

# FORM BUILDER PLUS FOR ASP.NET

Document and how-to guide for using Form BuilderPlus Utility for ASP.NET  
version 4.0 by Cubicle 9 Software

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## Form BuilderPlus for ASP.NET Features

- Intuitive easy-to-use utility that builds robust and comprehensive ASP.Net data input/edit forms from Microsoft SQL Server tables and linked child tables.
- Creates Visual Studio 2008-2015 aspx files and their corresponding C# or VB.Net code-behind files; which you have 100% control over to further edit and develop. Simply browse and point to your ASP.Net project folder where you want the aspx and code-behind files to be written.
- Create drop-down lists from SQL Server tables using queries that you attach to Drop-Down objects. Or simply add comma separated values.
- Create type-ahead text boxes using SQL Server tables from queries that you attach to textbox objects. Does NOT require a web service or PHP scripts.
- Choose from several CSS styles or choose no style for your own custom style.
- Incorporates JQuery for date and numeric edit validation. Date textboxes are automatically supplied with a calendar selector.
- Indicate whether a selected table field is required.
- Powerful Search function automatically built in, to retrieve existing table entries for edit.
- With the exception of multi-line text objects, treats carriage returns as tabs on form objects.
- Let's you change and store form phrasing for language support.
- Let's you choose to implement AJAX extensions.

## Intended Audience

The intended audiences are developers who use Microsoft Visual Studio 2008-2015 to build ASP.Net data input/edit forms. Because this utility creates aspx and C# or VB.Net files, users must be familiar the concepts and interactions between these files within the Visual Studio IDE.

## Requirements

Microsoft Visual Studio 2008 – 2015 , Microsoft SQL Server 2008 -2015

## Getting Started

Copy the aspxList\_20.dll into your project's bin folder – this dll controls the search grid's navigation.

Copy the jQuery folder under your project's top level node. This location can be changed using "Set Form Wording" in the Edit menu.

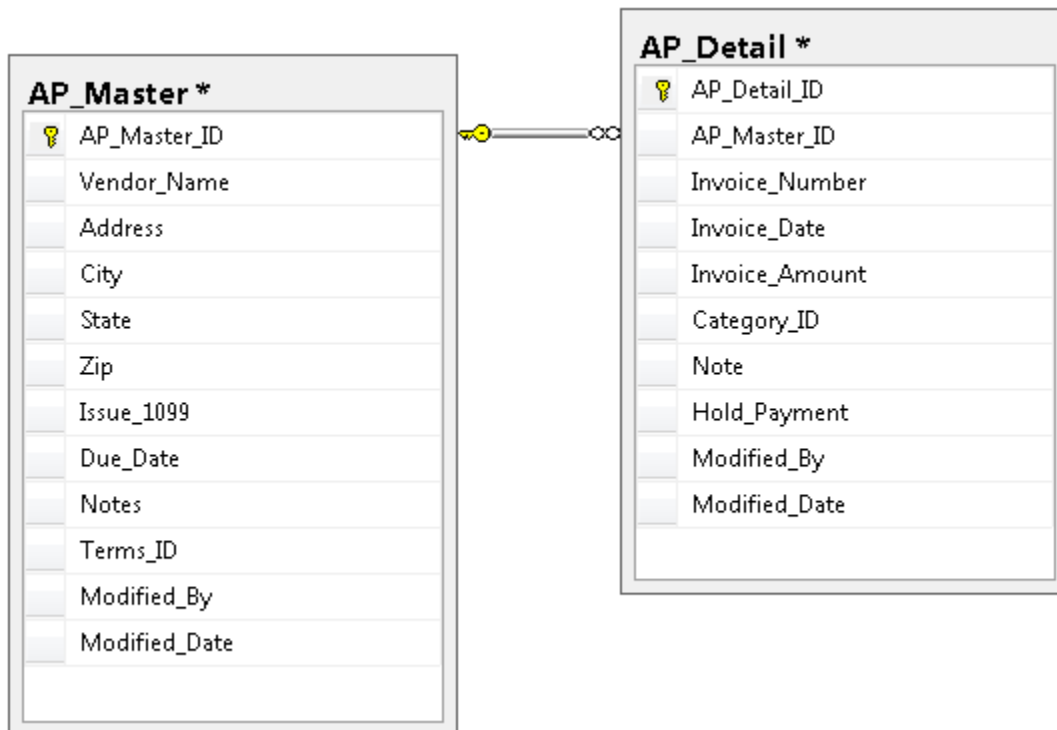
For C# projects, copy the cSearchLookup.aspx and cSearchLookup.cs into your project's top level node.

For VB projects, copy the vbSearchLookup.aspx and vbSearchLookup.vb into your project's top level node.

## Supported SQL Server Data Types

Numeric	Text	Dates
bigint	char	date
bit	nchar	datetime
decimal	nvchar	smalldatetime
float	text	timeshtamp
int	varchar	
money		
numeric		
real		
smallint		
smallmoney		
tinyint		

## Table Requirements



Tables must have seeded identity columns.

AP\_Master table - [AP\_Master\_ID] [int] IDENTITY(1,1) NOT NULL

AP\_Detail table - [AP\_Detail\_ID] [int] IDENTITY(1,1) NOT NULL

## Anatomy of a Form BuilderPlus for ASP.NET form

**AP Master Maintenance** Close

[Search](#)

Vendor Name:  State:  Due Date:

Address:  Zip:  Notes:

City:  Issue 1099: ☐ Terms ID:

[Add Row](#)

Row	Invoice_Number	Invoice_Date	Invoice_Amount	Category_ID	Note	Hold_Payment	Delete
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	Select ▼	<input type="text"/>	<input type="checkbox"/>	<a href="#">Delete</a>

Cancel Add

The example form above shows an accounts payable invoice entry form with a header section and an invoice detail section (Header and Detail tables).

The form comes up ready to enter a new row. Begin entering data into the fields, and then click the [Add] button to insert the new row.

Click the blue [Search](#) link to search for an existing row to edit.

**AP Master Maintenance**

[Collapse](#)

1 of 1

[P] [F] [X] [Y] (Filter on Vendor\_Name)

Vendor_Name	Address	City	State	Due_Date	Select
Hillside Office Cleaners	12345	San Diego	CA	07/30/2015	<a href="#">Select</a>

This will display a grid containing previously entered rows. To get to a specific row, enter a filter string into the search navigation bar's filter box, and then click the [ F ] button to filter the data using that string.

Click on the Select link located in the last column of the grid of the row you want to edit. This will collapse the search grid and fill the form fields with data from the selected row.

**AP Master Maintenance**
Close

[Search](#)

Vendor Name:

State:

Due Date:

Address:

Zip:

Notes:

City:

Issue 1099: ☒

Terms ID:

[Add Row](#)

Row	Invoice_Number	Invoice_Date	Invoice_Amount	Category_ID	Note	Hold_Payment	Delete
1	12345	07/30/2015	500.00	Supplies ▼		<input checked="" type="checkbox"/>	<a href="#">Delete</a>
2	85633	07/30/2015	200.00	Material ▼		<input type="checkbox"/>	<a href="#">Delete</a>

Update
Delete
Cancel

The data can now be edited. Because the form is in “edit” mode, the [ Add ] button is replaced with the [Update] button. Also, the [Delete] button is present.



## Search Navigation Bar



Filter Box – Used to enter a filter criteria or a page number.



Page – When a page number is entered in the filter box, click this button to go to that page.



Filter – When a filter criterion is entered in the filter box, click this button to redraw the list using the filter string. Use % as a wild card to select character(s) before and/or after your filter string. (%Royce% to return “Rolls Royce of America”)



Remove filter – Resets the list with the original list.



First page



Previous Page



Next Page



Last Page

## Form BuilderPlus for ASP.NET Utility

The screenshot shows the 'Form Builder for ASP.NET' application window. The interface includes a menu bar (File, Edit, Help) and a toolbar with buttons for 'Reset Form', 'Get Schema', and 'Build Form'. The main configuration area contains the following fields:

- Company Name: Cubicle 9
- Developer Name: Joe Developer
- SQL Connection String: Data Source=SPARKY-HP\SQLEXPRESS;Initial Catalog=Cubicle\_9;Integrated Security=True
- ASPX Page Name: AP\_Invoice.aspx
- Save ASPX to: C:\Visual Studio Projects\cSharpNCEnet\cSharpProject\Accounts\_Payable
- Master Table Name: AP\_Master
- Child Table Name: AP\_Detail
- Foreign Key to Master Table: Master\_ID
- Options: ☒ Create Designer File, ☒ Use AJAX
- CSS Style: The Blues
- Starting Position (px): Top: 0, Left: 0
- No. of Cols on Form: 3

Below the configuration fields, there are two tables for defining form controls:

**AP\_Master Table:**

	In Search Grid	Edit	Required	Object Type	SQL Query for Dropdown List and TypeAhead Objects	Name	Type	Length	D
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TypeAhead	Select Vendor_Name From AP_Vendor	Vendor_Name	varchar	50	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Address	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		City	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		State	varchar	2	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Zip	varchar	10	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Checkbox		Issue_1099	bit		

**AP\_Detail Table:**

	Edit	Required	Object Type	SQL Query for Dropdown List and TypeAhead Objects	Name	Type	Length	Decimals
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Invoice_Number	varchar	20	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Invoice_Date	date		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Invoice_Amount	decimal		2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dropdown List	Select Category_ID, Category From AP_Category	Category_ID	int		0
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Note	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Checkbox		Hold_Payment	bit		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Modified_By	varchar	50	

The Form BuilderPlus for ASP.NET utility has few fields, but is very powerful at building robust and comprehensive ASP.NET data input/entry forms. The top portion of the utility is where you enter basic information such as company name, programmer name, and the connection string (used for obtaining the table schema for the form builder utility and for building the connection string into the code-behind files). Additionally, you will enter the aspx page name, the folder location where you want the files to be written, the Master table name, and if used, the child table name.

You also can select if the files will be built in a C# or VB.Net project, the use of AJAX, the desired CSS style, and the number of columns to group fields into on the aspx page.

## Form BuilderPlus for ASP.Net Form Fields

Company Name:


The Company Name field is not required. If supplied, it is added to the header comment in the stored procedure(s) that the form builder utility builds.

Developer Name:

The Developer Name field is not required. If supplied, it is added to the header comment in the stored procedure(s) that the form builder utility builds.

SQL Connection String:

The Connection String is a required field. It is used to get the table schema used for the form builder utility and for the connection string; used for the SQL Server data operations within the built code-behind files.

Save ASPX to:  

The “Save ASPX to” field is a required field. It is the folder location where you want the aspx, C# or VB.Net code-behind, designer, and the “create procedure” file(s) to be written. This location can be directly in your project, or a different location altogether. The folders button opens a folder browse window.

The “create procedure” files are built as .txt files to be copied and pasted into SQL Server Management Studio to create the insert/update stored procedure(s).

Master Table Name:

The Master Table Name is a required field. The selected fields within the master table are used to create the header portion of the input/edit form.

Child Table Name:

Foreign Key to Master Table:

The Child Table Name is not required. If supplied, the selected fields within the child table are used to create a multi-row detail section in the input/edit form. Here the form user can add and remove detail or child rows. The Foreign Key to Master Table is the field link back to the Master Table.

**Get Schema**

When the Master or Master/ Child table(s) have been entered, click the Get Schema button to retrieve the table schema. The schema information is placed in the 2 data grids under the header section of the form builder utility.

**Build Form**

When the header fields and table schema grid fields have been entered, click the Build Form button to build and write the aspx, C# or VB code-behind, designer, and “create procedure” files to your folder location.

☐ C# ☒ VB

The C# - VB radio buttons are where you will indicate your project’s programming language.

☐ Use AJAX

The Use AJAX checkbox is used to build in AJAX extensions to the aspx file.

☒ Create Designer File

The Create Designer File checkbox is used to build the designer file. The designer file is required if your project was created as a WebApplication project. It is not required if your project was created as a Website project. If you are unsure how your project was created, check this option. You will know right away when you build your ASP.Net project because it will scream at you that you have multiple references to the form objects. When this occurs, you can just delete the designer file. And then going forward, just leave this option unchecked.

CSS Style:

Spearmint Green

The style drop-down allows you to choose from several color-scheme styles on the aspx form. You can also choose no style to add your own CSS style sheet.

**Starting Position ( px )**

Top: 0 Left: 0

The starting position is the pixel location where the form objects will be placed

No. of Cols on Form:

3 ▼

The Number of Columns on Form drop-down is used to group the form fields in a series of 1, 2, 3, or 4 columns on the aspx form.

## Master Table Grid

AP_Master									
	In Search Grid	Edit	Required	Object Type	SQL Query for Dropdown List and Type-Ahead Objects	Name	Type	Length	D
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Vendor_Name	varchar	50	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Address	varchar	100	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		City	varchar	100	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		State	varchar	2	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Zip	varchar	10	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Issue_1099	bit		

The table schema grids are where you select table fields and where you set the options of how you want those fields to be manipulated.

1 of 1

In Search Grid	Vendor_Name	Address
<input checked="" type="checkbox"/>	Hillside Office Cleaners	12345

The “In Search Grid” option is used to place the field in the Search grid.

Edit

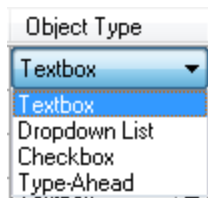
☒

The Edit checkbox is used to place an editable object on the ASP.Net form.

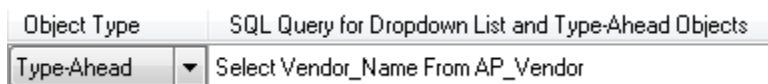
Required

☒

The Required checkbox is used to insert code into the code-behind to test for empty fields. And if empty, will display a required field error message. Note: it is not necessary to check the Edit checkbox if you check the Required checkbox.



The object Type dropdown list is where you indicate the type of form object to be used for an Edit/Required field.

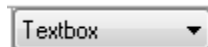


The “SQL Query for Dropdown List and Type-Ahead Objects” is where you will enter SQL queries or comma separated values for Dropdown List objects. And SQL queries for Type-Ahead objects.

Name	Type	Length	Decimals
Vendor_Name	varchar	50	

The remaining cells in the data schema grid are display only columns and cannot be changed.

## Object Types

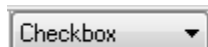


This is the most common object type. It will support text, numbers, and all date types. If the field data type is a date, a date selector is built into the textbox object. If the data type is any numeric type, a built in non-numeric block is built into the textbox object. In addition, numeric decimals are maintained in the textbox object. Both dates and numeric fields are validated for type accuracy in the code-behind file.

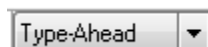


Use the dropdown list object to display data from a selectable list. There are 3 ways to populate the dropdown list object. In the “Drop-Down List/TypeAhead SQL Query” grid field:

1. Add comma separated values: ***One, Two, Three, Four***
2. Add a single value select query: ***Select Terms From AP\_Terms***
3. Add a value/text select query: ***Select Terms\_ID, Terms From AP\_Terms*** (Terms\_ID is what gets saved and Terms is what gets displayed in the dropdown list)



Use the checkbox object for True/False bit data types and for Y/N char and varchar data types.



Use the Type-Ahead object to add type-ahead search functionality to a textbox. Add a single value select query in the “SQL Query for Dropdown List and Type-Ahead Objects” grid field:

**Select Vendor\_Name From AP\_Vendor** (the order by is not necessary, as it is automatically inserted)

Vendor Name:

**San Jose AutoSmart**  
**San Jose Cell Wireless**  
**San Jose Drain Service**  
**San Jose Iron Works**  
**San JoseElectric Co.**  
**Santaclara Credit Union**  
**Santrionos Salmon Grill**

## Child Table Grid

AP_Detail									
	Edit	Required	Object Type	SQL Query for Dropdown List and Type-Ahead Objects	Name	Type	Length	Decimals	
▶	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Invoice_Number	varchar	20		
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Invoice_Date	date			
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Invoice_Amount	decimal		2	
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Category_ID	int		0	
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Note	varchar	100		
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Hold_Payment	bit			
	<input type="checkbox"/>	<input type="checkbox"/>	Textbox ▼		Modified_By	varchar	50		

If a child table is used, you will fill out the same fields in the child table grid. The only exception is the “In Search Grid” column is missing from the child grid. This is because there is no search grid built into the child table, as it is linked directly to the master table.

## Real World Example

Company Name: Cubicle 9 Software Developer Name: Joe Developer

SQL Connection String: Data Source=SPARKY-HP\SQLXPRESS;Initial Catalog=Cubicle\_9;Integrated Security=True

ASPX Page Name: AP\_Invoice.aspx

Save ASPX to: C:\Visual Studio Projects\cSharpNCEnet\cSharpProject\Accounts\_Payable

Master Table Name: AP\_Master Child Table Name: AP\_Detail Foreign Key to Master Table: Master\_ID

☒ Create Designer File ☒ Use AJAX

CSS Style: Spearmint Green

Starting Position ( px ) Top: 0 Left: 0

No. of Cols on Form: 3

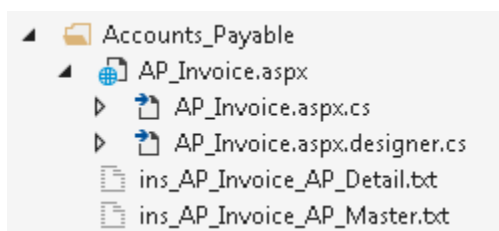
**AP\_Master**

	In Search Grid	Edit	Required	Object Type	SQL Query for Dropdown List and Type-Ahead Objects	Name	Type	Length	D
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Type-Ahead	Select Vendor_Name From AP_Vendor	Vendor_Name	varchar	50	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		Address	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		City	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Textbox		State	varchar	2	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Zip	varchar	10	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Checkbox		Issue_1099	bit		

**AP\_Detail**

	Edit	Required	Object Type	SQL Query for Dropdown List and Type-Ahead Objects	Name	Type	Length	Decimals
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Textbox		Invoice_Number	varchar	20	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Textbox		Invoice_Date	date		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Textbox		Invoice_Amount	decimal		2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dropdown List	Select Category_ID, Category From AP_Category	Category_ID	int		0
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Note	varchar	100	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Checkbox		Hold_Payment	bit		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Textbox		Modified_By	varchar	50	

Here is a sample of a Form BuilderPlus for ASP.NET utility filled out and ready to build the AP\_Invoice aspx page, cs code-behind file, the designer file, and the 2 create procedure script txt files. Clicking the Build Form button will create these files in your folder location.

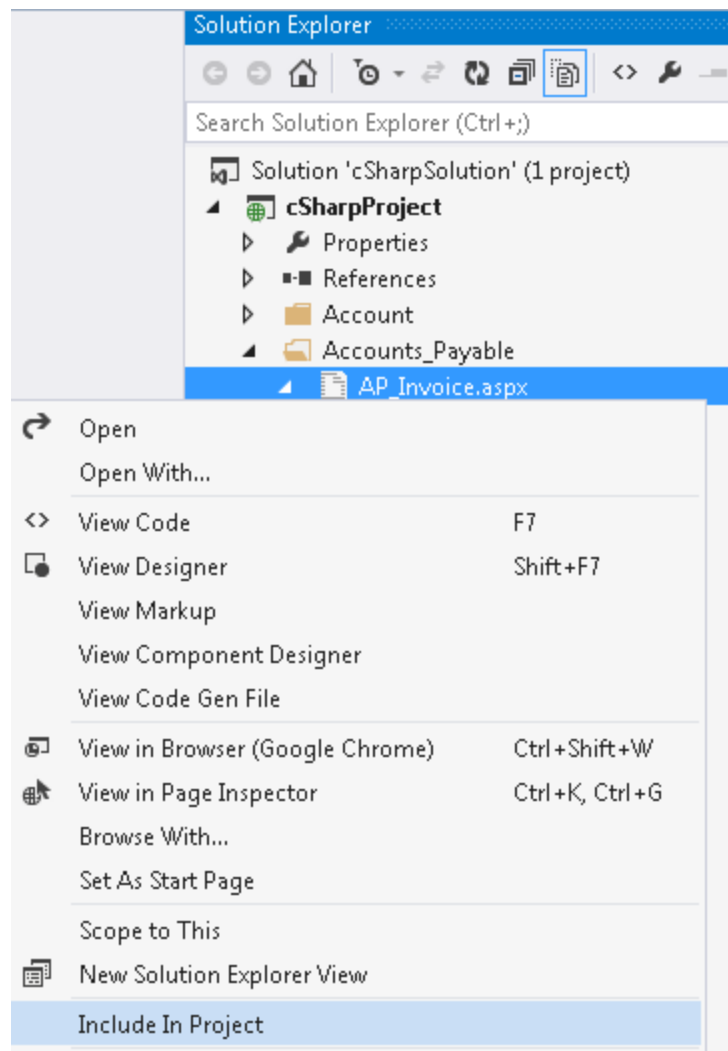


If your project is a WebApplication project, you will need to include the files in your project. Although visible in your project, you will not be able to run or build your project until these files have been included.

If your project is a Website project, there is no need to include these files.

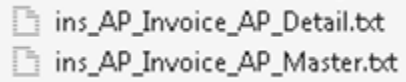
To include the new files in your project, right-click on the aspx file in your project. Then select the context-menu option "Include in Project". See diagram.





## Stored Procedures

You will notice that there are 2 txt files included in your project. These are the insert/update stored procedures that you will need to create in your SQL Server. All that you need to do is open each one up, copy and paste into SQL Server Management Studio, and then execute.

A screenshot of a file explorer showing two text files. The first file is named 'ins\_AP\_Invoice\_AP\_Detail.txt' and the second file is named 'ins\_AP\_Invoice\_AP\_Master.txt'. Both files have a small document icon to their left.

ins\_AP\_Invoice\_AP\_Detail.txt  
ins\_AP\_Invoice\_AP\_Master.txt

## Set Form Wording

Verbiage that is built into the aspx page can be changed to support different languages by using the “Set Form Wording” option located under the Edit menu option.

**File Edit Help**

**Set Form Wording**

**Language** [Close] [Maximize] [Refresh]

**Set Form Wording**

<b>Close Button:</b>	Close	<b>Confirm Delete:</b>	Are you sure you want to delete this record?
<b>Search Link:</b>	Search	<b>Confirm Delete Row:</b>	Are you sure you want to delete row
<b>Collapse Link:</b>	Collapse	<b>Is Required:</b>	is Required!
<b>Add Row Link:</b>	Add Row	<b>Required:</b>	Required
<b>Cancel Button:</b>	Cancel	<b>Is Invalid:</b>	is Invalid!
<b>Add Button:</b>	Add	<b>Invalid:</b>	Invalid
<b>Update Button:</b>	Update	<b>Must be Numeric:</b>	Must be Numeric!
<b>Delete Button:</b>	Delete	<b>Non-Numeric:</b>	non-Numeric
<b>Close Yes Button:</b>	Yes	<b>Invalid Date:</b>	Invalid Date!
<b>Close No Button:</b>	No	<b>Select Link:</b>	Select
<b>Unsaved Message:</b>	There are unsaved changes - Close Anyway?		
<b>Edit Alert Message</b>	Please fix fields highlighted in red. Hold mouse cursor over field to determine source of error. Refer to status line below for detailed list of errors.		
<b>JQuery Folder Location:</b>	../jquery/js/		
<b>JQuery CSS Location:</b>	../jquery/css/ui-lightness/		

**Save**

## jQuery Folder Location Settings

In addition to setting language preferences, you can change the folder locations of where the aspx page points to the jQuery script folders. If your project already contains a folder location for existing jQuery script files, copy the scripts out of the jQuery folder into the existing folder and change the location in the Set Form Wording window.