočal pregled posameznih naročil strank
 - Pri izdelavi uporabite tabele, ki so prikazane na izseku podatkovnega modela
 - Uporabite koncept Master/Detail





Vaja 10 (2)

Primer spletnega obrazca

Nastavitev formata
izpisanega datuma

Data	
DataField	OrderDate
DataFormatString	{0:d}

Pregled naročil

Stranka

Alfreds Futterkiste (Berlin, Germany)

Sestavljeno polje

Naročila stranke

	OrderID	Employee	OrderDate	RequiredDate	ShippedDate	ShipName	ShipAddress
Select	10643	Suyama Michael (6)	25.8.1997	22.9.1997	2.9.1997	Alfreds Futterkiste	Obere Str. 57, Berlin 12209, Germany
Select	10692	Peacock Margaret (4)	3.10.1997	31.10.1997	13.10.1997	Alfred's Futterkiste	Obere Str. 57, Berlin 12209, Germany
Select	10702	Peacock Margaret (4)	13.10.1997	24.11.1997	21.10.1997	Alfred's Futterkiste	Obere Str. 57, Berlin 12209, Germany
Select	10835	Davolio Nancy (1)	15.1.1998	12.2.1998	21.1.1998	Alfred's Futterkiste	Obere Str. 57, Berlin 12209, Germany
Select	10952	Davolio Nancy (1)	16.3.1998	27.4.1998	24.3.1998	Alfred's Futterkiste	Obere Str. 57, Berlin 12209, Germany
Select	11011	Leverling Janet (3)	9.4.1998	7.5.1998	13.4.1998	Alfred's Futterkiste	Obere Str. 57, Berlin 12209, Germany

Podrobnosti naročila

OrderID	ProductName	UnitPrice	Quantity	Discount
10643	Rössle Sauerkraut	45,6000	15	0,25
10643	Chartreuse verte	18,0000	21	0,25
10643	Spegesild	12,0000	2	0,25