



MCAD/MCSD Training Guide (70-316): Developing and Implementing Windows-based Applications with Visual C# .NET and Visual Studio .NET

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Index of Guided Practice Exercises

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1.1	<p>You are a Windows developer for SpiderWare, Inc. In one of your applications you are required to create a form that enables users to set various options of the application. You want the form to have the following characteristics:</p> <ul style="list-style-type: none">• It should have a thin title bar showing the text Options and a close button. The user should not be able to resize, minimize, or maximize this form.• It should always appear on top of the other forms in the application.• It should be always displayed in the center of the screen. <p>How would you create such a form?</p>	55
1.2	<p>You are a Windows developer for SpiderWare, Inc. In one of your applications, you recently created a form that will be used to set various options of the application (refer to Guided Practice Exercise 1.1). Your application now requires another form such as the one you designed earlier. However, the color of this form should always be the same as the color of the user's desktop.</p> <p>How would you create such a form?</p>	63
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2.1	<p>One of the common features of Windows-based applications is that they show or hide controls to make their user interface effective. One common example is the Find and Replace dialog box in Microsoft Word, where controls showing advance options are initially hidden but can be shown if the user wants.</p> <p>How would you create such an interface, where users can control visibility of controls?</p>	132
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2.3	<p>The Edit main menu is one of the most common features of all Windows-based applications. Typically, the Edit menu contains commands such as Cut, Copy, Paste, Undo, and Redo.</p>	200
3.1	<p>You are a Windows developer for a data analysis company. For one of your applications:</p> <ul style="list-style-type: none"> • You need to create a keyword searching form that asks for a filename and a keyword from the user. • The form should search for the keyword in the file and display the number of lines that contain the keyword in the results group box. • Your form assumes that the entered keyword is a single word. • If it is not a single word, you need to create and throw a custom exception for that case. <p>How would you throw a custom exception to implement custom error messages and custom error handling in your program?</p>	248

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3.2	<p>As a Windows developer for a data analysis company, you recently developed a keyword searching form for your Windows application (refer to Guided Practice Exercise 3.1).</p> <ul style="list-style-type: none"> • The form asks for a filename and a keyword from the user, and then it searches for the keyword in the file and displays the number of lines that contain the keyword in the results group box. • The form assumes that the entered keyword is a single word. • In the solution in Guided Practice Exercise 3.1, if the keyword is not a single word, the form creates and throws a custom exception for that case. • Since you created that solution, you have studied field-level validation techniques and realized that for this scenario, the use of field-level validation provides a much more elegant solution. <p>You now want to modify the keyword searching form. Its basic functionality is still the same as in Guided Practice Exercise 3.1, but you need to incorporate a few changes in the user interface.</p> <ul style="list-style-type: none"> • Initially the keyword text box and the Search button are disabled; you should enable these controls as the user progresses through the application. • If the keyword entered by the user is not a single word, instead of throwing an exception, you need to display the error icon with the keyword text box and set an error message. • The keyword text box should not lose focus unless it has valid data. <p>How would you create such a form?</p>	265
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5.1	<p>In this exercise, you'll be working with employee data from Skylark Spaceways. This exercise helps you review the basic syntax of both simple and complex data binding, as well as the use of the DataGrid control.</p> <ul style="list-style-type: none"> • You need to display this data in two different ways. • First, you should create a form that displays information about one employee at a time, with buttons to scroll through the list. • To save space, the form should show the employee names and positions in TextBox controls. • However, it should also make the home planet information available as a ToolTip on the employee names text box. • There should be a button on this form to open a second form. • The second form should display the entire employee roster in grid form. <p>How would you create such a form?</p>	374
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