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Self-Review Exercises

2.1 Fill in the blanks in each of the following statements:
a) The technique of _____ allows you to create GUIs without writing any code.
b) A(n) _____ is a group of one or more projects that collectively form a Visual Basic app.
c) A(n) _____ appears when the mouse pointer hovers over an icon.
d) The _____ window allows you to browse solution files.
e) The properties in the **Properties** window can be sorted _____ or _____.
f) A Form's _____ property specifies the text displayed in the Form's title bar.
g) The _____ contains the controls that you can add to a Form.
h) The _____ displays relevant help articles, based on the current context.
i) The _____ property specifies how text is aligned within a Label's boundaries.

2.2 State whether each of the following is *true* or *false*. If *false*, explain why.
a) [icon] toggles auto-hide for a window.
b) The toolbar icons represent various menu commands.
c) The toolbar contains icons that represent controls you can drag onto a Form.
d) Both Forms and Labels have a title bar.
e) Control properties can be modified only by writing code.
f) PictureBoxes typically display images.
g) Visual Basic files use the file extension .bas.
h) A Form's background color is set using the BackColor property.

Answers to Self-Review Exercises

2.1 a) visual app development. b) solution. c) tool tip. d) **Solution Explorer**. e) alphabetically, categorically. f) Text. g) **Toolbox**. h) context-sensitive help. i) TextAlign.

2.2 a) False. The pin icon ([icon]) toggles auto-hide. b) True. c) False. closes a window. b) True. c) False. The **Toolbox** contains icons that represent such controls. d) False. Forms have a title bar but Labels do not (although they do have Label text). e) False. Control properties can be modified using the **Properties** window. f) True. g) False. Visual Basic files use the file extension .vb. i) True.

Exercises

2.3 Fill in the blanks in each of the following statements:
a) When an ellipsis button is clicked, a(n) _____ is displayed.
b) Using _____ help immediately displays a relevant help article.
c) GUI is an acronym for _____.
d) The _____ property specifies which image a PictureBox displays.
e) The _____ menu contains commands for arranging and displaying windows.

2.4 State whether each of the following is *true* or *false*. If *false*, explain why.
a) You can add a control to a Form by double clicking its control icon in the **Toolbox**.
b) The Form, Label and PictureBox have identical properties.
c) If your machine is connected to the Internet, you can browse websites from the Visual Studio IDE.
d) Visual Basic app developers usually create complex apps without writing any code.
e) Sizing handles are visible during execution.

2.5 Some features that appear throughout Visual Studio perform similar actions in different contexts. Explain and give examples of how the ellipsis buttons, down-arrow buttons and tool tips act in this manner. Why do you think the Visual Studio IDE was designed this way?

2.6 Briefly describe each of the following terms:
a) toolbar
b) menu bar
c) **Toolbox**
d) control
e) Form
f) solution

Note Regarding Exercises 2.7–2.11

In the following exercises, you're asked to create GUIs using controls that we have not yet discussed in this book. These exercises give you practice with visual app development only—the apps do not perform any actions. You place controls from the **Toolbox** on a Form to familiarize yourself with what each control looks like. We have provided step-by-step instructions for you. If you follow these, you should be able to replicate the screen images we provide.

2.7 *(Notepad GUI)* Create the GUI for the notepad as shown in Fig. 2.40.

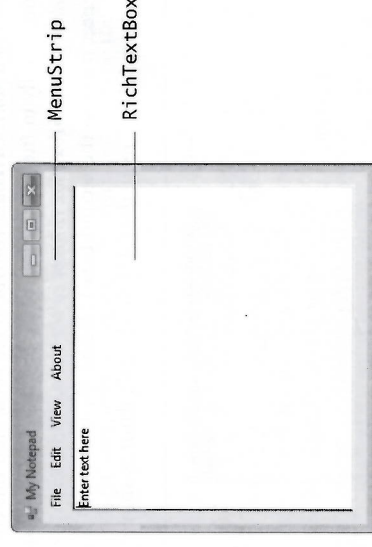**MenuStrip**

RichTextBox

Fig. 2.40 | Notepad GUI.

a) *Manipulating the Form's properties.* Change the Text property of the Form to My Notepad. Change the Font property to 9pt Segoe UI.
b) *Adding a MenuStrip control to the Form.* Add a MenuStrip to the Form. After inserting the MenuStrip, add items by clicking the **Type Here** section, typing a menu name (for example, **File, Edit, View** and **About**) and then pressing *Enter*.
c) *Adding a RichTextBox to the Form.* Drag this control onto the Form. Use the sizing handles to resize and position the RichTextBox as shown in Fig. 2.40. Change the Text property to Enter text here.

2.8 *(Calendar and Appointments GUI)* Create the GUI for the calendar as shown in Fig. 2.41.
a) *Manipulating the Form's properties.* Change the Text property of the Form to My Scheduler. Change the Font property to 9pt Segoe UI. Set the Form's Size property to 275, 400.
b) *Adding Labels to the Form.* Add two Labels to the Form. Both should be of equal size (231, 23; remember to set the AutoSize property to False) and should be centered in