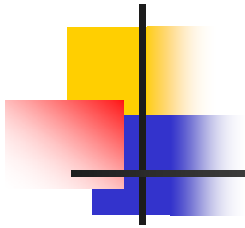




## Project 5: Count Northwind Orders

---

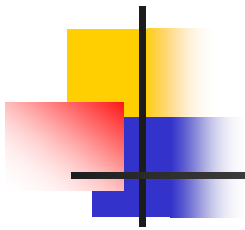
Graded Project



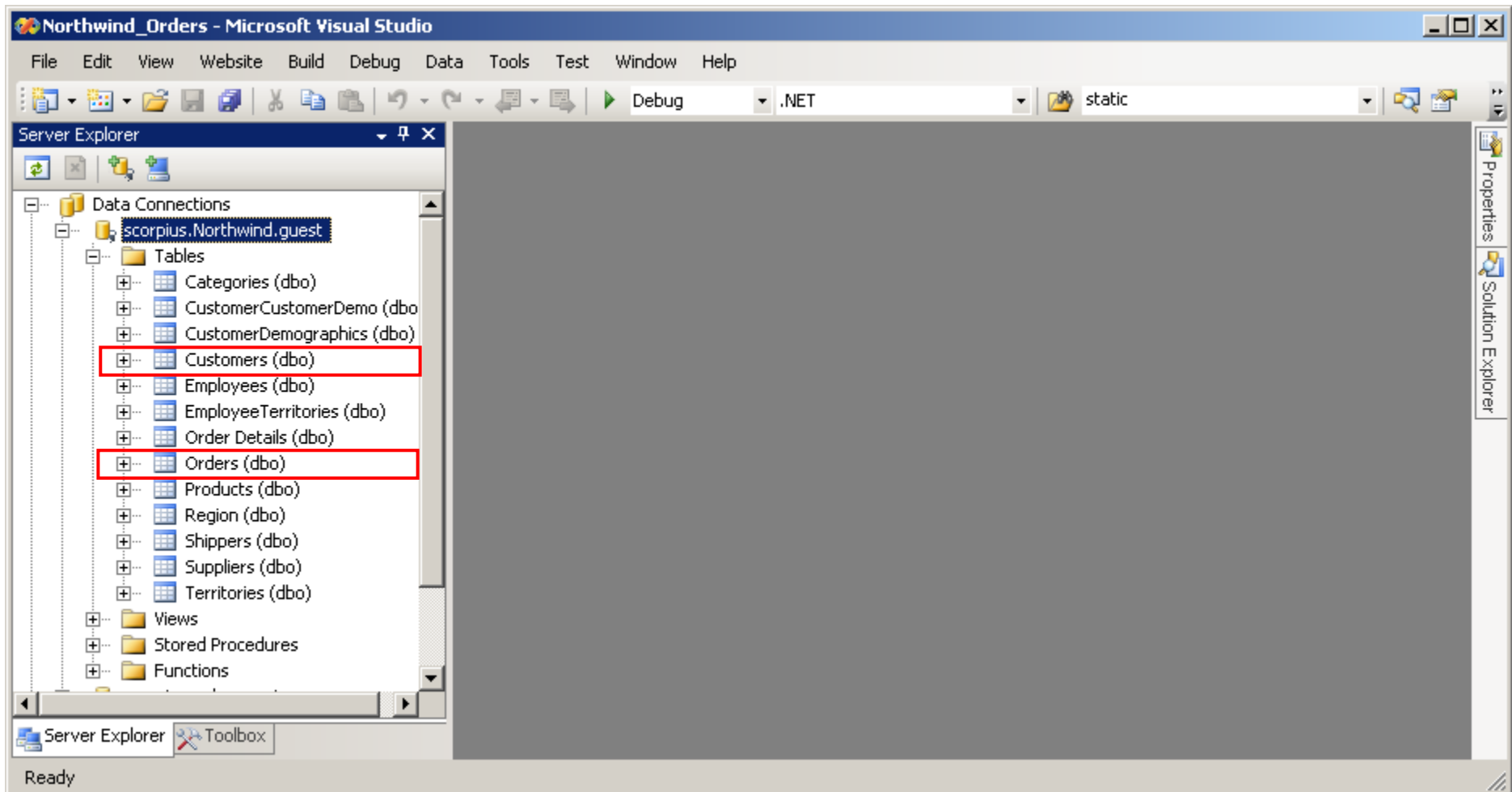
# The Northwind Traders Database

---

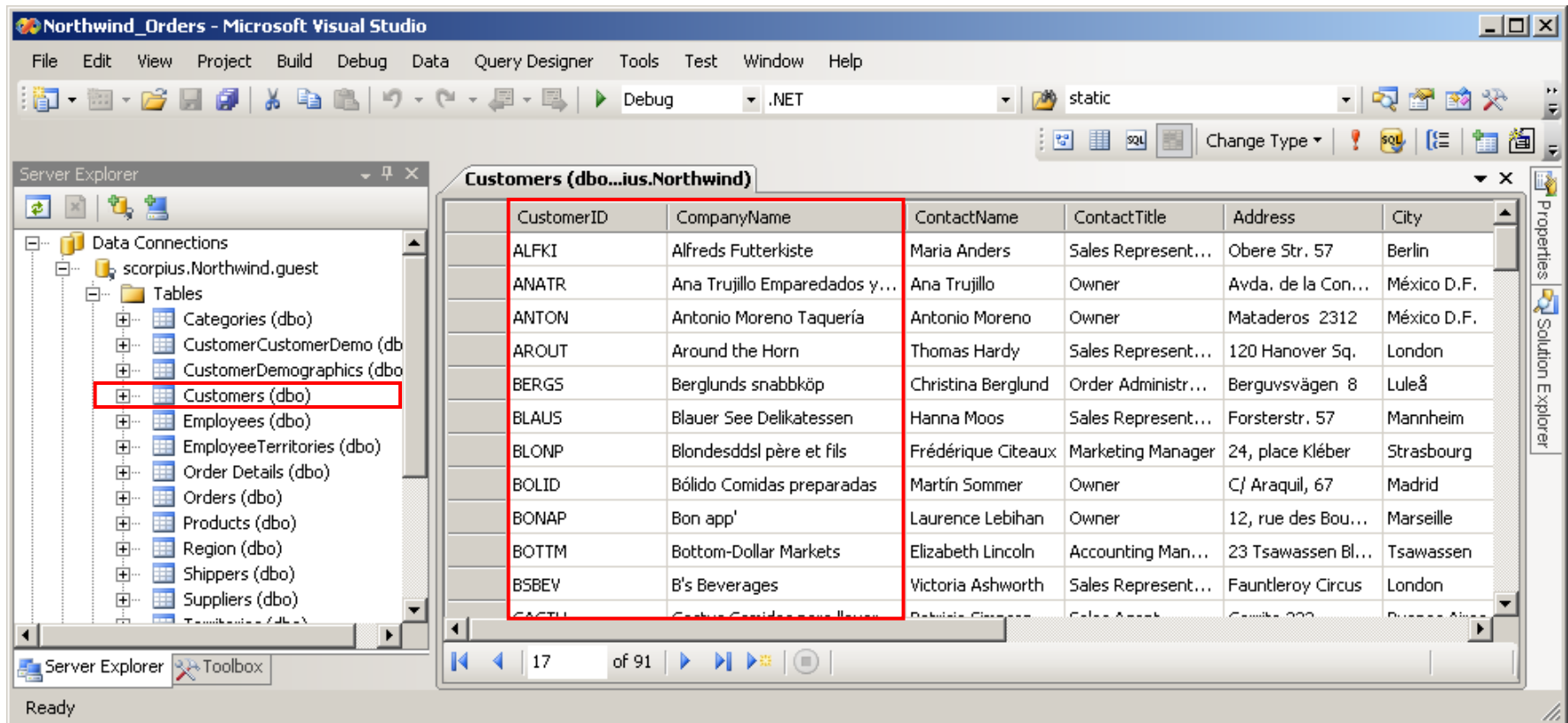
- The Northwind Traders database was created by Microsoft for training and demonstration purposes.
- There is a read-only copy on scorpius available to all users.
  - Database name: Northwind
- There are 13 tables in the database
  - In this project we are only concerned with two of them.
  - And only a few of the columns in those two tables.



# Northwind Database



# Table Customers



Northwind\_Orders - Microsoft Visual Studio

File Edit View Project Build Debug Data Query Designer Tools Test Window Help

static

Change Type

Server Explorer

Data Connections

scorpius.Northwind.guest

Tables

Categories (dbo)

CustomerCustomerDemo (dbo)

CustomerDemographics (dbo)

Customers (dbo)

Employees (dbo)

EmployeeTerritories (dbo)

Order Details (dbo)

Orders (dbo)

Products (dbo)

Region (dbo)

Shippers (dbo)

Suppliers (dbo)

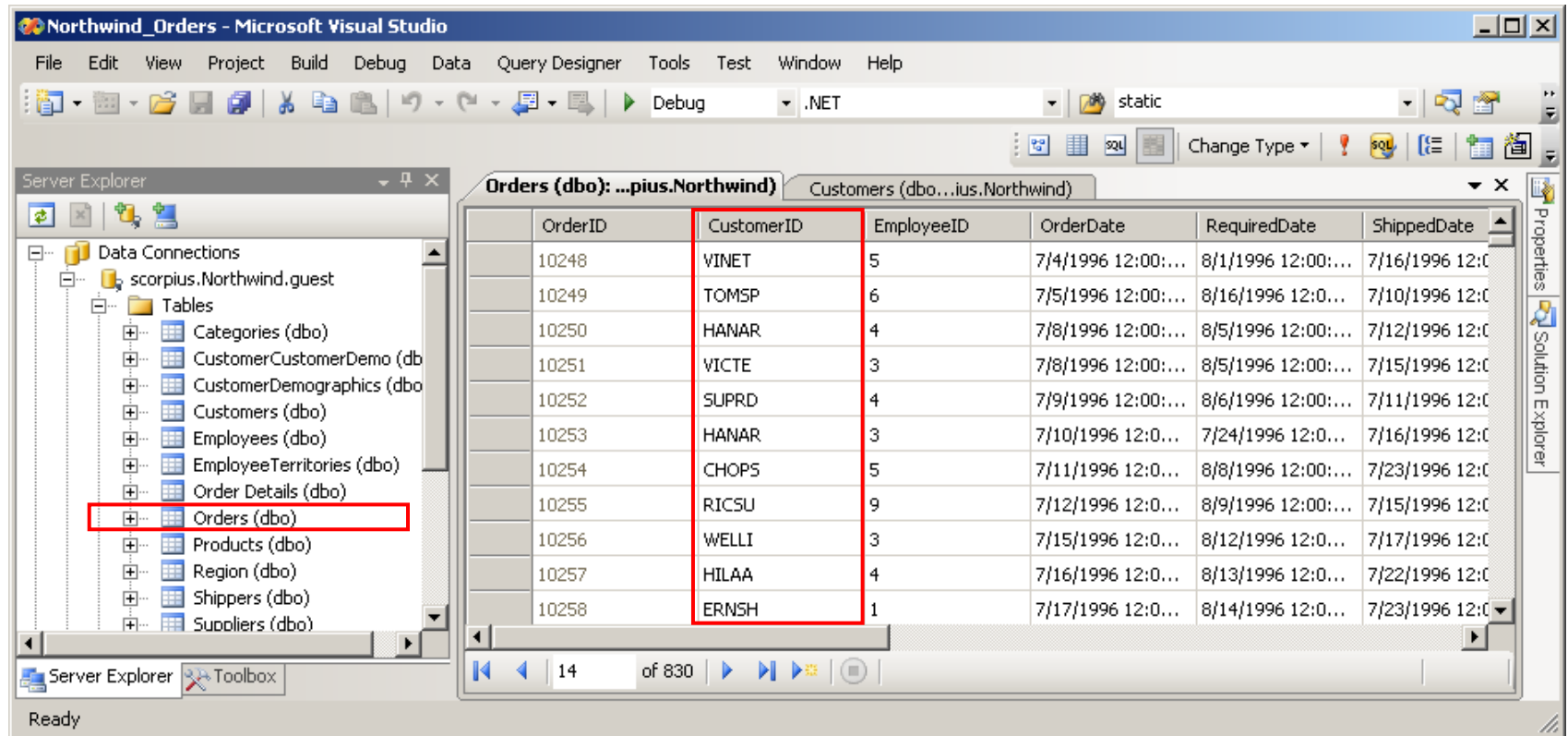
Customers (dbo...ius.Northwind)

CustomerID	CompanyName	ContactName	ContactTitle	Address	City
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Represent...	Obere Str. 57	Berlin
ANATR	Ana Trujillo Emparedados y...	Ana Trujillo	Owner	Avda. de la Con...	México D.F.
ANTON	Antonio Moreno Taquería	Antonio Moreno	Owner	Mataderos 2312	México D.F.
AROUT	Around the Horn	Thomas Hardy	Sales Represent...	120 Hanover Sq.	London
BERGS	Berglunds snabbköp	Christina Berglund	Order Administr...	Berguvsvägen 8	Luleå
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Represent...	Forsterstr. 57	Mannheim
BLOMP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg
BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bou...	Marseille
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Man...	23 Tsawassen Bl...	Tsawassen
BSBEV	B's Beverages	Victoria Ashworth	Sales Represent...	Fauntleroy Circus	London
CASTU	Castro Comidas preparadas	Patricia Castillo	Sales Represent...	Camino 292	Buenos Aires

17 of 91

In table Customers, we will be concerned with CustomerID and CompanyName. CustomerID is the primary key.

# Table Orders



The screenshot shows the Microsoft Visual Studio interface with the Northwind database schema loaded in the Server Explorer. The 'Orders (dbo)' table is highlighted in the Server Explorer. The main window displays the data for the 'Orders (dbo)' table, which is a table with columns: OrderID, CustomerID, EmployeeID, OrderDate, RequiredDate, and ShippedDate. The data is displayed in a grid with 14 rows and 6 columns. The first row is highlighted in red. The status bar at the bottom indicates '14 of 830' rows.

OrderID	CustomerID	EmployeeID	OrderDate	RequiredDate	ShippedDate
10248	VINET	5	7/4/1996 12:00:...	8/1/1996 12:00:...	7/16/1996 12:00:...
10249	TOMSP	6	7/5/1996 12:00:...	8/16/1996 12:00:...	7/10/1996 12:00:...
10250	HANAR	4	7/8/1996 12:00:...	8/5/1996 12:00:...	7/12/1996 12:00:...
10251	VICTE	3	7/8/1996 12:00:...	8/5/1996 12:00:...	7/15/1996 12:00:...
10252	SUPRD	4	7/9/1996 12:00:...	8/6/1996 12:00:...	7/11/1996 12:00:...
10253	HANAR	3	7/10/1996 12:00:...	7/24/1996 12:00:...	7/16/1996 12:00:...
10254	CHOPS	5	7/11/1996 12:00:...	8/8/1996 12:00:...	7/23/1996 12:00:...
10255	RICSU	9	7/12/1996 12:00:...	8/9/1996 12:00:...	7/15/1996 12:00:...
10256	WELLI	3	7/15/1996 12:00:...	8/12/1996 12:00:...	7/17/1996 12:00:...
10257	HILAA	4	7/16/1996 12:00:...	8/13/1996 12:00:...	7/22/1996 12:00:...
10258	ERNSH	1	7/17/1996 12:00:...	8/14/1996 12:00:...	7/23/1996 12:00:...

Table Orders has a row for each order that has been entered.

The customer for each order is identified by the CustomerID column.

This is the same CustomerID that appears in the CustomerID column of table Customers.



## Assignment

---

- Write an ASP.NET app that permits the user to determine the number of orders that have been entered for a specified customer.
- The user identifies a customer by typing the first few letters of the CompanyName (*not CustomerID*) into a TextBox.



## Requirements

---

- If there are multiple customers whose `CompanyName` matches the letters entered by the user, the app will display a `DropDownList` with those companies' names as choices.
- The user can then select the company from the `DropDownList`.



## Requirements

---

- When the user has uniquely identified a company, the app determines the number of orders in the database for that company and displays the result.



# Initial Page



Northwind Traders Orders

localhost:3664/Northwind\_Orders/

APOD Blogger Dashboard CAP 4063 CNET News

## Northwind Traders Orders

Company Name

One or more initial letters

User enters one or more initial letters of company name.



## After user has entered initial letters



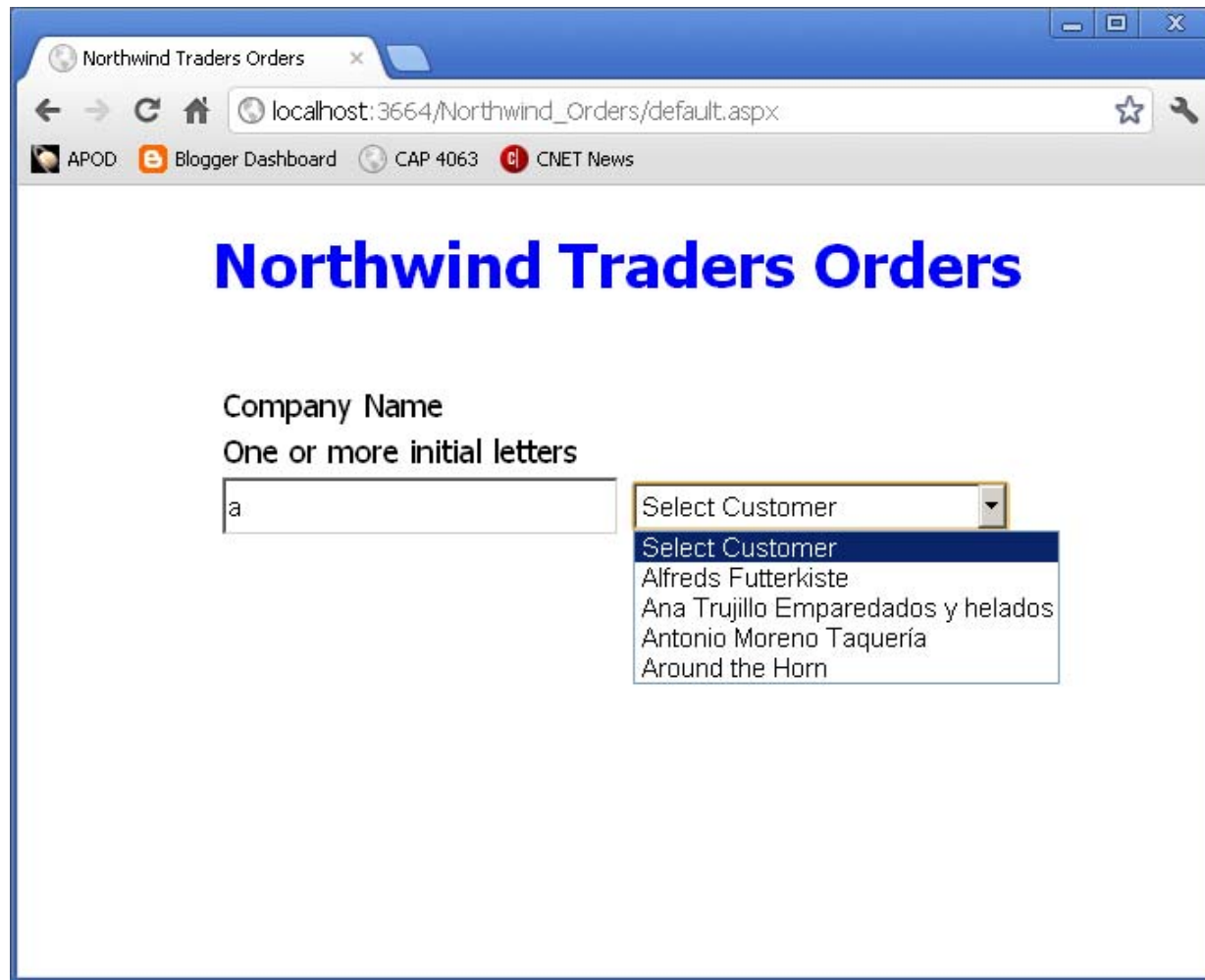
Northwind Traders Orders

Company Name  
One or more initial letters

a

User presses Tab or Enter, or clicks outside the TextBox.

## After tabbing out of the TextBox



Northwind Traders Orders

localhost:3664/Northwind\_Orders/default.aspx

APOD Blogger Dashboard CAP 4063 CNET News

### Northwind Traders Orders

Company Name

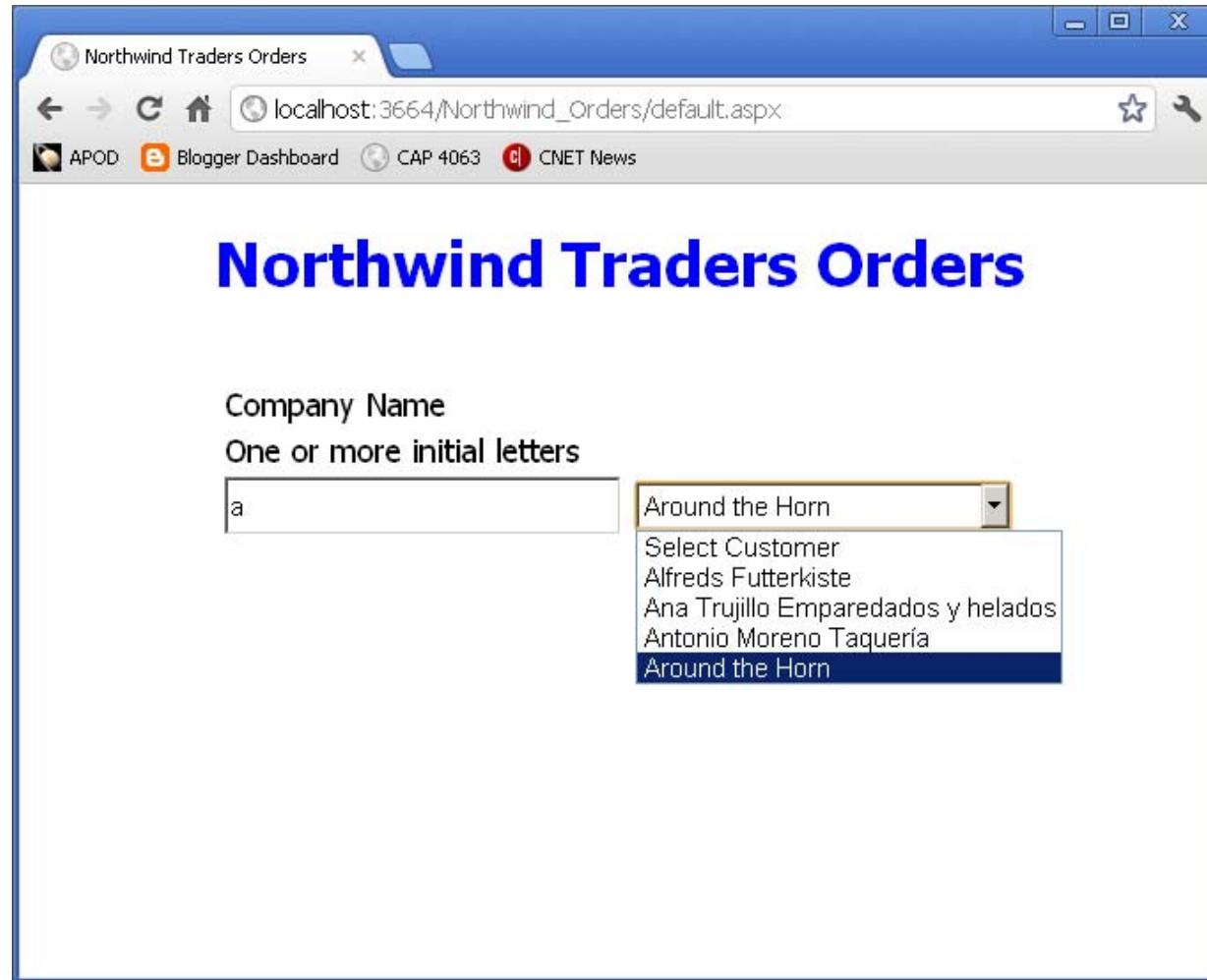
One or more initial letters

a

Select Customer

- Select Customer
- Alfreds Futterkiste
- Ana Trujillo Emparedados y helados
- Antonio Moreno Taquería
- Around the Horn

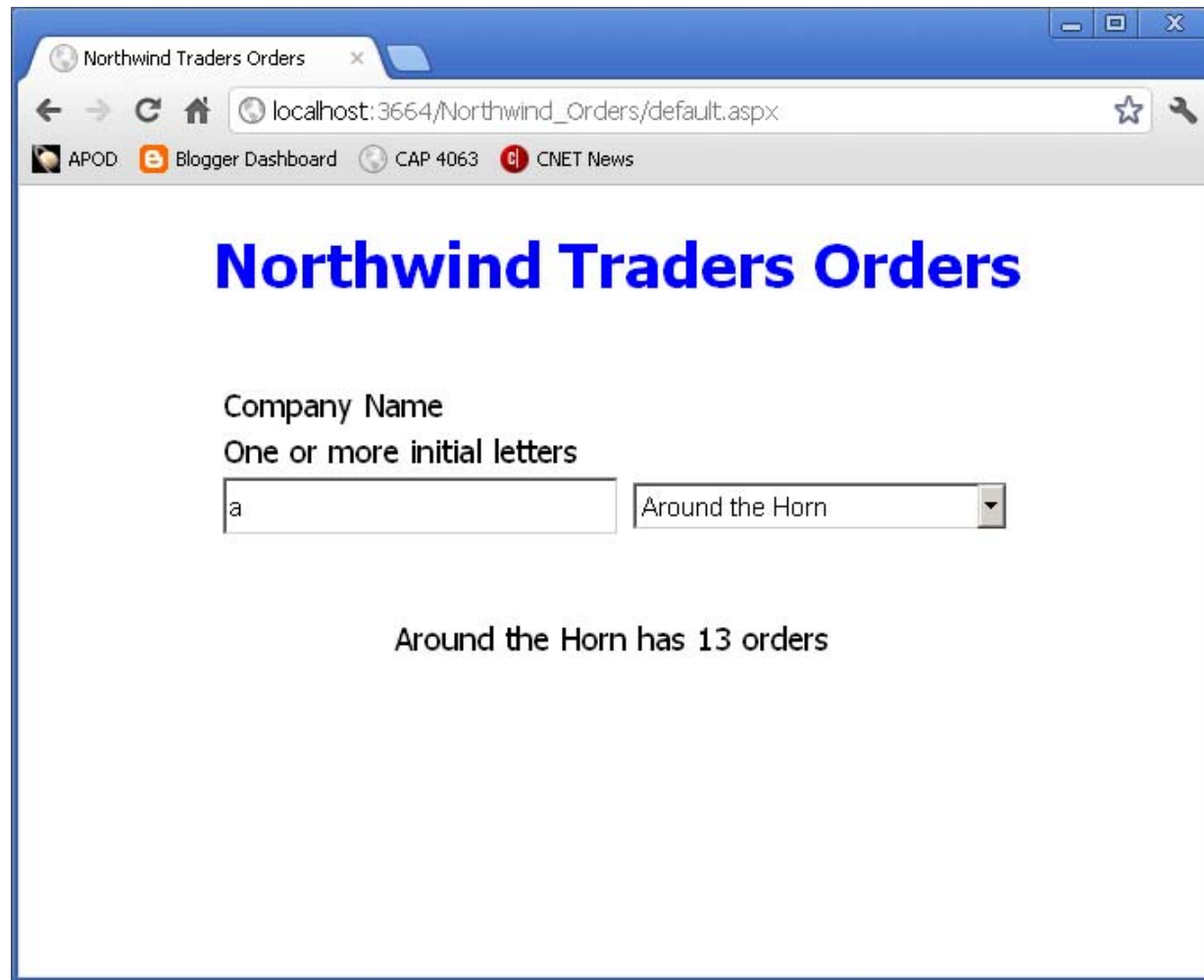
# Selecting from the DropDownList



The screenshot shows a web browser window with the title 'Northwind Traders Orders'. The address bar shows 'localhost:3664/Northwind\_Orders/default.aspx'. The browser's toolbar includes navigation buttons and a list of open tabs: 'APOD', 'Blogger Dashboard', 'CAP 4063', and 'CNET News'. The main content area has a large blue heading 'Northwind Traders Orders'. Below this, there is a form with the label 'Company Name' and the instruction 'One or more initial letters'. A text input field contains the letter 'a'. To the right of the text input is a dropdown menu. The dropdown menu is open, showing a list of customer names: 'Select Customer', 'Alfreds Futterkiste', 'Ana Trujillo Emparedados y helados', 'Antonio Moreno Taquería', and 'Around the Horn'. The 'Around the Horn' option is currently selected and highlighted in blue.

User selects an item from the DropDownList.

# Result Displayed



Northwind Traders Orders

localhost:3664/Northwind\_Orders/default.aspx

APOD Blogger Dashboard CAP 4063 CNET News

## Northwind Traders Orders

Company Name  
One or more initial letters

a Around the Horn

Around the Horn has 13 orders

App displays the number of orders for the selected customer.

User can now select another customer from the DropDownList or enter new initial letters into the TextBox.



User selects another customer from the DropDownList.



Northwind Traders Orders


Company Name  
One or more initial letters

a

Around the Horn

- Ana Trujillo Emparedados y helados
- Select Customer
- Alfreds Futterkiste
- Antonio Moreno Taquería
- Around the Horn

# New Result



Northwind Traders Orders

localhost:3664/Northwind\_Orders/default.aspx

APOD Blogger Dashboard CAP 4063 CNET News

## Northwind Traders Orders

Company Name  
One or more initial letters

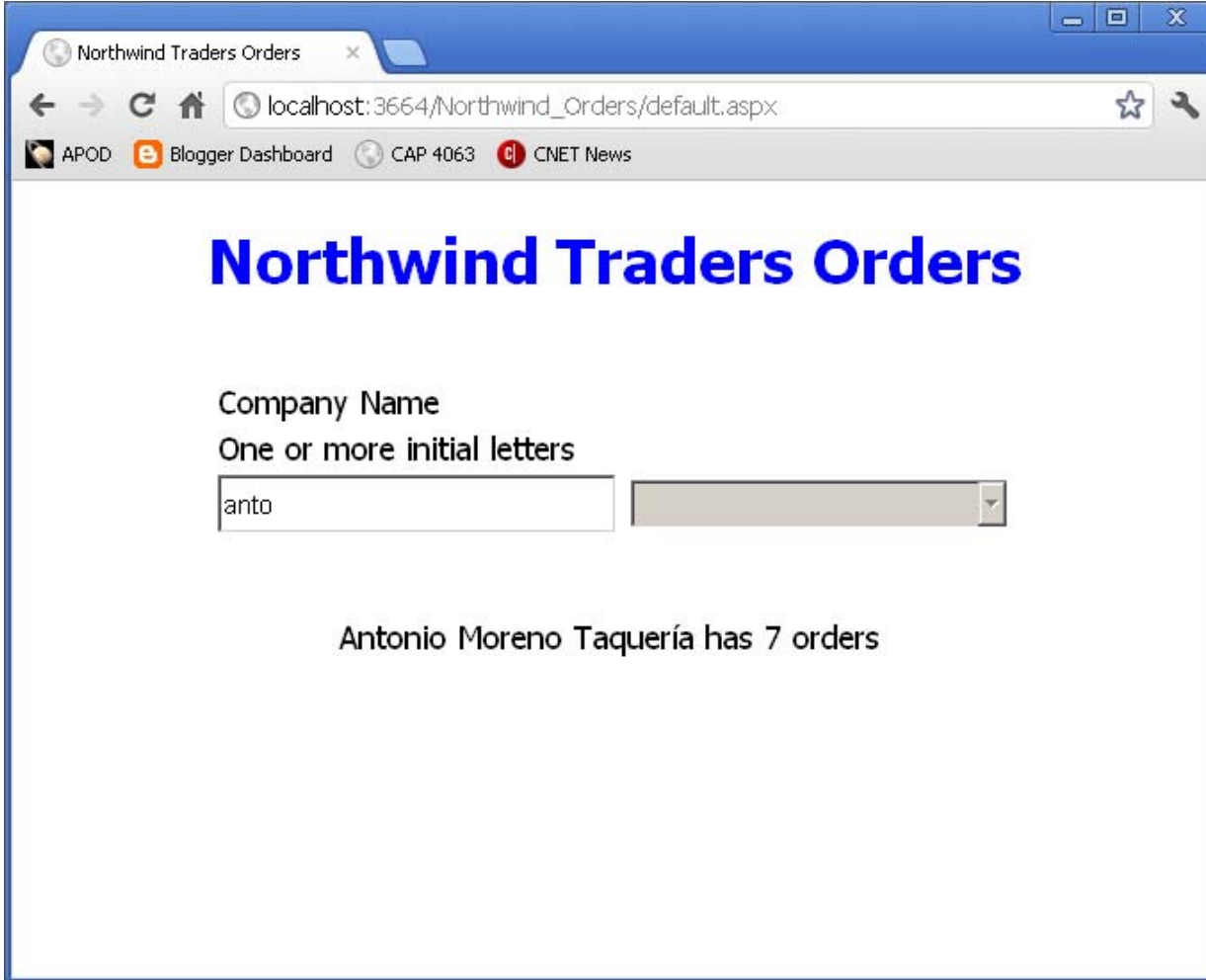
a Ana Trujillo Emparedados y helados

Ana Trujillo Emparedados y helados has 4 orders

App displays number of orders for newly selected customer.



User enters letters that uniquely identify a customer.



Northwind Traders Orders

localhost:3664/Northwind\_Orders/default.aspx

APOD Blogger Dashboard CAP 4063 CNET News

## Northwind Traders Orders

Company Name  
One or more initial letters

anto

Antonio Moreno Taquería has 7 orders

When user tabs out of the TextBox, app immediately displays number of orders.

DropDownList is empty and disabled.



User enters letters with no matching customer name.

Northwind Traders Orders

Company Name  
One or more initial letters

z

There are no customer names matching z

App displays error message.

DropDownList is empty and disabled.

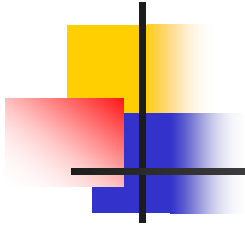
# User Resizes Browser Window



# User Resizes Browser Window



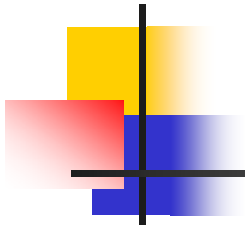
Page content remains centered.



## Requirements

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- Page layout should match the examples.
- Use CSS styling as shown and discussed in class.



## Requirements

---

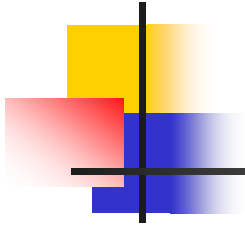
- Cursor should be in the TextBox when the page is initially shown on the browser.
  - User can start typing immediately without having to click on the TextBox.
- Remove any leading and trailing spaces from the text that the user enters before looking for matching company names.
  - See C# string class Trim method.
- When the user tabs out of the TextBox after making a change, any previous output disappears.
  - If there are no non-space characters in the TextBox, nothing more happens.
  - Don't look for matches to a zero length string.



## Requirements

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- DropDownList has a dummy initial item "Select Customer".
  - If user selects that item, any previous output disappears, but nothing else should happen.
  - DropDownList is unchanged.



## Design Matters

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- Apply the principles of object oriented design that have been shown and discussed in class.
- Projects will be graded on software design as well as functionality.




# Deployment

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- Deploy your application to your virtual directory on the scorpius web site.
  - OK to use a different IIS server if you have access to one.
    - Must be publically accessible on the Internet.
- Put the URL for your app into the Blackboard submission comments box.
  - Example:
    - <http://cis4930wp.eng.usf.edu/wpusr40>
  - Substitute *your* user ID for wpusr40.
  - Grader should be able to view your page by copying and pasting the link 24



# App on scorpius

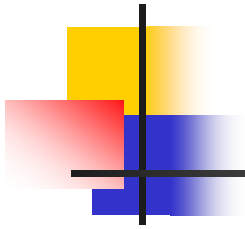


Northwind Traders Orders

Company Name  
One or more initial letters

a Around the Horn

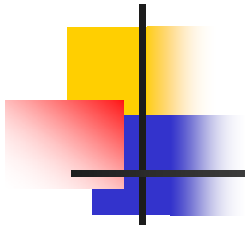
Around the Horn has 13 orders



## Ground Rules

---

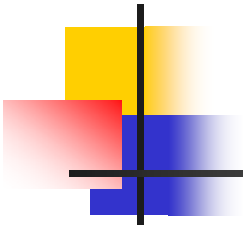
- No collaboration on this project.
- It is OK to use anything on the class website or in the textbook.
- It is OK to reuse code that you have written previously or submitted as a group member on previous project.



## Ground Rules

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- Do not share your work with other students.  
Before or after submitting the project.
  - OK to *discuss* the project.
  - OK to look at others' web sites with a browser.
- Do not copy any other student's code.
  - Or even look at it.
- Do not let anyone copy or examine your code.



## Ground Rules

---

Except for code posted on the class web site

- Do not copy code from the Internet
  - or any other source.
- Write your own code.



# Submission

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- Submit your web site files via Blackboard Assignments.
- Zip your web site folder using the Windows “Send to Compressed Folder” command.
- Attach the .zip file to your Blackboard submission.
  - Be sure to click Attach after selecting the file.
  - Be sure to click Submit after attaching the file.



# Due Date

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- Project is due by 11:59 PM, Wednesday, June 20.
  - Late submissions will be seriously penalized.