

Chapter 2.

Marvelous Moves



Hop on to the carpet...

And we'll take you on an truly magical ride. Once you do these exercises, you'll understand how the basic elements of Alpha Five web application design fit together...

And, when you're finished, you'll have your first web application!

Notes:

How the material is organized

In order to have a sense of how Alpha Five web applications work, it is important to see the system in action. This chapter will create a simple, unsecure web component and a web page. We will then put the component on the page and view it in the browser.

Later chapters go over the elements in greater detail, but, in order to avoid unnecessary duplication, the rest of this book assumes you have done these exercises. They also contain important information that may not appear elsewhere.

Besides, you don't want to miss the TA! DA!

Preparation for the lessons

The process of creating Alpha Five web applications is the same for all users, with a few minor exceptions. For consistency in teaching and learning, the text in this book refers to the Alpha Five DBF files provided with this book's companion databases.*

A Web Project named **MailListUnsecure** has finished examples of the *Web Component* and *A5 Web pages* used in this chapter. You will be able to view the examples, but you will not be able to see the project in action until you **Publish** the files. (See "Viewing and using the Web Project" on page 43.)

This chapter is based on the web application chapter published in *Alpha Five Made Easy, The Basics and More for Versions 6, 7 & 8* and uses the same file names. If you did the exercises for the web application chapter in one of those books, please see "Special note for Alpha Five Made Easy readers" on page x before you do these exercises.

Creating a Web Project

ABC Seminars wants to offer interested persons the opportunity to enter their names on the mailing list and change their addresses, phones, etc., when necessary. The company wants all entries to be automatically posted to their database. All users will be able to open and edit the material.‡

Earlier, we stated that there are four basic steps that go into creating a web based database with Alpha Five. This section will teach those steps:



PLEASE NOTE



LOOKING AHEAD†

ALPHA FIVE MADE EASY
READERS

SCENARIO

*. Instructions for connecting to remote databases is given in Chapter 10.

†. For experienced or returning users. May be helpful to beginners who want to see the results of the exercise.


‡. Of course, in a real life application, the information on other members might not be visible to all—and for sure, we wouldn't want just anyone to be able to change a member's data (something we'll fix in the next chapter). As are the others in this book, this example is intended for demonstrations purposes only.

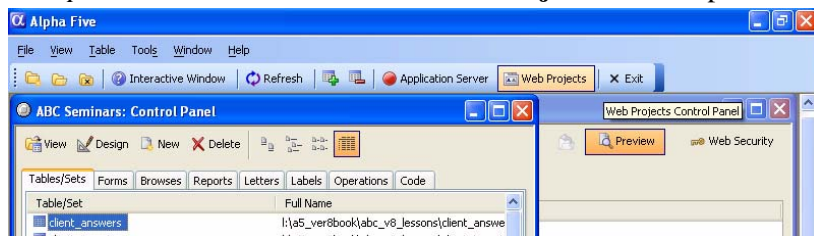
- a. Creating a Web Component.
 - This exercise will use the Grid component.
- b. Creating a Web Page.
- c. Inserting the Web Component on the Web Page.
- d. Viewing and using the Web Project in your Browser.

OPEN WEB PROJECTS CONTROL PANEL

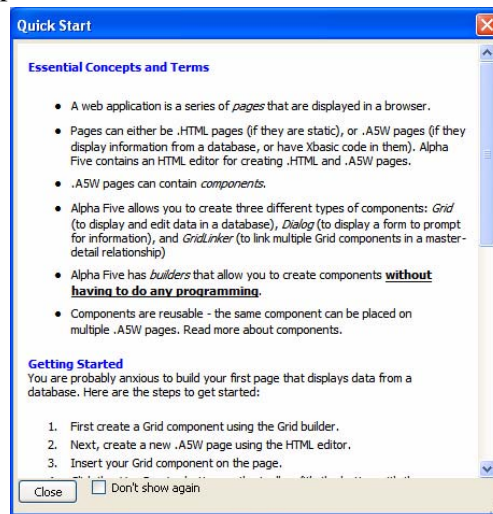


- Before we can do these steps, we need to open the **Web Projects Control Panel**.

1. Open Alpha Five and navigate to the following file:
 - c:\A5_V8+9_WebBook\ABC_WebAppLessons\ABC Seminars.adb*
2.  Click on the Control Panel tab in the Window Bar at the bottom of the screen to bring the Control Panel to the front.
3. *Alpha Five Control Panel*: Click **Web Projects** on the top Toolbar.



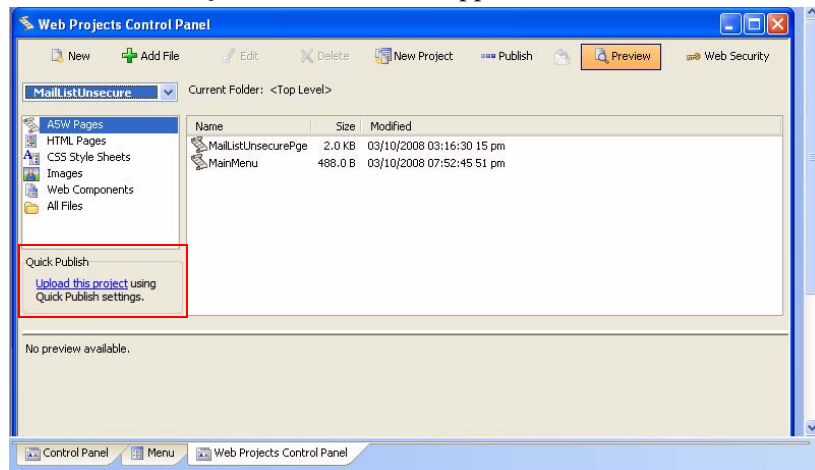
- If you have not previously disabled it, the **Quick Start** memo appears.
 - We will cover these instructions in this chapter.
 - You may disable it if you wish.
 - You can reactivate it at Top Menu > View > Show Quick Start Help...



*. Depending on how Alpha Five is opened, the file extension **.adb** may not appear.

4. Click **Close**.

- The *Web Projects Control Panel* appears.



- The various design elements are on the left. As you click on each, it's files appear.

The *Web Project Control Panel* is fully detailed in Chapter 4.




NOTE



V9-PLATINUM EDITION

Users of V9-Platinum Edition have a **Quick Publish** option (red box above) that we'll learn more about later.

5. Click  to start the **Application Server** (the red icon indicates it is off).

-  The button changes color and has a green icon

6. Click **New Project**. Name the project **MyMailListUnsecure**. (Click OK)

Web stuff REALLY doesn't like file names with spaces, so be sure to link the words together as above.



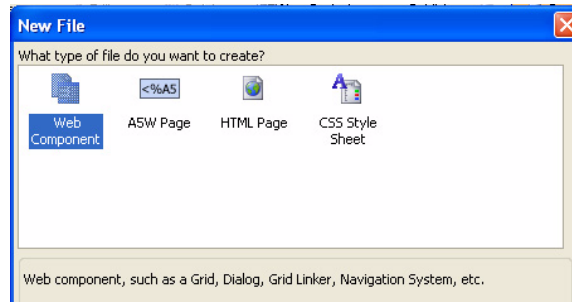
CAUTION

Creating a Grid Web Component



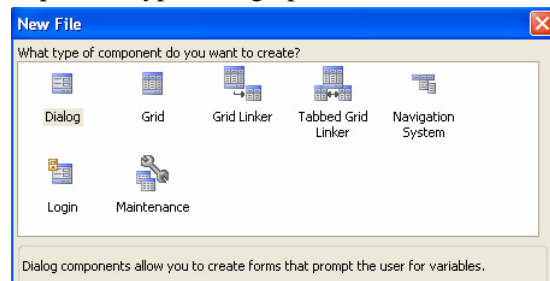
1. At the Web Projects Control Panel, select *Web Components* in the left panel and click **New** on the Toolbar.

- The New File dialog opens. *Web Component* is the default because that is what we selected. Had we selected a new web page, that would have been the default.



2. Click **Next**.

- The Component Type dialog opens.



3. Choose **Grid**. (Click OK).

- The Grid Builder opens.



NOTE

PLEASE TAKE A MOMENT TO
READ THIS

Your grid may have a different appearance in the *Preview* window at the right because the style may be different. We'll change that in a little bit.

Time to take a rest after all that excitement and read about this feature.

There are so many attributes for *Grid Web Components* that three chapters have been devoted to them. For now, we will hit the highlights.

The left panel shows the *Grid Builder Navigator*. The appropriate section will come up when you click on its link.

COMPONENT TYPE

- **Component Type** defines the type of grid and has the following options:

- *Grid layout*: This governs the format of the Grid that can be seen in the Preview panel at right. There are 3 choices: **Tabular**, **Columnar** and **Stacked Columnar**. Go through the choices to see them pre-viewed. The Grid can be **Read only** or **Updateable**.
- *Grid contains a Search part*: If you want the user to be able to look up data, you will need a Search part. Search parts are optional.
- *Grid contains a Detail View part*: Depending on the setup, when the user clicks on a link in the grid, more details, such as full address, phone, mail, etc., will be visible. *Detail View* parts are optional. They can also be used to enter new records. *Detail View* parts can be **Read only** or **Updateable**.
- *Detail View* parts are available only if the *Grid layout* is **Read only**.



NOTE

**READ ONLY VS.
UPDATEABLE**

If you want to be able to add and edit records in the Grid itself, choose Updateable. If you want to add and edit records in a *Detail View* part, the Grid layout must be Read Only. This will become clearer as we go along.

- Ok, back to work.
4. Enter these settings (note that the preview window at right changes as you add sections):
 - a. *Grid layout*: **Tabular, Read Only**.
 - b. *Grid contains a 'Search' part*: **Yes**.



IMPORTANT NOTE

The Application Server web components are based on making selections. Many of these choices are made by means of checkboxes. In effect, the option is asking, “Do you want to do this?” Rather than say “click or unclick the checkbox,” we will usually answer the question by saying “Yes” or “No.” In other words, a checked box = Yes (or True). An unchecked box = No.

- c. *Grid contains a 'Detail' part*: **Yes**.
 - d. *Detail View is*: **Updateable**.
5. Scroll the *Preview* pane at the right down to see the *Detail View* out of sight below the *Search* and *Grid* views.
 6. Click **Click here to zoom preview window** above the *Preview* panel for a larger view. (Click OK to Close)

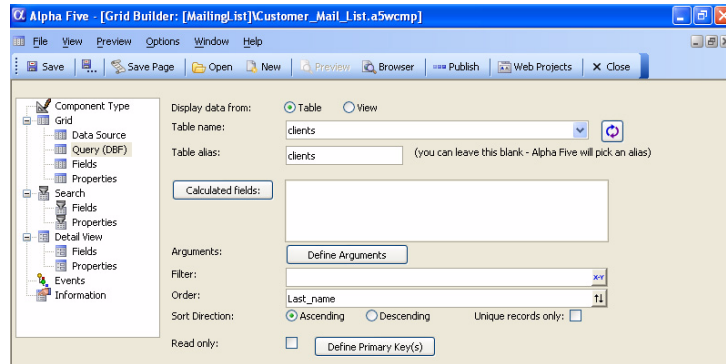
Defining the Grid Data Source

7. *Grid Builder Navigator*: From the left pane, select *Grid > Data Source*.
 - Grid is not an option because it is just the heading for the tree.
8. *Specify the type of data that you want to display on your web form*:*
Choose **Alpha Five .dbf Tables**.†

*. *Alpha Five users*: Do not confuse Application Server “form” references with an Alpha Five desktop (database) forms. You cannot use those forms in web applications.

Defining the Grid Query

9. *Grid Builder Navigator*: Select *Grid > Query (DBF)*.
 - The Web App builder will Query (ask) the Alpha Five DBF table for information, hence the term.



LINKING TABLE

10. *Display data from*: **Table**.
11. *Table name*: Choose **clients**.
12. *Alias*: Allow the alias to be inserted automatically (probably clients).
13. *Calculated fields*: None.

FILTER

14. *Filter*: None.

SORT ORDER

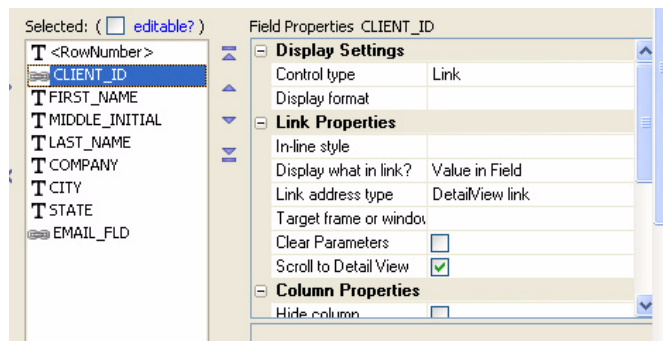
15. *Order*: Click the *Smart Button** and choose **Last_Name**. (Click OK)

SORT DIRECTION

16. *Sort direction*: Accept the default, **Ascending**.

Selecting fields for the Grid

17. *Grid Builder Navigator*: Select *Grid > Fields*: Choose **Client ID** from *Available Fields* and enter it into *Selected*.
 - As soon as a field is chosen, its Field Properties appear in the right hand window.

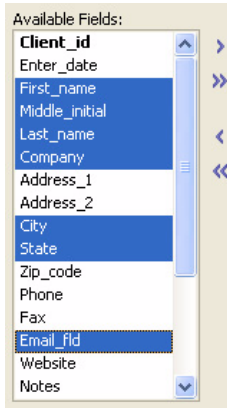


†. Instructions for connecting to remote databases are given at “Defining the Data Source” on page 353.

*. *Smart buttons* appear in text boxes and open built-in Alpha Five builders.



WINDOWS HINT



18. Enter the fields from **First Name through Company, City, State and Email** into *Selected*.

You can enter the fields in groups because SHIFT + CLICK and CTRL + CLICK are enabled (screen shot at left).

- Group the fields as follows (if you are not familiar with this windows technique, it may take a couple of tries, but it's worth learning because you can use it in other Windows programs):
 - a. Click on First_name.
 - b. Hold the SHIFT key and click on Company.
 - c. Press and hold the CTRL key.
 - d. Click on City and State.
 - e. Continue to hold the CTRL key down.
 - f. Click on Email_fld.
 - g. Click the single arrow to the right (red box).
 - The double arrow selects and moves **all** the fields in the table.

ROW NUMBERS

- Next we want to see row numbers at the left side of the grid.

19. *Available fields:* Add **<RowNumber>** to *Selected Fields* box.

- Scroll down—it's near the bottom.

20. Move **<rownumber>** to the top of the list with the arrows at the right of *Selected*.

RECORD NUMBERS

- You could also insert the record number of the field into the grid with **<logicalrecno>**.

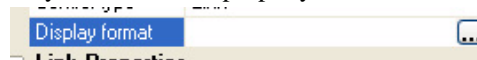
Setting the field properties

Next, we will define the Field Properties. For some properties, you will enter text directly into the property box. For others, you will click a button and make choices. The problem is that you can't see the button until your cursor is on the field property.

- *Display Settings > Control type:* This property has a down arrow opens a drop down box of options. It becomes visible when you click on the property title.



- *Display Settings > Display format:* This property has a button that becomes visible when you click on the property title.



- Sometimes the text box will say <click button to edit> and sometimes it will be blank, as above.
- The important thing to remember is that you need to click the property in order to know what to do.

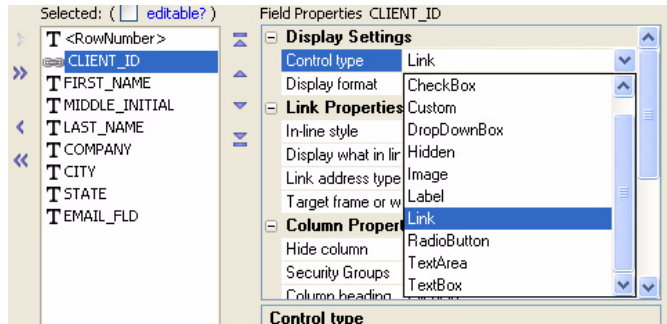


REMEMBER THIS!

DETAIL VIEW LINK

We want to create a link so that when the user clicks on the **Client ID** field in the Grid, the details will be shown in the *Detail View* part.

21. *Selected:* Click on **Client ID** to bring up its Field Properties.
22. Enter the following settings:
 - If you can't see the button, be sure your window is Maximized.



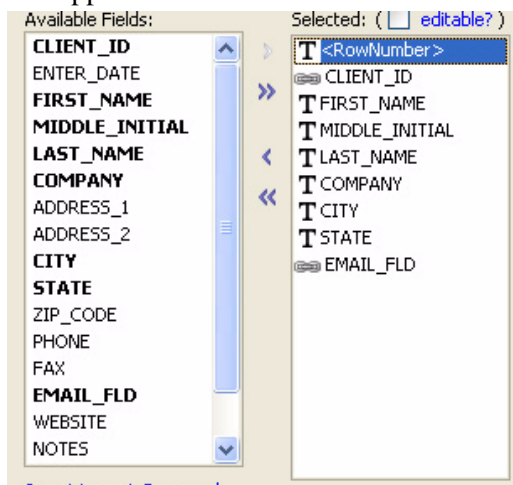
- *Display Settings > Control type:* Choose **Link**.
 - *Link Properties > Display what in link?:* **Value in field**.
 - *Link Properties > Link address type:* Choose **Detail View Link**.
- Next, we want to be able to send an email to the customer.

EMAIL LINK

23. *Selected fields:* Click **Email fld**.
 - *Display Settings > Control type:* Choose **Link**.
 - *Link Properties > Display what in link?:* **Value in field**.
 - *Link Properties > Link Address Type:* Choose **Field value is an Email address**.

CHANGING THE COLUMN HEADING

- Next, we will make a column heading smaller.
24. *Selected fields:* Click **Middle Initial**.
 - *Column Properties > Column Heading:* Change **Middle Initial** to **MI**.
- Notice what has happened to the Available Fields and Selected displays.



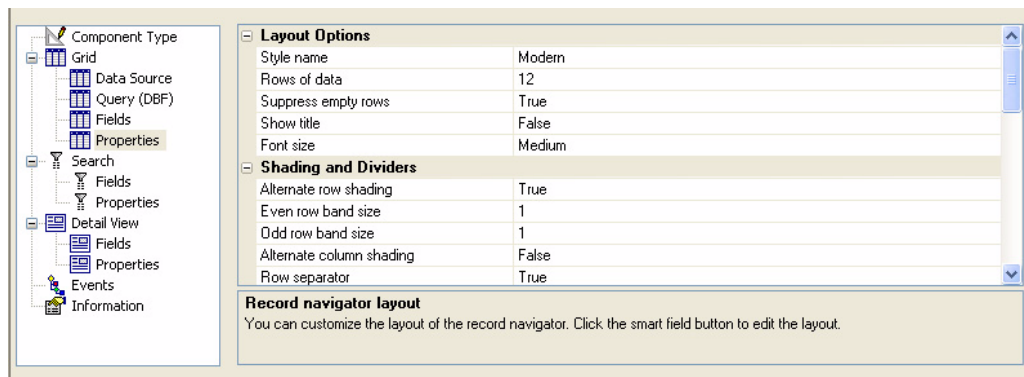
- *Available Fields*: Chosen fields are bolded.
- *Selected*:
 - Link icons are next to Client ID and Email_fld, signifying their Control Types as Links.
 - The other fields have Label control types and have that icon.
- There are other icons for the rest of the control types. Control Types are important and we'll go over them in detail later.

Defining the Grid Properties

These are properties that affect the overall appearance and behavior of the grid, itself.

25. *Grid Builder Navigator*: Select *Grid > Properties*.

- If there is an error message in the bottom pane, you can ignore it. We will take care of this when we configure the Detail Part.



STYLE

a. *Style name*: Choose **Modern**.

ROW QUANTITY

b. *Rows of data*: Change to **12**.

- Do not use too many rows as it will take your grid longer to appear.

ROW APPEARANCE

c. *Alternate row shading*: Checkbox = **Yes**.

SORTING

d. *Column Titles and Sorting Options: Sorting Style*: **Click column label to sort—show current sort direction with icon**.

RECORD (PAGE) NAVIGATOR

e. Scroll down to *Record Navigator > Record Navigator Layout*: Click the button.

- The Record Navigator Designer opens.



My heavens, look at all the choices. As you have probably figured out, this is the record (page) turning feature that you use all the time on the web. Wonder how long it would take to program one of these???? Well, for us it's only a click. Choose any style you like. If you have any doubts as to how it will look, check the Preview panel at the bottom of the window. We chose the 3rd from the top on the left—just because. If you like, you can even customize the navigator style at this window.



HINT!

You may think of this as a “page” navigator—I know I do—but note that in this context, it is called a “record” navigator.

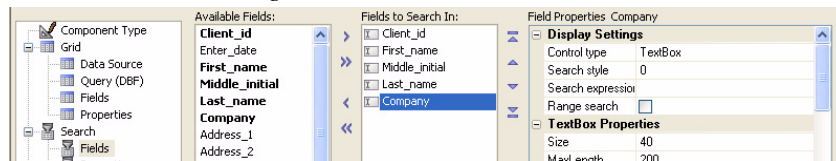
- Choose option #3.
 - Accept the defaults for the rest of the Grid Properties, but feel free to look around at all the options. (Click OK)
- Next, we'll work on the fields and properties for the **Search part**.

Setting up the Search part elements

The settings in this part affect the fields on which the user will be able to do a search.

SEARCH FIELDS

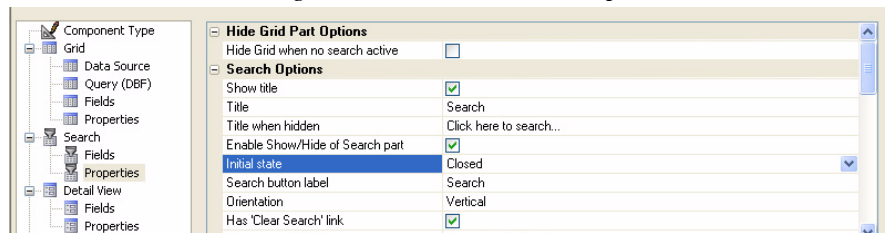
26. *Grid Builder Navigator: Select Search > Fields.*



- Put **Client ID, First Name, Middle Initial, Last Name and Company** into the *Fields to Search In* box.

SEARCH PROPERTIES

27. *Grid Builder Navigator: Select Search > Properties.*



VIEW

- Search options > Enable Show/Hide of Search part. Yes.*
 - This will put a line of text (see *Title when hidden* in next step) on the page instead of the Search part.