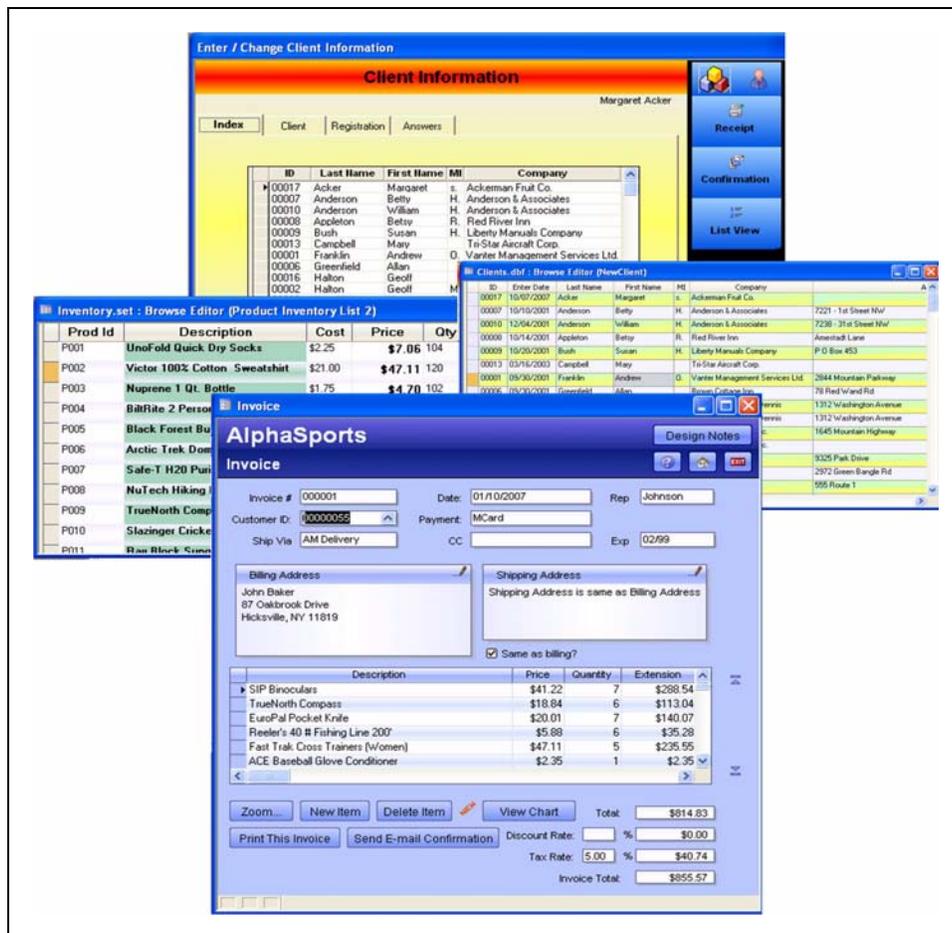Chapter 4.

Forms and Browses

Forms and Browses are the heart of data entry.

With Alpha Five, it is easy to create tabbed interfaces that are familiar to Windows users. Forms organize the input of data. Browses also assist the user in entering and viewing data.

Notes:

Preparation for the Lesson.

Open Alpha Five and navigate to the following file:

- •c:\A5_Ver9Book\ABC_V9_Lessons\ABC Seminars.adb[*]

- Click on the Control Panel tab in the Window Bar at the bottom of the screen to bring the Control Panel to the front.

SPECIAL NOTES

As fields are added to the form, the *Summary Genie* may pop-up. Accept the default settings and click *Finish*. The genie may be deactivated by clicking the "magic lamp" in the upper right corner of the toolbox.

Because this is a long chapter, it has been broken into a series of exercises. The quill and inkwell marks the beginning and end of each exercise.

LOOKING AHEAD![†]

In this chapter: Forms may be viewed from the Alpha Five Control Panel Forms tab or by clicking its button on the opening ABC Seminars menu.

- • Browses:
  - •Embedded: See Tabbed forms below.
  - •Stand Alone: NewClients and c:\Program Files\A54v\Samples\Invoice\Invoice.adb.
  - •BrowseButton
- • Default form: SpeakerEntry (Button: Speakers)
- • Menu forms:
  - •HelpAppsURLs (Button: Handy URL's).
  - •Menu (ABC Seminars opening menu).
  - •NewClientImport, a submenu (Button: Import).
  - •PleaseWait (for use in a script).
- • Tabbed forms:
  - •ClientInfoDemo (A5 Control Panel, Forms tab)
  - •SpeakerEntry (Button: Speakers)
  - •ClientInfo (Button: Clients)

Understanding Form Design

Forms are used for entering, changing and viewing data.

Objects are placed on forms. Much the same as a remote control, magazine and lamp are objects placed on a table, fields, labels and buttons are objects that are placed on a form.

---

*. Depending on how Alpha Five is opened, the file extension **.adb** may not appear. (For instructions on opening an existing database, see "Using Alpha Five with a remote database" on page xi.)

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

Forms may also be printed, but usually you will want to create a separate form or report that is formatted especially for printing. Forms can be imported from the Report Editor. (See "Importing a Layout" on page 239.)

There are three types of forms, two of which, **Default** and **Custom** are created by the Genie. The third, **Blank Form**, is ready for your personal design. All forms can be modified to suit your needs.

- **Blank Forms** begin as a blank sheet of electronic paper.
- **Default Forms** contain every field in the table or set. These are the quickest to make, but often contain more fields than are useful for data entry.
- **Custom Forms** are also easy and quick to make. This style is more useful because it can be limited to specific fields.

In this exercise, we will briefly demonstrate the process for creating a **Default Form** and using **Stylesheets**. We will then create a simple, basic **Custom Form**. At that time we will illustrate how fields are placed on the form and will examine the components of **Form Design**.

Finally, we will create a new form from scratch so we can give the user all the Windows bells and whistles, including tabbed interfaces and embedded browses.

Creating a Default Form

- The default form contains all the fields in the table or set. This is the most basic type of form and is designed completely by the genie, making it very simple to create.
- We will also look at the Alpha Five **Stylesheets** feature.

1. At the *Alpha Five Control Panel Tab,* click the **Forms** tab.

2. Click **New** button.

3. *Data Source*: Choose **Clients_form (Set)**. (Click Next)
   - Sets are identified by a three-box graphic at the left of the listing.
   - A single box means it is a table.

4. Choose **Default Form (contains all of the fields in the Table/Set.**) (Click Next)

5. *Stylesheet*: Choose **Subtle Glass.**
   - Stylesheets will help your designs maintain a consistent appearance. There are several pre-designed stylesheets. Custom stylesheets can also be created.
   - Stylesheets are discussed at length on page 159.

6. Click Next and then Finish.

•The Form Editor opens to a two page tabbed interface. The first page contains all of the fields in the one-to-one links in the set.
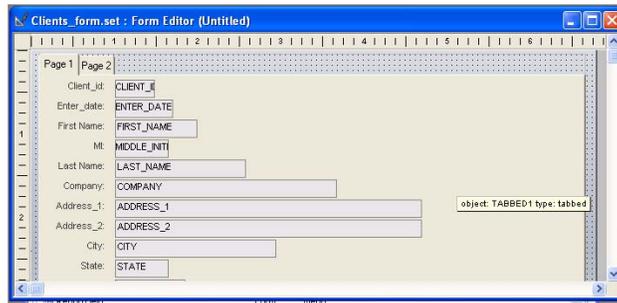
•The second page contains the one-to-many links in the set. These appear as **Embedded Browses**.[*]
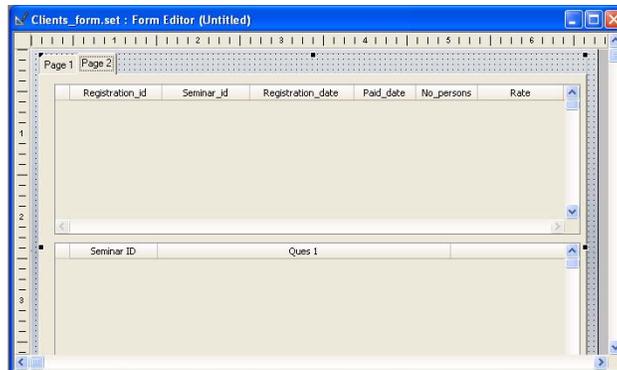
7. Click the Page 2 tab to access the page.

↪ Previous to Version 9, you had to press the tab twice in Design Mode. Tabbed forms created in earlier versions may still require the tab to be clicked twice.

The Default Form may be edited. The positions of the fields can be changed and fields can be removed.

STYLESHEET GALLERY

8. Click the button at the left of the top row of buttons (Form view) to see the results of the stylesheet selection.

   •It takes you from Design Mode to Form View.

9. Examine the background and font colors of the form.

10. Click the top left again. (This time the bubble help says Design Mode.)

11. Choose **Stylesheets > Apply or Create a Stylesheet** from the top menu.

---

*. Embedded browses will be discussed in this chapter. (See "Creating an Embedded Browse" on page 114.)

•The Style Sheet Gallery appears.
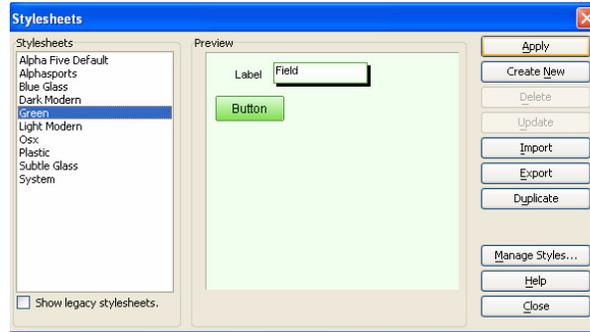
12. Click on **Green**.

   •The checkbox at the bottom will reveal "Legacy Stylesheets." These were created in earlier versions of Alpha Five. Feel free to choose one of these if appeals to you.

13. Click Apply and then Close.

14. Click **Form View**.

   •The form is changed to reflect the new settings.

15. Repeat above to experiment with some other styles, if you like.

   •"Understanding color choices" on page 159 gives instructions on creating custom stylesheets, as well as updating and managing them.

16. Click X in the upper right corner at either Form View or Design Mode. Close the form without saving as follows:

   •Form view: Click **Cancel** at the "Save Form As" dialog box.

   •Design Mode: Click **No** at the "Save changes to current form" dialog.

Creating a Custom Form

   Next, we will create a form that contains specific fields. We will also examine the form design tools.

17. At the *Alpha Five Control Panel Tab,* click the **Forms** tab.

18. Click **New** button.

19. *Data Source*: Choose **Clients_form (Set)**. (Click Next)

20. Choose **Custom Form (contains fields that you select)**. (Click Next)

21. Select the following fields.
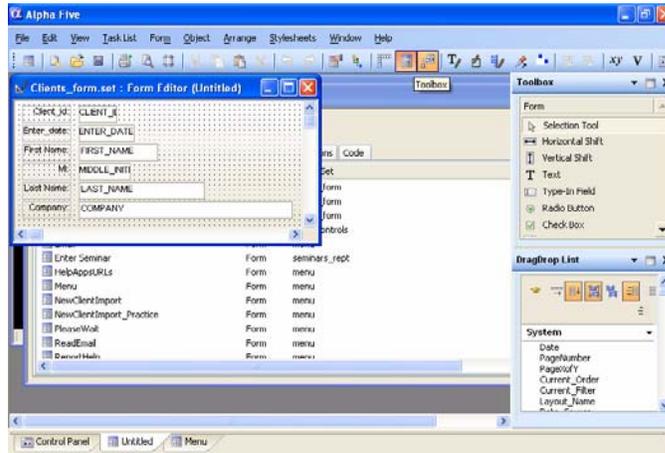
HINT!

   Highlight your first choice and then click the RIGHT ARROW button repeatedly to enter your choices into the Fields on Form window. (In this case, click the button 6 times.)

   •Client ID

   •Enter Date

   •First Name

- •Middle Initial
- •Last Name
- •Company

22. Click Next.

23. *Stylesheet*: **Alpha Five Default** (or any other you choose). (Click Next.)

- • Now we will check out another very useful Alpha Five feature.

Throughout the program are opportunities for you to view the Xbasic code that is created by the Genie. As you advance in learning the program, you can take advantage of this by cutting and pasting the code to your own scripts.

At this time, we will only look at the code. You will learn more about Xbasic in a later chapter.

VIEW XBASIC CODE

24. Click **Show Xbasic.**

- •The Xbasic Form Genie window appears.

NOTE

No doubt, some of you are licking your chops, anxious to get your teeth into writing code. Others have faces that pale at the mention of it. To the first, I say "Be Patient," and to the second "Don't panic!" Alpha Five has been designed with both of you in mind. It can be used with or without the more advanced development vehicles.

25. Close the Genie by clicking the **X** in the upper right corner.

26. Click **Finish**.

•The form opens with only the fields that we indicated.

THE DESIGN TOOLS   In the above illustration, **Bubble Help** appears below the **Toolbox** button (because the cursor is placed on the button). The following may also be seen in the screen shot.

- •The **Top Menu** is the row of text options at the top of the window**.**

- •The **Forms Toolbar** is the row of buttons below the **Top Menu**.

- • The **Toolbox** and **DragDrop List** are at the right. If you do not see them on your screen, click their buttons on the **Forms Toolbar**. The buttons turn orange when they are pressed.

Other tools we will use are:

- •The **Right Click Menu**.

- •The **Hot Keys**: F11 and F12.

27. Hover your cursor over the **Company** field.

- •Bubble help gives you information on the field.

28. Click the **Company** field to give it focus - black boxes surround the field.

29. Right click on the field to see the Right Click Menu.[*]

- • Next, we will examine all the design tools in detail.

Understanding the Top Menu

PLEASE TAKE A MOMENT TO READ THIS

As in most Windows programs, many of the sub-menu items are duplicated elsewhere; we will define only those that are unique. Open the menus as you read along to become familiar with the extensive features.

- • **File** and **Edit** menus contain typical Windows items and their Keyboard Shortcuts.


- **View**

  - **Trace Window.** Alpha Five reports errors here. (See "Understanding the Trace Window" on page 478.)

  - **Script Recorder Window**. Scripts are custom actions that you can create for your application. This handy tool will allow you to create scripts by recording your selections.

  - **Code Editor**. Allows you to create and edit scripts.

  - **OLE Automation Browser:** Allows you to investigate the properties, methods, events and constants of ActiveX controls on your computer. (Advanced)

  - **HTML Editor.** Allows you to create web pages.

  - **Debugger**. A tool for proofing scripts.

  - **Status Bar**. Information bar at the bottom of the screen. Toggles Show / No Show.

  - **Window Bar**. Buttons at the bottom of the screen that access the Control Panel and other open windows. Toggles Show / No Show.

  - **Settings**. Global preferences for the database.

  - The next seven items are duplicated by buttons. See "Understanding the Forms Toolbar" on page 80.

  - **Object and DragDrop List bubble help** can be turned on or off. It appears when you hover the cursor over an object (field, label, etc.) on the form or the DragDrop List.

  - **Structure Information** shows the tables in the set and their relationship.The double bar arrow indicates one-to-many. The single bar arrow means the relationship is one-to-one.

VERY USEFUL IN FORM AND REPORT DESIGN
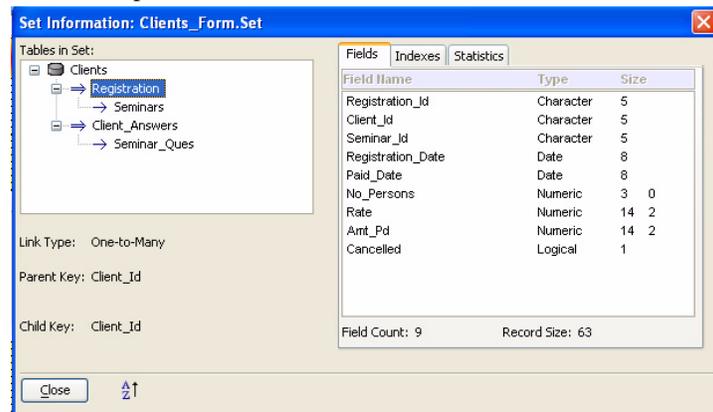
a. Click on **Structure Information**, then click on a Table.

b. Click on the **Fields** tab.

  - The fields in the table are listed with their type and size.

c. Click the A-Z button at the lower left. The fields are shown in alphabetical order, helpful for a large table.

d. Click on the **Indexes** tab to see those created for each table. (See "Understanding Indexes" on page 316.)

e. Click on the **Statistics** tab to see how many records exist and other information about the Table.

f. Click CLOSE.

g. Click VIEW on the Top Menu to reopen the list.

- **Object Explorer** (left) shows all properties of all objects on the form. [*]
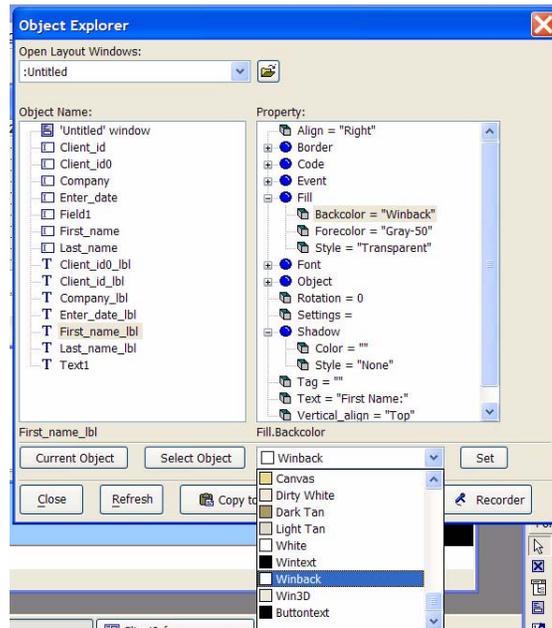
a. Choose **Object Explorer**.

b. Click on first_name_lbl (label).

c. Drill down[†] a couple of categories to see the Properties that can be changed in both Design and Form Views.

d. Changes are made by choosing from the lower window and clicking **Set**.

NOTE   While useful in Form View for quickly modifying an object without returning to Design Mode, there are easier ways to set these properties while designing.

e. Go to **Form view**.

- Move the Object Explorer window if necessary. It will close automatically.

f. Click on an object to activate it.

g. Re-open the **Object Explorer**.

h. Click **Current Object** to quickly go to the object you want to modify.

i. Experiment with options to change font, color, etc.

---

*. **Xbasic scripts:** A primary use for the Object Explorer is to quickly find the name of the object in a form with many fields. This can be useful in Xbasic scripts. For more information, go to A5 Help > User Guide > Form Design > Object Properties > Object Explorer. This entry also contains an interesting discussion on the names of objects. The name of the object may also be found by right clicking on the field in Design Mode and choosing Properties.

†. **Drill down** means to click on the + sign next to the menu item to open the next set of selections.

ROLL- UPS

Certain windows can be rolled up so they can remain handy, yet are out of the way.

  j. Click **Roll-Up**.

  k. Click **Expand Object Explorer**.

  l. Click CLOSE

  m. Return to **Design Mode** and then reopen the **View** list to continue.

• **Code Explorer** lists the Events (see below) that have been designed for the form.

• **Task List**

 • **Toolbox** and **DragDrop List** are duplicated on the Forms Toolbar (see "Using the Toolbox" on page 90 and "Using the DragDrop List" on page 95.).

 • **Interactive** opens a window at the lower left where a line of code may be tested.

 • **Browse Controls:** Allow you to insert buttons and images in both Embedded and Stand Alone Browses. (See "Using Browse Controls" on page 98.)

 • **Restore Default Layout** opens the **DragDrop List** and **Toolbox** at the right side of the screen, one above the other.

• **Form**

 • **Form View** is the same as the left button on the *Toolbar*.

 • **Form Properties** contains settings for the form.

 • **Events** are actions that can be set for the form using Action Scripting or Xbasic.

 • The **Grid** is on the background of the form in *Design Mode*.
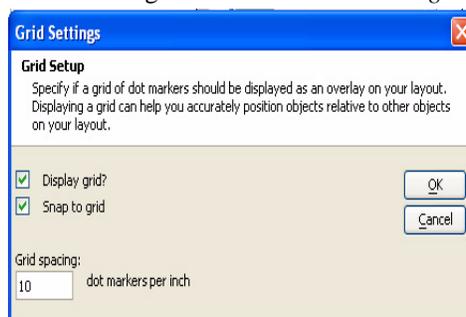
  a. Click **Grid** to open.

  b. *Grid Spacing*: The default is 10 dot markers per inch.

 • *Grid Spacing* affects the distance between fields as they are dragged onto the form. To have the fields touching, accept the default of 10. To space them apart, try a larger grid.[*]

  c. *Snap to Grid* means that objects move to the grid when they are near it. This helps align items. Snap may be turned off.

  d. *Show Grid:* You may elect to show or not show the grid.

  e. Change the *Grid Spacing* to 15.

---

*. See step 4 on page 123.

    f. Click OK to see the change in the grid, then reopen the Form menu.

    g. Reset the spacing so that objects are touching (10 dot markers per inch) because we will use that setting for our exercises. (Click OK)

- •**Calculated fields** and **Variables**[*]. (See *Toolbar* below)
- **Object**
  - •**New** covers the same tasks as the *Toolbox*.
  - •**Properties**: (see *Toolbar, Right Click Menu* and *Hot Keys below.*)
  - •**Events** (see *Toolbar*, *Right Click Menu* and *Hot Keys below.*)
  - •**Pop-up Event Editor** (see *Toolbar* below).
  - •**Size-to-Fit** (see *Right Click Menu below* and *Arrange Toolbar.)*
- **Arrange**
  - •Most of these items are on the *Arrange Toolbar.*
  - •**Set Tab Order** sets the order of movement from field to field by the TAB key.
   - **By Example** (see *Toolbar* below)
    - **By Table:** Fields are listed and may be moved up or down.
- **Stylesheets**
  - •Consistent colors and fonts make an application more pleasing to the end user. See "Stylesheet Gallery" on page 73 and "Understanding color choices" on page 159. (See also *Right Click Menu*)
- **Window**
  - •**Cascade, Tile Horizontally, Tile Vertically, Arrange Icons** are typical Windows choices.
  - •**Open Windows:** Items after the thin gray line are open Alpha Five windows. This is a handy method for moving back and forth between open windows, especially if you like to work with the View > Window Bar closed to allow for larger work space. The form with focus[†] (**Untitled** in example at left) is bolded.
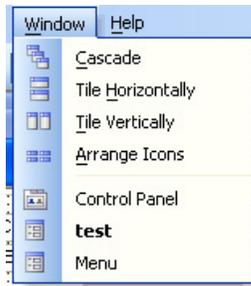
Understanding the Forms Toolbar

In addition to some common Windows buttons, the Toolbar contains very useful form design buttons.

30. With your mouse, hover the cursor over the top row of buttons to become familiar with their descriptions and short cut keys.

- •Reading left to right, the first set of buttons activate:
  - **a.** *Button 1*: **Form View.**

---

*. See "Introducing Variables" on page 298.

†. The active window is said to have "focus."