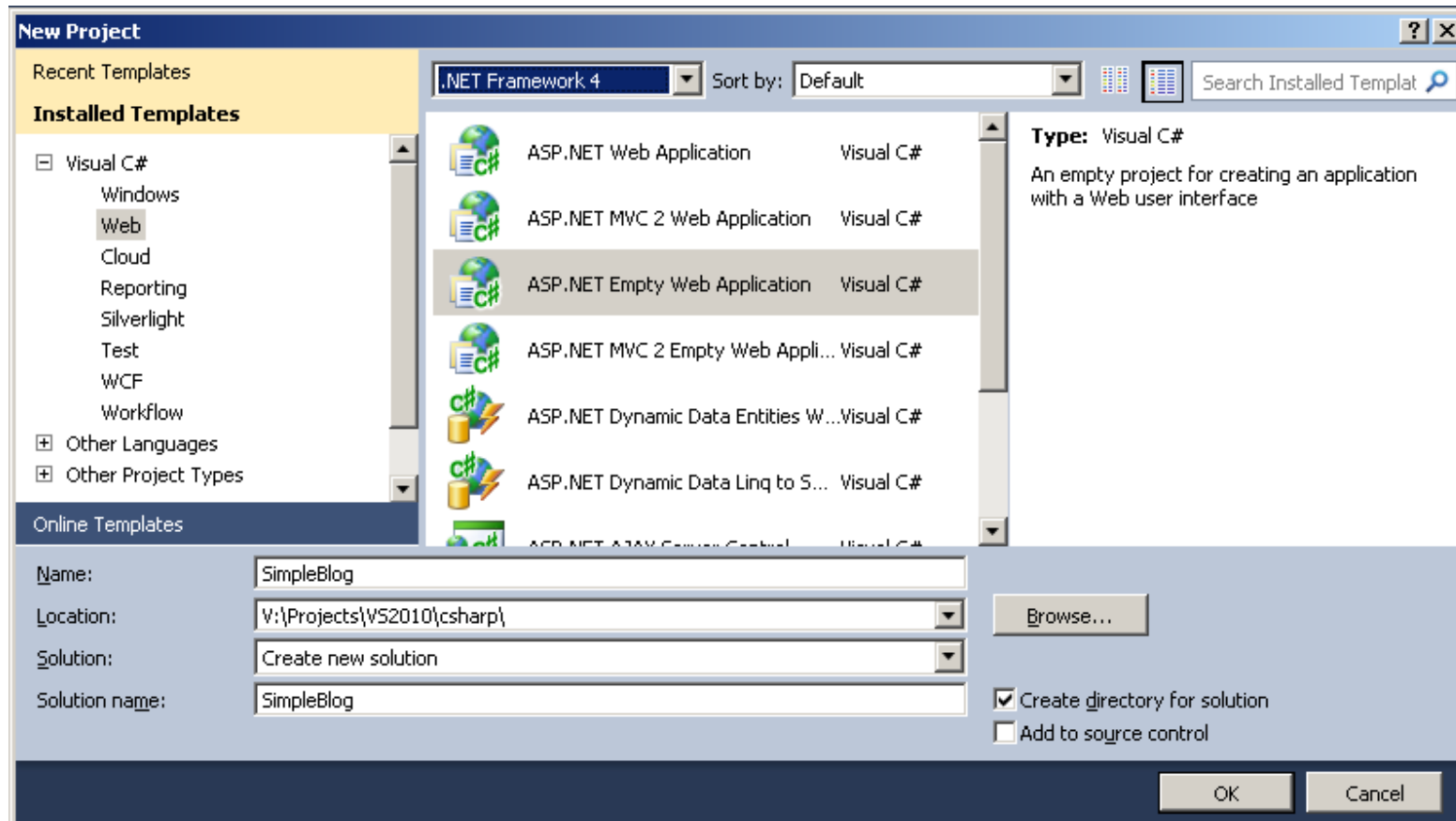# .NET Web Applications

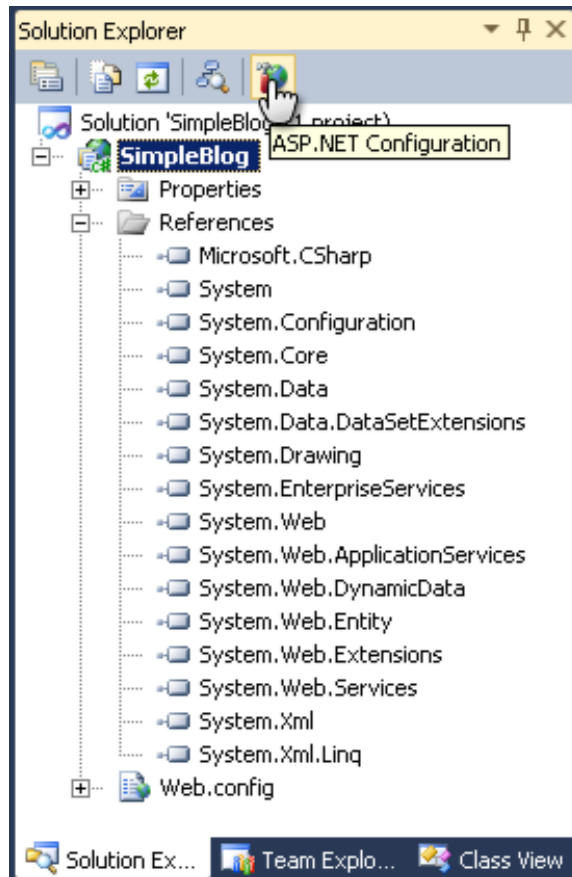Example Project
Walk-Through

# Simple Blog

- Project Goals -
    - Introduce .NET web application development concepts
    - Explore the Visual Studio and ASP.NET web site building process
    - Demonstrate the steps used to create an basic ASP.NET web application

# Create the Project

# Empty Project



- The web.config file is important

- The ASP.NET Configuration tool should be your first visit

# ASP.NET Configuration

# Security Wizard

**Step 1: Welcome**

Step 2: Select Access Method

Step 3: Data Store

Step 4: Define Roles

Step 5: Add New Users

Step 6: Add New Access Rules

Step 7: Complete

Security Management

**Welcome to the Security Setup Wizard**

This wizard helps you set up security for your Web site.

You can set up individual users and optionally set up roles, or groups, for those users. Creating users and roles allows you to secure all or portions of your site, personalize site content, and track usage of your site.

After establishing users and roles, you can then allow or deny access to specific folders in your application by user name or by role. You can also establish permissions for users who do not log in to your application (anonymous users).

Once you have completed the Security Setup Wizard, you can use Security Management option in the Web Site Administration Tool to make changes to your application's settings.

To continue, click Next.

< Back   Next >   Finish

# Internet vs Intranet

**Security Setup Wizard**

Step 1: Welcome

**Step 2: Select Access Method**

Step 3: Data Store

Step 4: Define Roles

Step 5: Add New Users

Step 6: Add New Access Rules

Step 7: Complete

Security Management

**Select Access Method:**

The first step in securing your site is to identify users (authentication). The method for establishing a user's identity depends on how the user accesses your site.

Select one of the following methods to indicate how users will access your site, and then click Next.

⦿ **From the internet**
  Your application is a public site available to anyone on the Internet. Users can log in to your application by entering their user name and password in a login page you create.

○ **From a local area network**
  Your application runs in a private local area network (intranet) only. Users are identified by their Windows domain and user name and do not have to log in to your application explicitly.

[ < Back ] [ Next > ] [ Finish ]

# Enabling Roles

**Security Setup Wizard**

Step 1: Welcome

Step 2: Select Access Method

Step 3: Data Store

**Step 4: Define Roles**

Step 5: Add New Users

Step 6: Add New Access Rules

Step 7: Complete

Security Management

**Define Roles**

You can optionally add roles, or groups, that enable you to allow or deny groups of users access to specific folders in your Web site. For example, you might create roles such as "managers," "sales," or "members," each with different access to specific folders. Later, you can add users to roles and users will have the access permissions associated with those roles.

Type the name of the role that you want to create and click Add Role.

If you do not want to create roles, please ensure that the checkbox below is unchecked and click Next to skip this step.

☑ Enable roles for this Web site.

< Back    Next >    Finish

# Adding Roles

# Adding Users

**Security Setup Wizard**

Step 1: Welcome

Step 2: Select Access Method

Step 3: Data Store

Step 4: Define Roles

**Step 5: Add New Users**

Step 6: Add New Access Rules

Step 7: Complete

Security Management

Add a user by entering the user's ID, password, and e-mail on this page. You can also specify a question with an answer that the user must give when resetting a password or requesting a forgotten password.

**Create User**

Sign Up for Your New Account

User Name: admin

Password: ●●●●●●●●●

Confirm Password: ●●●●●●●●●

E-mail: admin@bamafolks.com

Security Question: 

Security Answer: 

Create User

☑ Active User

< Back | Next > | Finish

# Default Access Rules

# Show the App_Data Folder

# Include In Project?
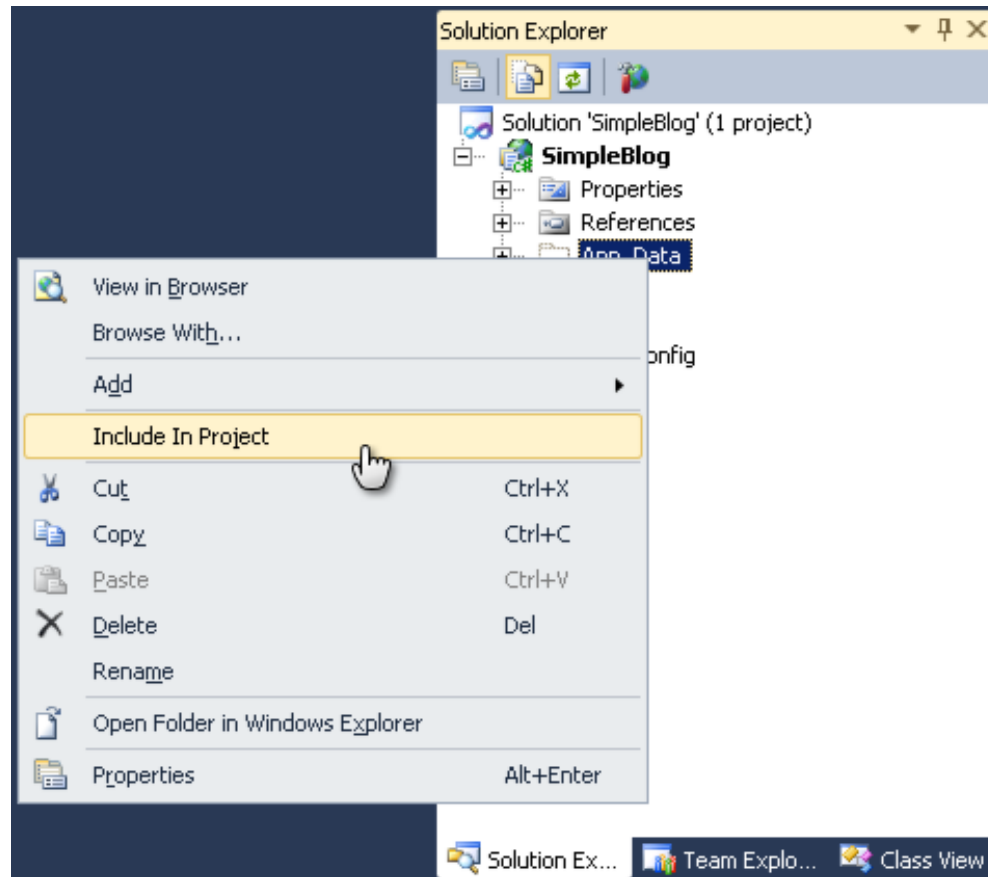
# Create the Database
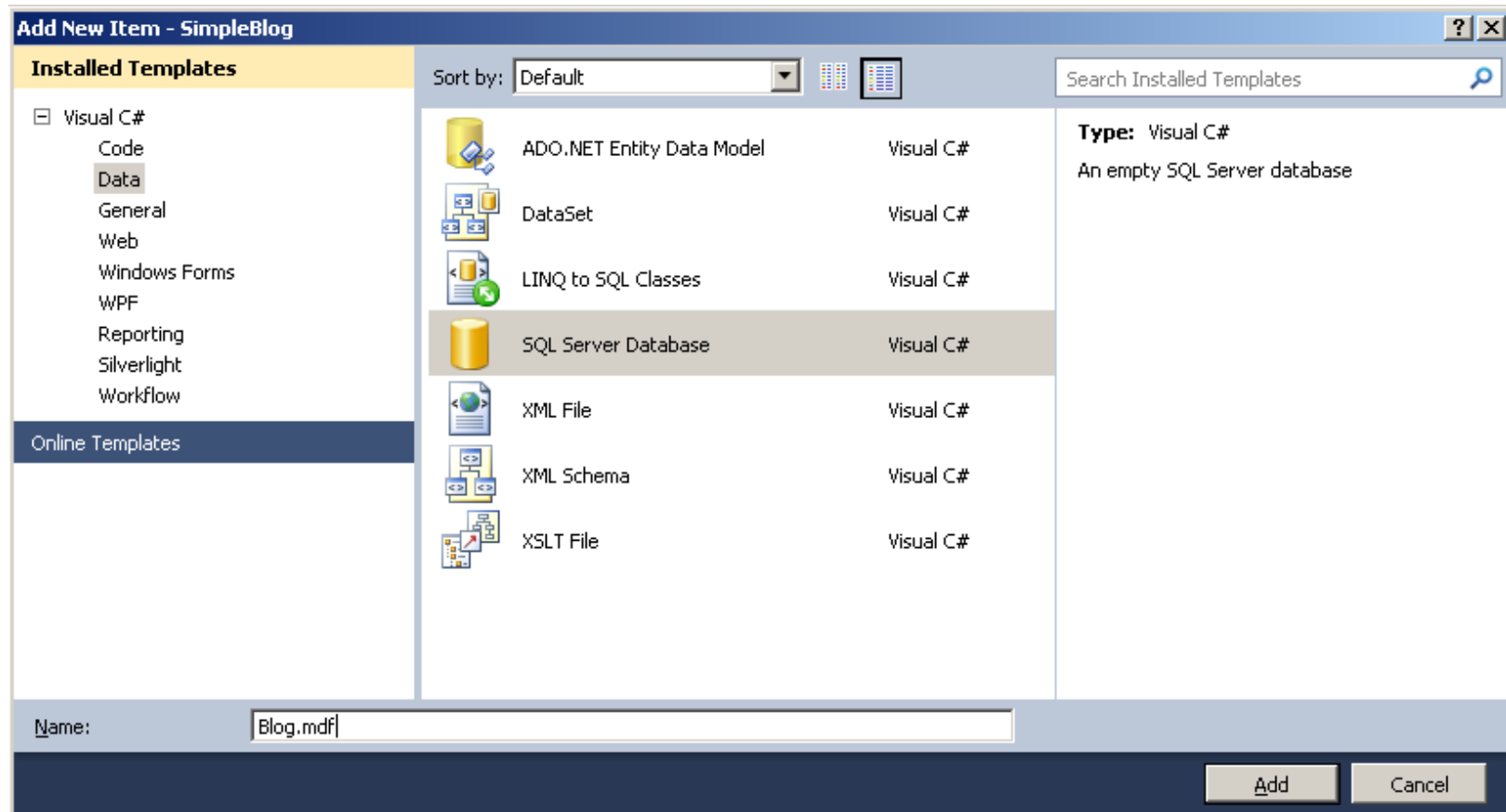
# Add Table to Database

- First, double-click Blog.mdf to open it in the Server Explorer

- Right-click to add a new table
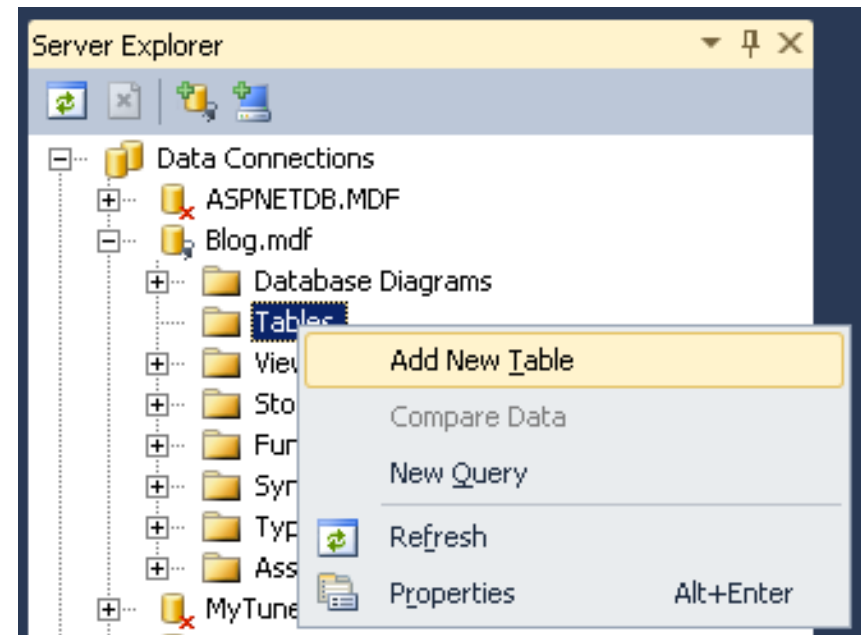
# The Category table
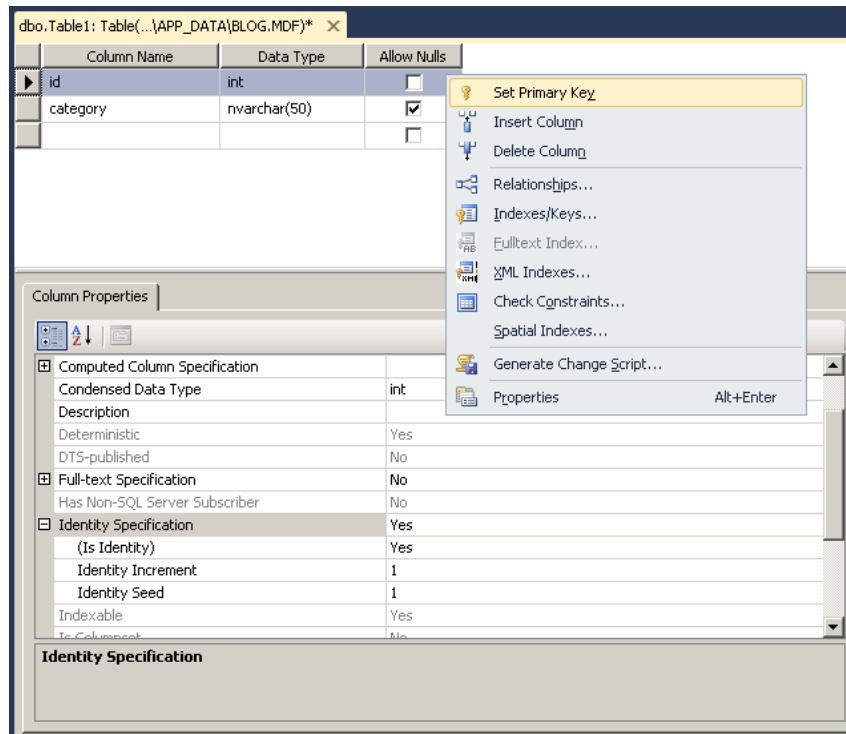


- Add two columns as shown to the left

- The Identity options require a numeric column type

- In general, all tables should have a unique primary key

# Save the Table

- You will be prompted to name the table when you save it
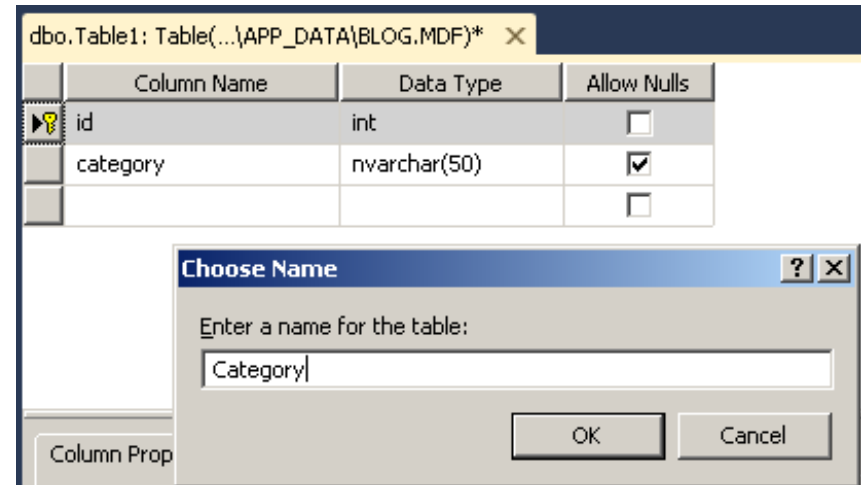
# Create the Post Table
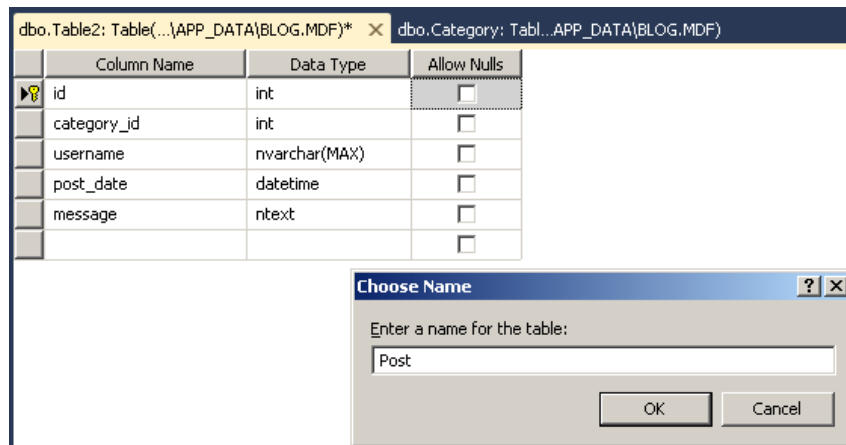


- Use the image to the left to create the Post table

- This will be used to hold the top-level blog posts

# Create the Comment Table

- Add one more table to hold comments made to existing posts

- The post_id column will reference the Post record this comment was made against
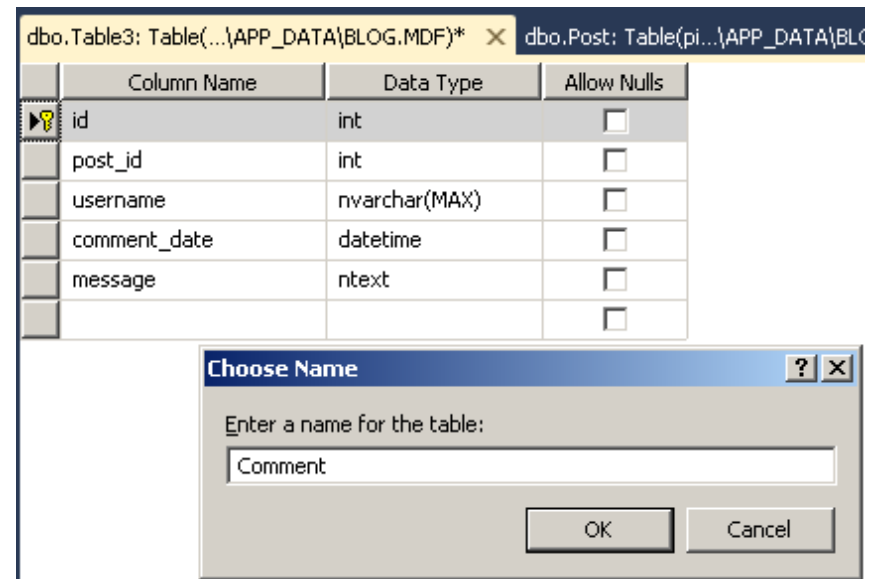
# Database Diagrams
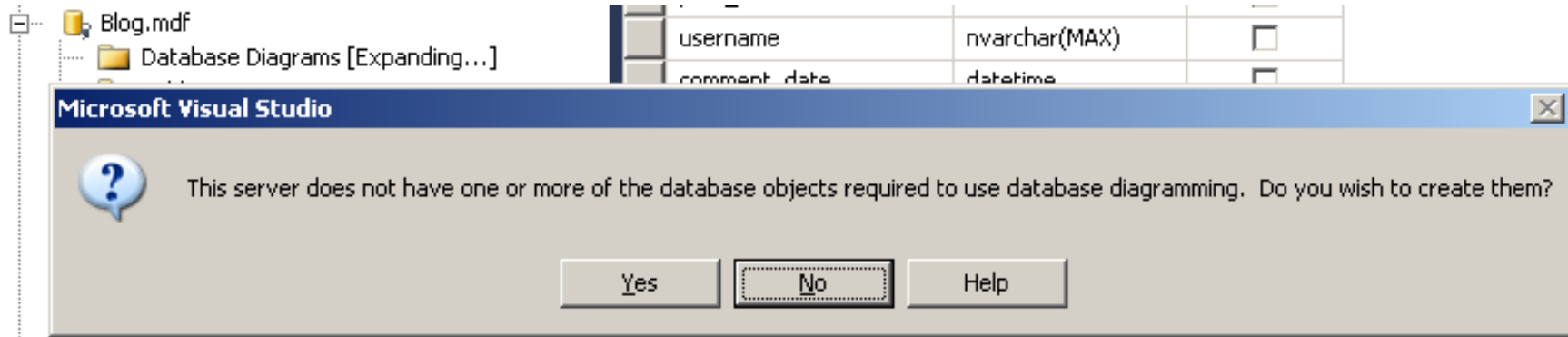


- Table relationships are defined using Database Diagrams

- Expand the Database Diagrams branch and answer **Yes** to this question

# Add Diagram and Select Tables
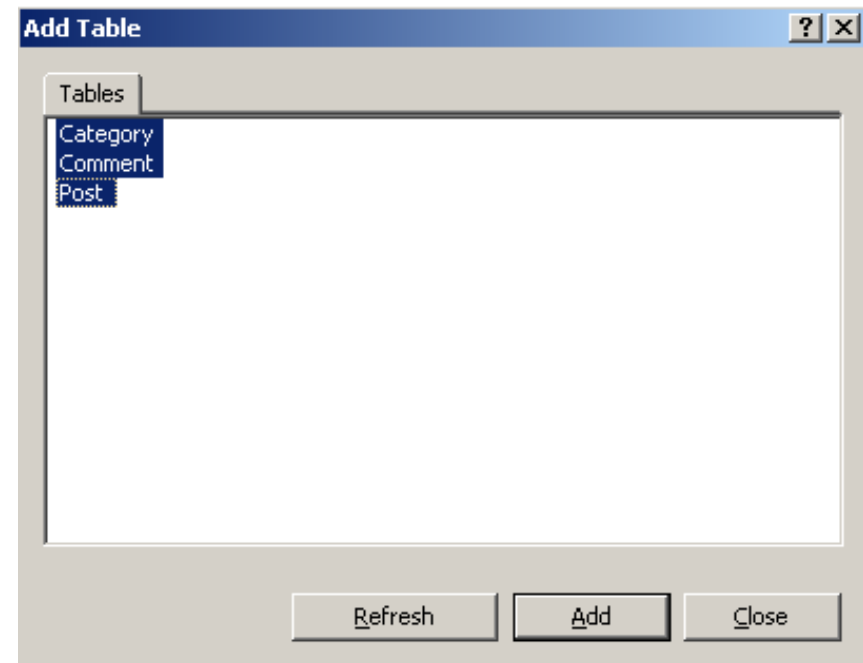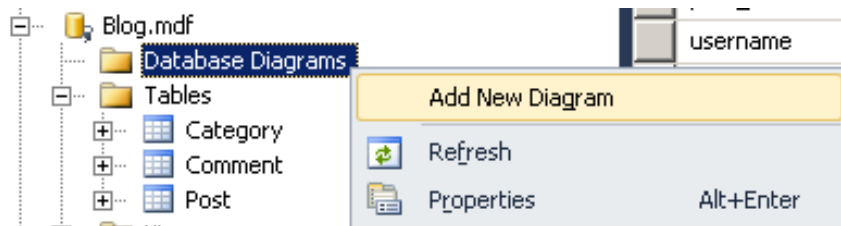
# Drag and Drop to Create New Relationships

# Relationship Options

# Final Relationship Diagram
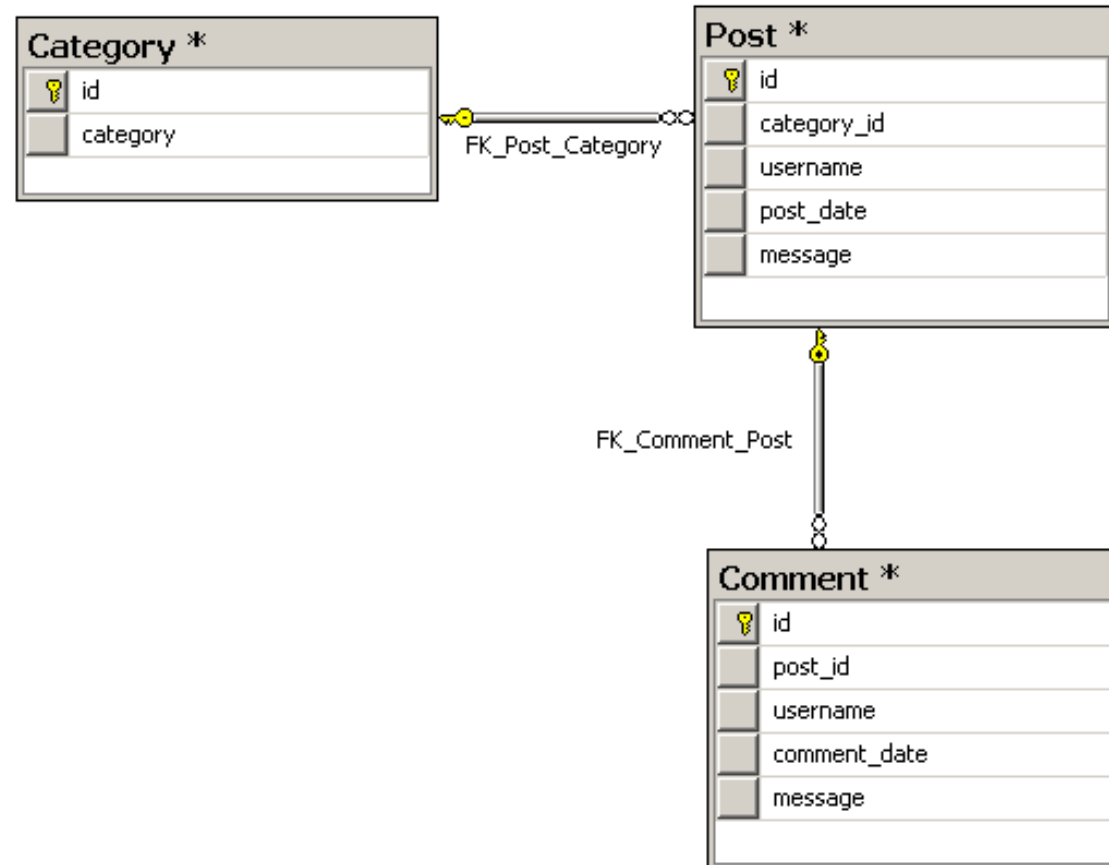
# Save Diagram to Update Schema

**Save**

The following tables will be saved to your database. Do you want to continue?

Category
Post
Comment

☑ Warn about Tables Affected

| Yes | No | Save Text File |
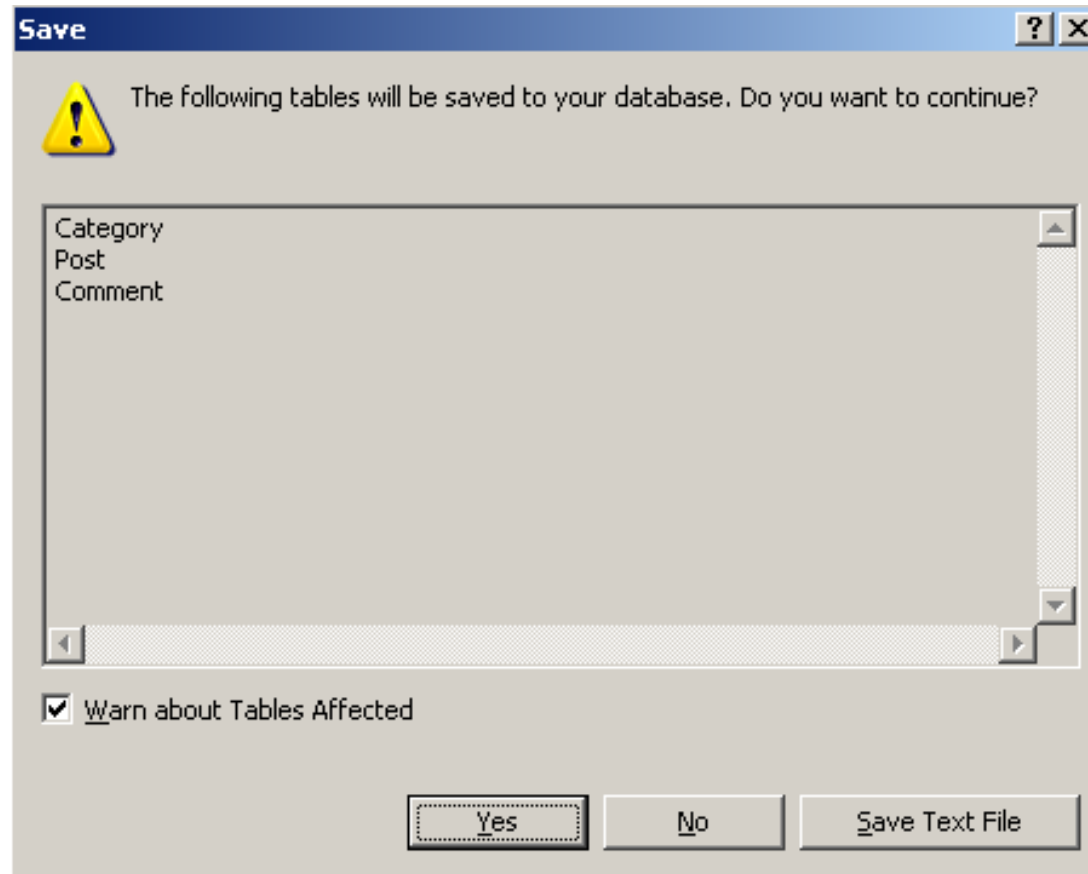
# Add Login.aspx Page
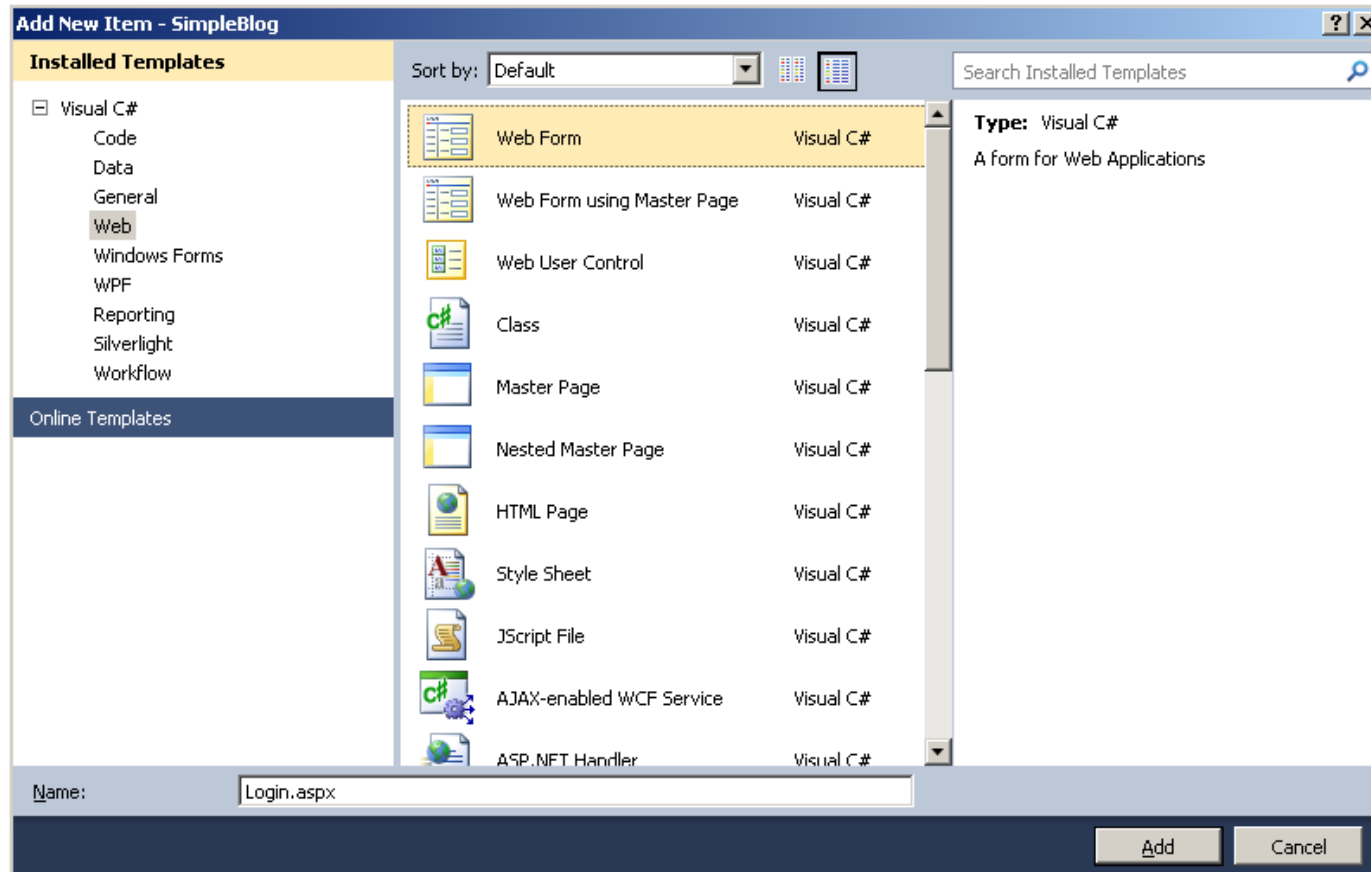
# Add Login Control to Page
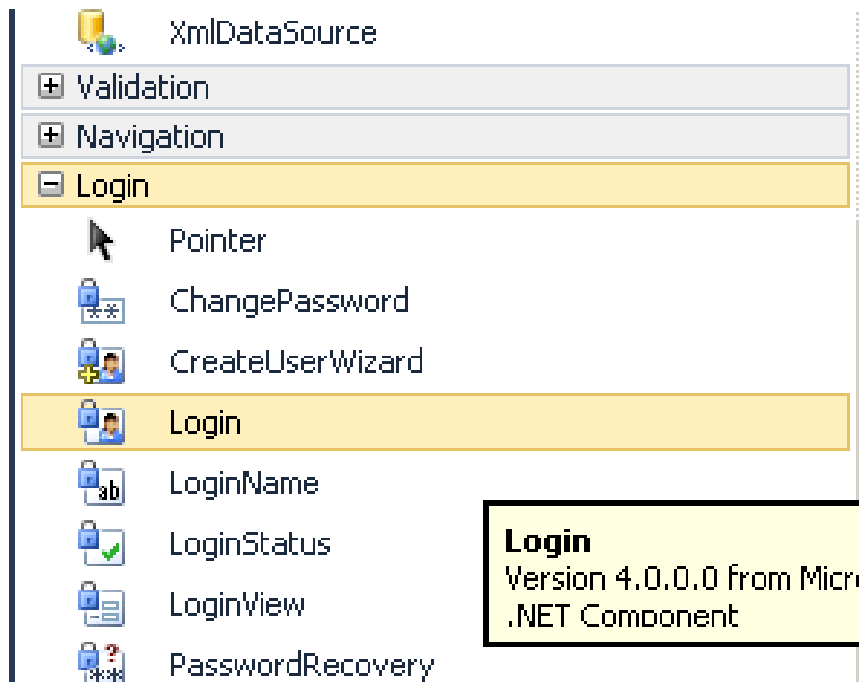
- Add the following code before the Login control:

```
<p>

    Please enter your username and password.

    <asp:HyperLink ID="RegisterHyperLink"
runat="server"
EnableViewState="false">Register</asp:HyperLink>

    if you don&#39;t have an account.

</p>
```

# Add Register.aspx Page
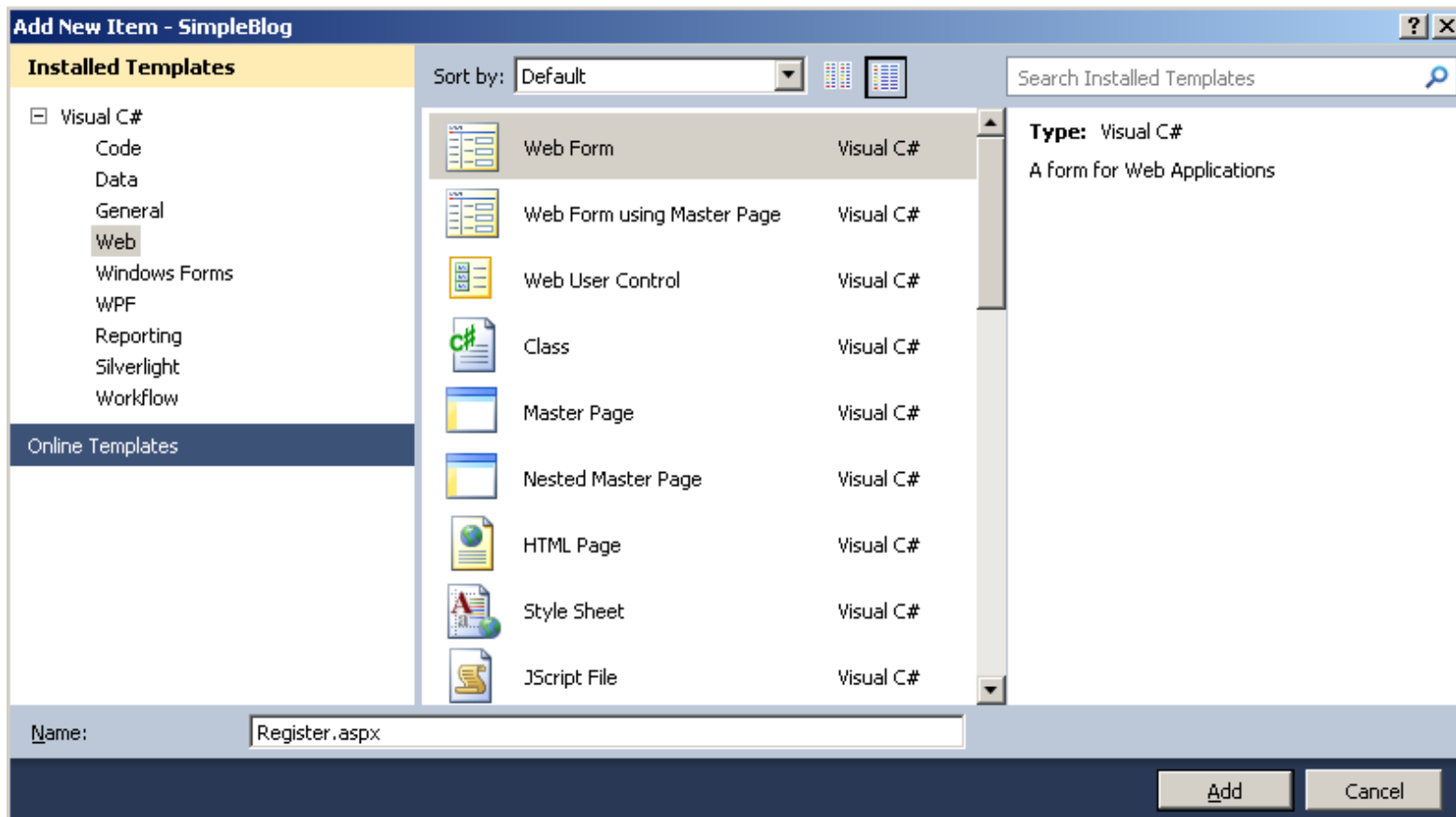
# Add CreateUserWizard to Register.aspx Page

# CreateUserWizard Tasks

# Add Home.aspx Page

# Add DataSource to Home.apsx

- Next, add an SqlDataSource object

- We will use this to setup data binding shortly
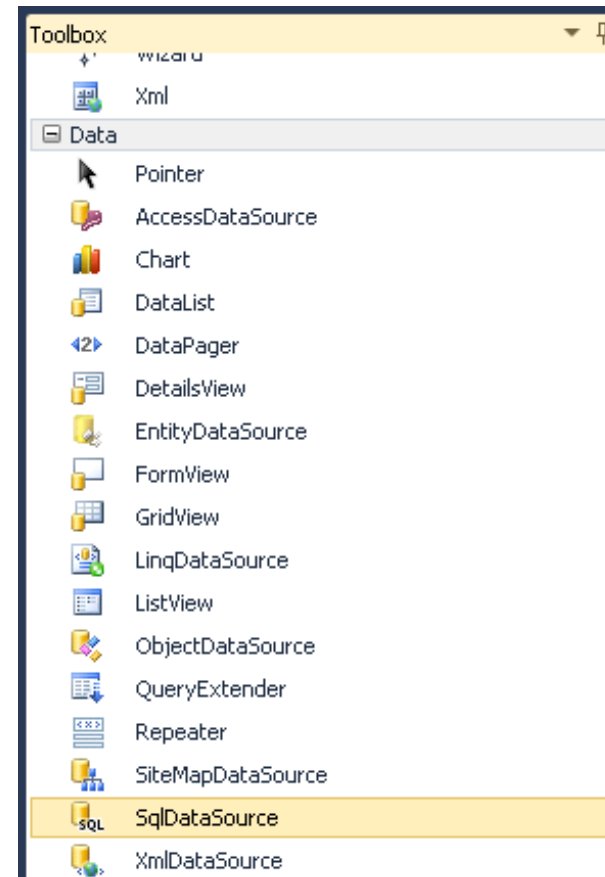
# Setup Database Connection
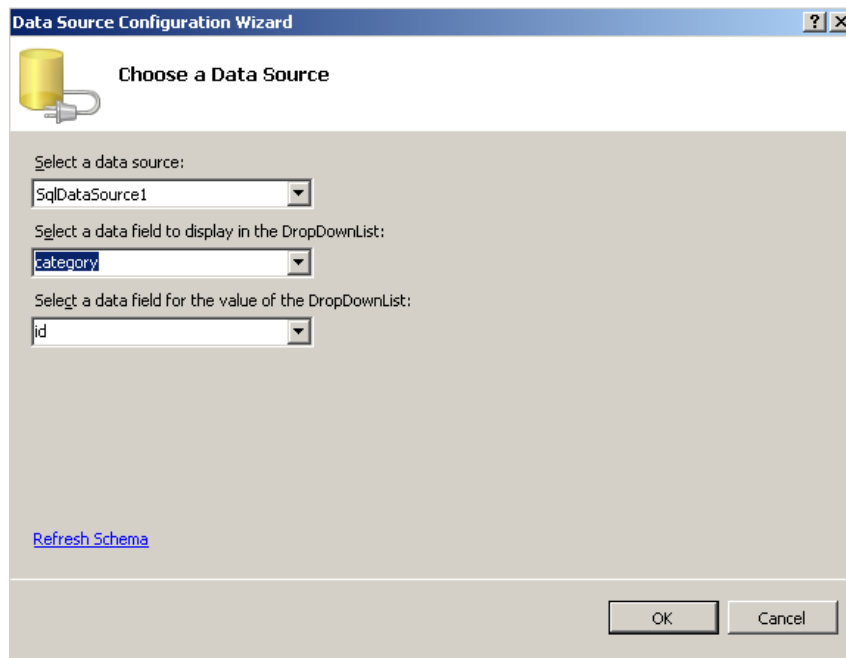
# Select and Test Data

# Home Page: Step 1

- Add a Literal and a DropDownList control

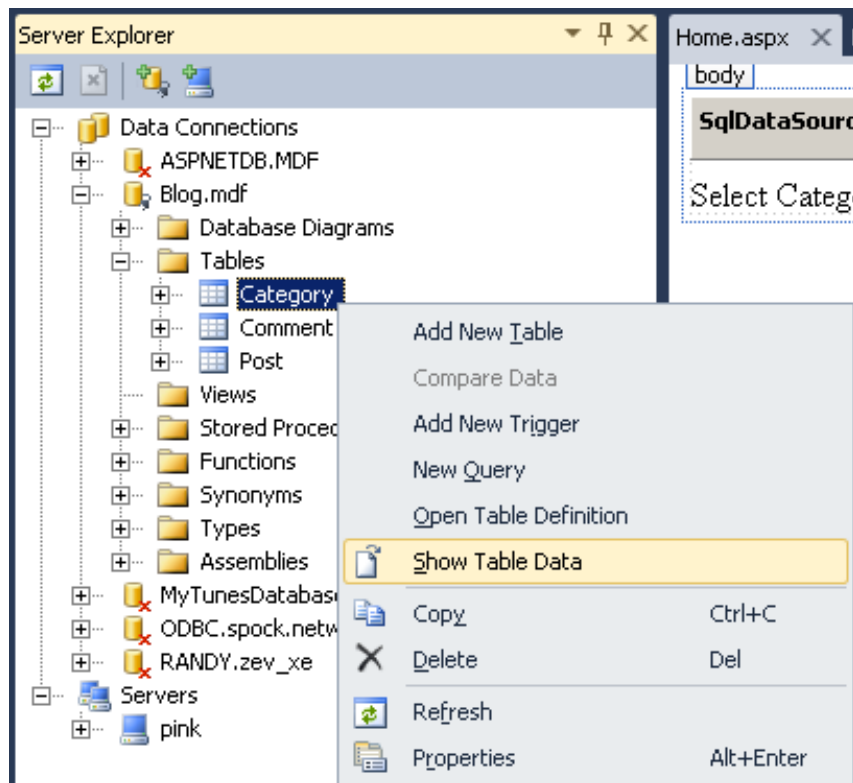- Select the Choose Data Source... task to proceed
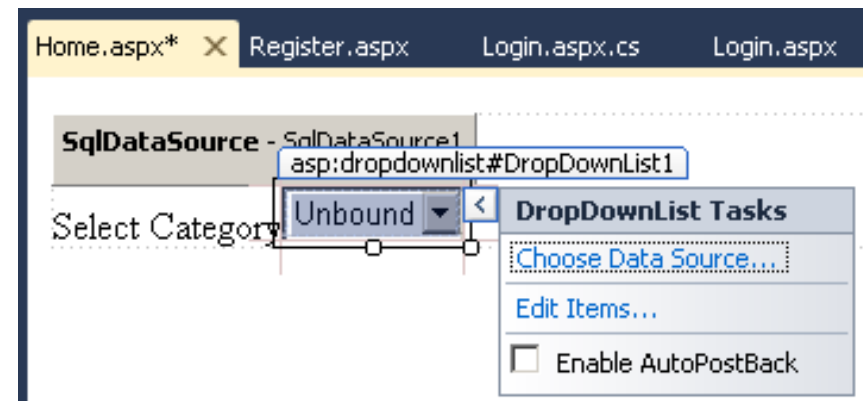
# Home Page: Step 2

- Select our existing DataSource
- Display the category field
- Use the id field

# Running Home.aspx

- Home.aspx is incomplete

- We need to add some categories

- A new web page should be created

- Let's add some records manually

Select Category ▾

# Adding Category Records
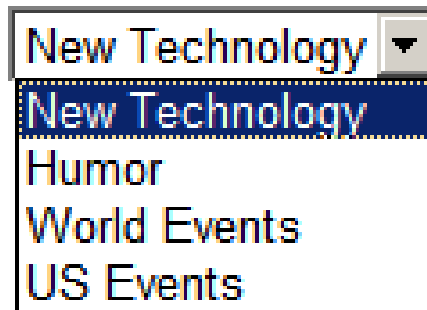
# Home Page with Categories

Select Category | New Technology ▾
New Technology
Humor
World Events
US Events

- Drop-down list is auto-populated at runtime

- Connecting data to controls is called Data Binding
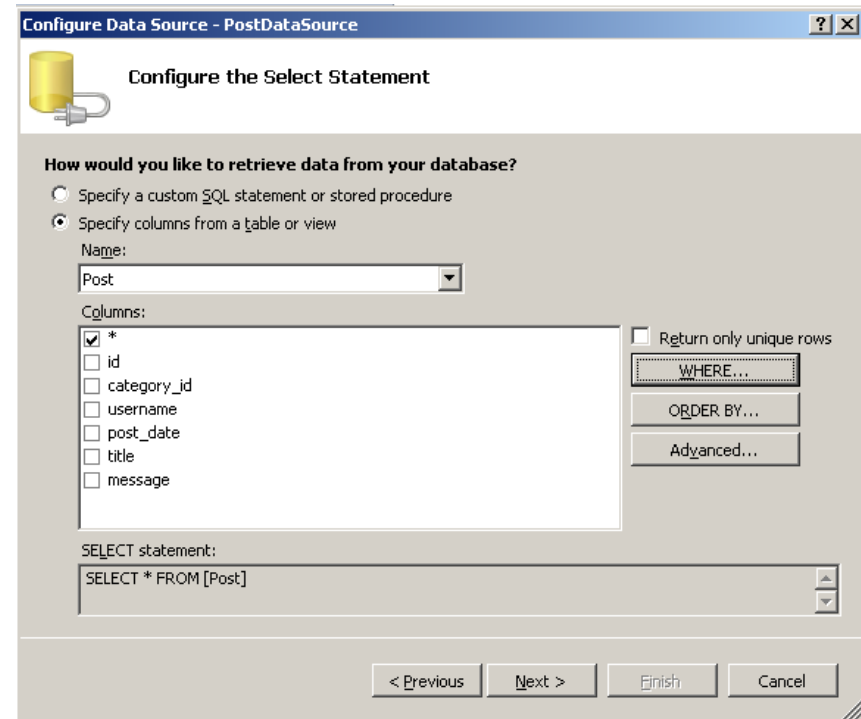
- SQL databases are the most common data source

# Adding a GridView

# Setup Post Data Source

- Select the Post table using the BlogConnection

- Click the WHERE... button next

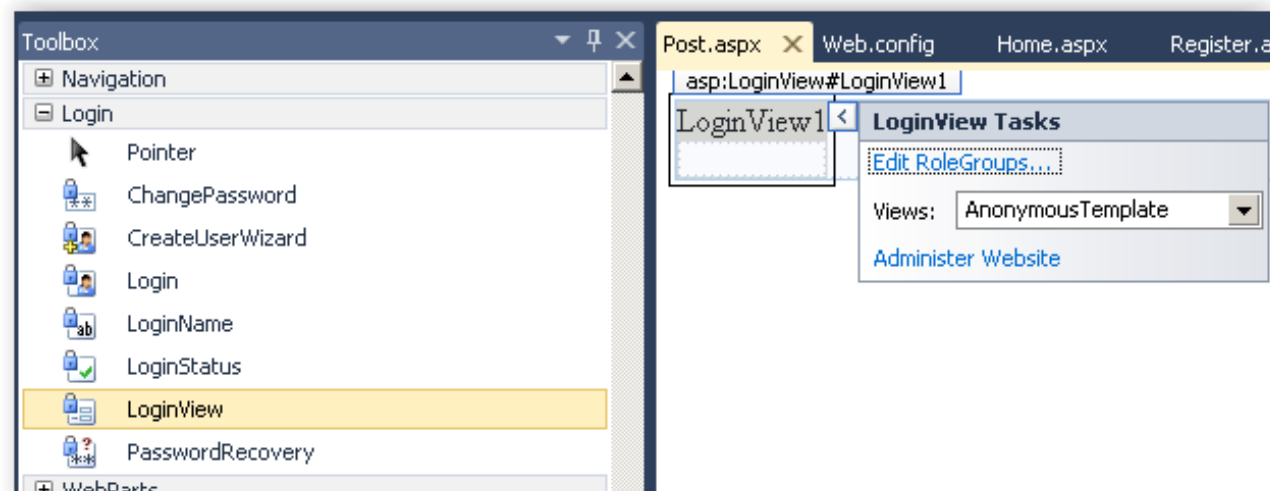# Filter by Selected Category



- Setup this up as shown here.

- Click the Add button before closing the dialog.
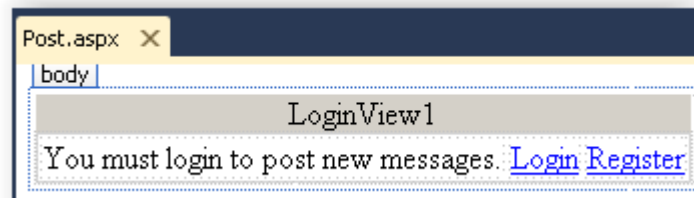
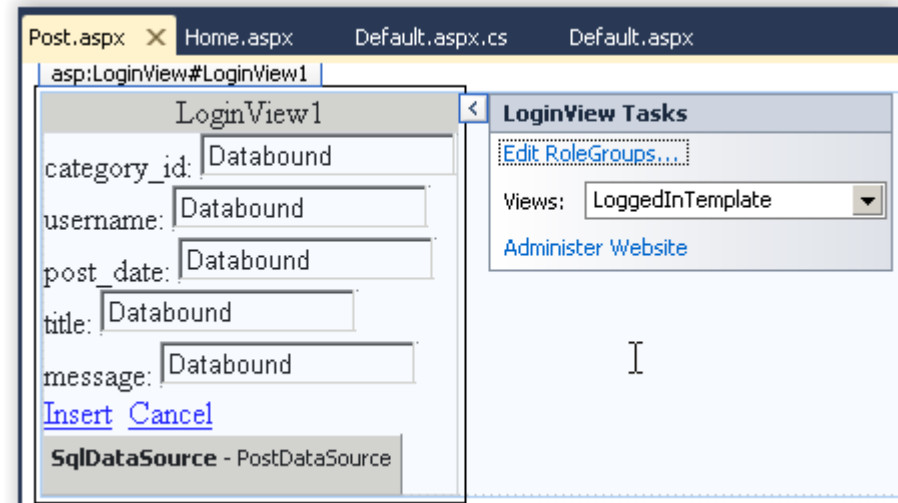# Post New Entry
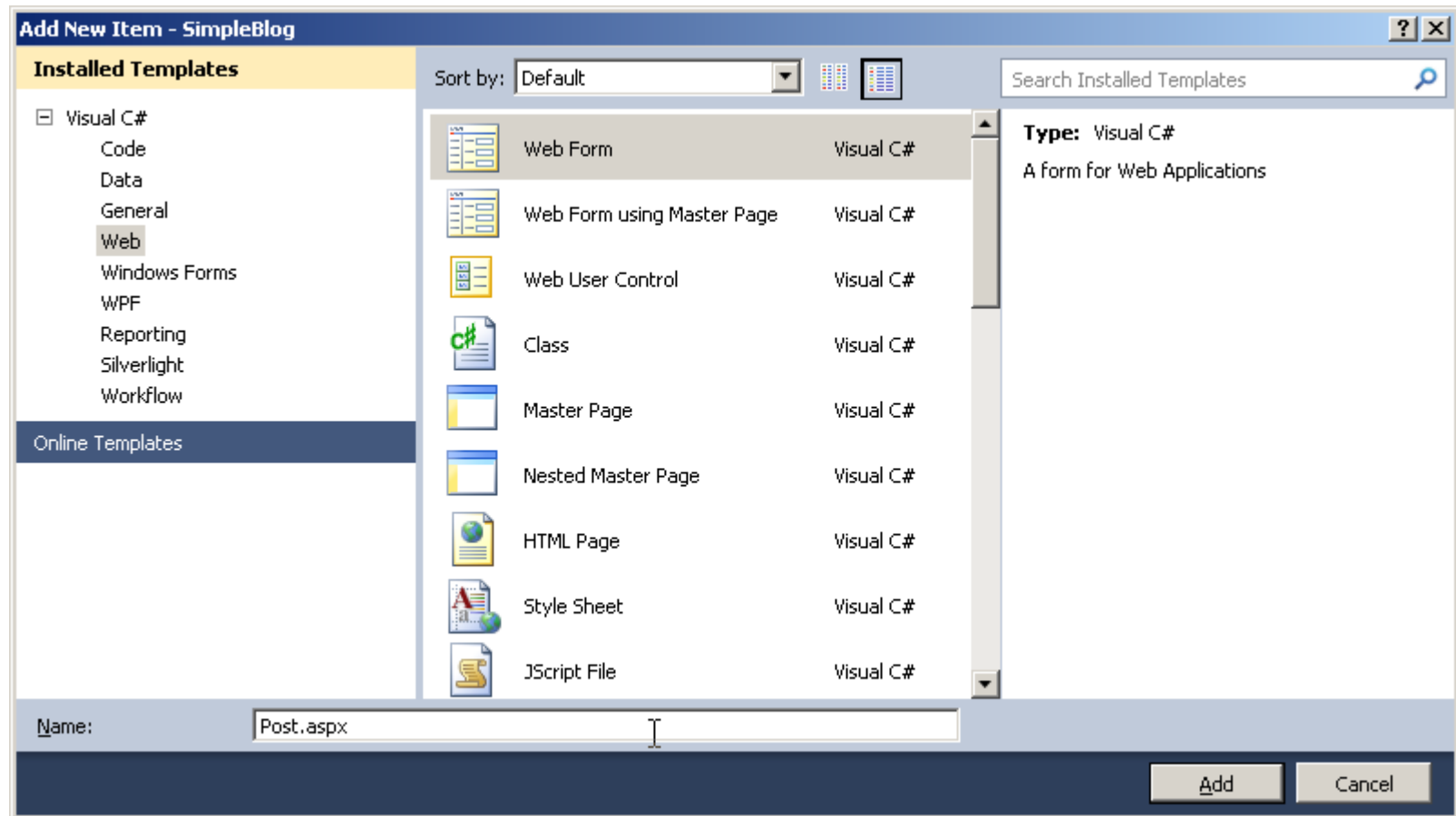
# Add a LoginView

- Group membership templates
- Anonymous and LoggedIn are defaults
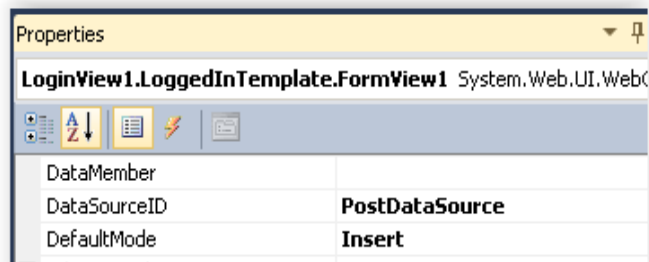
# Post.apsx Contents





- AnonymousTemplate just says login first

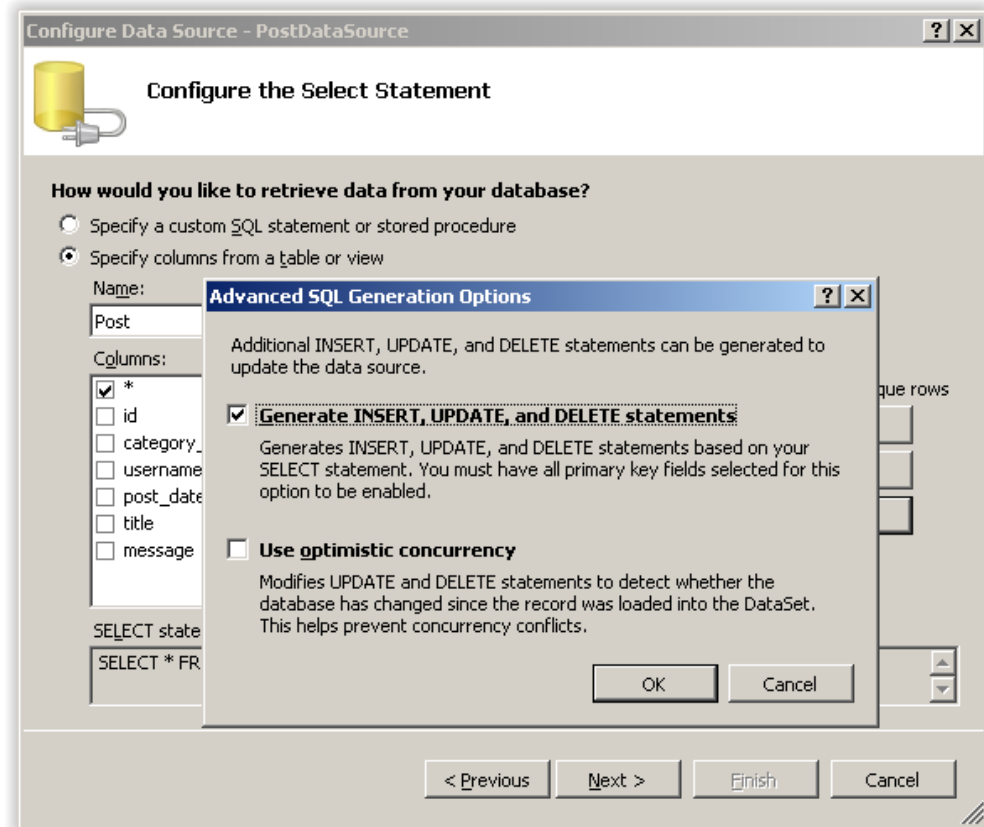- Add the HyperLink controls and set **NavigateUrl** properties

- Add a **FormView** and **SqlDataSource** to the LoggedInTemplate
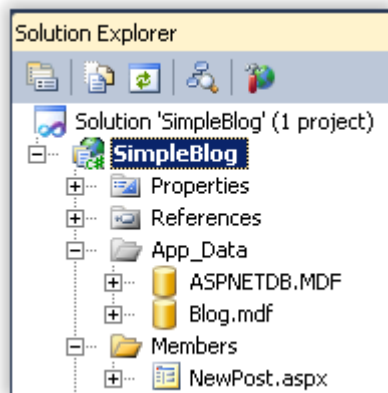
# Post.aspx Controls



- Set the FormView's **DefaultMode** to *Insert*

- Also generate SQL statements for the PostDataSource

# Security with Access Rules



- Add the Members folder

- NewPost.aspx is the same as Post.aspx, but without the LoginView

# Access to Members Folder