

*Note:* The alignment options align the group of controls to the control that is active (the sizing handles are white). Referring to Figure 2.13, the upper text box is the active control. To make another selected control the active control, simply click on it.

To set the spacing between controls, use the buttons for horizontal and/or vertical spacing. These buttons enable you to create equal spacing between controls or to increase or decrease the space between controls.

*Note:* If the Layout toolbar is not displaying, select *View / Toolbars / Layout*.

## Designing Your Applications for User Convenience

One of the goals of good programming is to create programs that are easy to use. Your user interface should be clear and consistent. One school of thought says that if users misuse a program, it's the fault of the programmer, not the users. Because most of your users will already know how to operate Windows programs, you should strive to make your programs look and behave like other Windows programs. Some of the ways to accomplish this are to make the controls operate in the standard way, define keyboard access keys, set a default button, and make the Tab key work correctly. You also can define ToolTips, which are those small labels that pop up when the user pauses the mouse pointer over a control.

### Designing the User Interface

The design of the screen should be easy to understand and “comfortable” for the user. The best way to accomplish these goals is to follow industry standards for the color, size, and placement of controls. Once users become accustomed to a screen design, they will expect (and feel more familiar with) applications that follow the same design criteria.

You should design your applications to match other Windows applications. Microsoft has done extensive program testing with users of different ages, genders, nationalities, and disabilities. We should take advantage of this research and follow their guidelines. Take some time to examine the screens and dialog boxes in Microsoft Office as well as those in Visual Studio.

One recommendation about interface design concerns color. You have probably noticed that Windows applications are predominantly gray. A reason for this choice is that many people are color blind. Also, research shows that gray is easiest for the majority of users. Although you may personally prefer brighter colors, your applications will look more professional if you stick with gray, or the system palette the user chooses.

*Note:* By default the BackColor property of forms and controls is set to *Control*, which is a color included in the operating system's palette. If the user changes the system theme or color, your forms and controls will conform to their new settings.

Colors can indicate to the user what is expected. Use a white background for text boxes to indicate that the user should input information. Use a gray background for labels, which the user cannot change. Labels that will display a message should have a border around them; labels that provide text on the screen should have no border (the default).

Group your controls on the form to aid the user. A good practice is to create group boxes to hold related items, especially those controls that require