

Microsoft® Visual C#® 2010 Step by Step

John Sharp (Content Master)

ISBN: 978-0-7356-2670-6

First printing: April, 2010

To ensure the ongoing accuracy of this book and its companion content, we've reviewed and confirmed the errors listed below. If you find a new error, we hope you'll report it to us on our website: www.microsoftpressstore.com/contact-us/errata.

Page	Location	Description	Date corrected
13	Step 5	<p>Reads: ...this is the leftmost button on the toolbar...</p> <p>Should read: ...this is the button second from the left on the toolbar...</p>	1/20/2012
24	Paragraph before second code block, first sentence	<p>Reads: ...there is also an Application.xaml.cs file.</p> <p>Should read: ...there is also an App.xaml.cs file.</p>	7/29/2011
31	Table at bottom of page, third row, Range column	<p>The exponent in the first part of the range should be negative.</p> <p>Reads: ...10⁴⁵...</p> <p>Should read: ...10⁻⁴⁵...</p>	7/29/2011
37	Third paragraph, sixth sentence	<p>Reads: C# always rounds down in circumstances like this.</p> <p>Should read: C# always rounds towards zero in circumstances like this.</p>	7/29/2011
41	Text at top of page, second sentence	<p>Reads: ...must convert the string to an int...</p> <p>Should read: ...must convert the int to a string...</p>	11/1/2010
61	Step 4, graphic	The labels for the Step Over and Step Into buttons should be reversed.	1/20/2012
67	Second code block	<p>Reads: <code>optMethod(1, 2.5, "World");</code></p> <p>Should read: <code>optMethod(1, 2.5, "World");</code></p>	7/29/2011

Page	Location	Description	Date corrected
71	First code block, third line	Reads: double fee = calculateFee(theDailyRate : 375); Should read: double fee = calculateFee(theDailyRate : 375.0);	11/1/2010
81	Step 7, first line of code	Reads: private int compareClick(object sender, RoutedEventArgs e) Should read: private void compareClick(object sender, RoutedEventArgs e)	7/29/2011
88	Step 8, second paragraph	Reads: If the current character being copied is a >, this code appends the string "<" to the text being output in its place. Should read: If the current character being copied is a <, this code appends the string "<" to the text being output in its place.	11/1/2010
94	Last paragraph, first sentence	Reads: The third statement assigns the Text property of the filename control to the Name property of the src variable. Should read: The third statement assigns the Name property of the src variable to the Text property of the filename control.	7/29/2011
116	Step 9	Reads: ...Window1.xaml.cs... Should read: ...MainWindow.xaml.cs...	11/1/2010
120	Step 5, first sentence	Reads: ...Window1.xaml.cs... Should read: ...MainWindow.xaml.cs...	11/1/2010
122	Step 5, first sentence	Reads: ...Window1.xaml.cs... Should read: ...MainWindow.xaml.cs...	11/1/2010
123	Step 1	Reads: ...Window1.xaml.cs... Should read: ...MainWindow.xaml.cs...	11/1/2010

Page	Location	Description	Date corrected
124	Step 1	Reads: ...Window1.xaml.cs... Should read: ...MainWindow.xaml.cs...	11/1/2010
147	Second paragraph from bottom of page	Reads: This class contains two public fields called Name (initialized to the string "John") and Age (initialized to the integer 42). Should read: This class contains two public fields called Name (initialized to the string "John") and Age (initialized to the integer 44).	11/1/2010
172	First code block, third line	Reads: int arg = 42; Should read: int arg;	7/29/2011
183	Both graphics	The two images should be swapped.	11/1/2010
195	Paragraph before last code block, second sentence	Reads: ...the compiler throws an IndexOutOfRangeException... Should read: ...the runtime throws an IndexOutOfRangeException...	10/12/2012
201	Step 11, code block	The entire code block should be bold.	7/29/2011
209	Code block, 10th and 17th lines	Line 10 reads: // Iterate remaining 10 elements using a for statement Should read: // Iterate remaining 11 elements using a for statement Line 17 reads: // Iterate remaining 10 elements using a foreach statement Should read: // Iterate remaining 11 elements using a foreach statement	7/29/2011
222	Last bulleted item	The following bulleted item is incorrect and should be deleted: The compiler detects and rejects any potentially ambiguous overloads. For example, the following two Min methods are ambiguous; it's not clear which one should be called if you pass two int arguments: // compile-time error public static int Min(params int[] paramList) ... public static int Min(int, params int[] paramList) ...	1/20/2012

Page	Location	Description	Date corrected
241	Second code block, last line	<p>Reads: ...// Aardvark</p> <p>Should read: ...// Mammal</p>	
269	Code block	<p>The two implementations of the ChewGrass methods in the Horse class should not have a semicolon after the closing brace.</p> <p>Reads:</p> <pre>class Horse : Mammal, ILandBound, IGrazable { ... void IGrazable.ChewGrass() { Console.WriteLine("Chewing grass"); // code for chewing grass }; } class Sheep : Mammal, ILandBound, IGrazable { ... void IGrazable.ChewGrass() { Console.WriteLine("Chewing grass"); // same code as horse for chewing grass }; }</pre> <p>Should read:</p> <pre>class Horse : Mammal, ILandBound, IGrazable { ... void IGrazable.ChewGrass() { Console.WriteLine("Chewing grass"); // code for chewing grass } } class Sheep : Mammal, ILandBound, Igrazable { ... void Igrazable.ChewGrass() { Console.WriteLine("Chewing grass"); // same code as horse for chewing grass } }</pre>	1/20/2012

Page	Location	Description	Date corrected
276	Table, second and third rows, and table footnotes	<p>In the Structure column, the entries in the second and third rows should be updated.</p> <p>Both read: no</p> <p>Both should read: yes</p> <p>The following accompanying footnotes should be deleted: 2 A structure implicitly derives from System.Object, which contains methods that the structure can hide. 3 A structure implicitly derives from System.Object, which contains no virtual methods.</p>	11/1/2010
302	"Properties and Field Names: A Warning" sidebar, code block, fourth line	<p>Reads: public int EmployeeID;</p> <p>Should read: public int EmployeeID</p>	10/12/2012
316	Fourth bulleted item, last sentence	<p>Reads: So 204 & 20 is 8 (204 is 11001100, 24 is 00011000, and 8 is 00001000).</p> <p>Should read: So 204 & 24 is 8 (204 is 11001100, 24 is 00011000, and 8 is 00001000).</p>	7/29/2011
316	Last code block and last paragraph	<p>All three occurrences of 1 << 6 should be replaced.</p> <p>Reads: 1 << 6</p> <p>Should read: 1 << 5</p>	11/1/2010
317	First Note reader aid	<p>Reads: ...and the bit at position 6 is the bit six places from the right.</p> <p>Should read: ...and the bit at position 6 is the bit seven places from the right.</p>	7/29/2011

Page	Location	Description	Date corrected
319	First code block	<p>Reads:</p> <pre>int adapted = 62; // 62 has the binary representation 111110 IntBits bits = new IntBits(adapted); bool peek = bits[6]; // retrieve bool at index 6; should be true (1) bits[0] = true; // set the bit at index 0 to true (1) bits[3] = false; // set the bit at index 3 to false (0) // the value in adapted is now 111011, or 59 in decimal</pre> <p>Should read:</p> <pre>int adapted = 126; // 126 has the binary representation 1111110 IntBits bits = new IntBits(adapted); bool peek = bits[6]; // retrieve bool at index 6; should be true (1) bits[0] = true; // set the bit at index 0 to true (1) bits[3] = false; // set the bit at index 3 to false (0) // the value in adapted is now 1110111, or 119 in decimal</pre>	7/29/2011
319	First code block, last line	<p>Reads:</p> <pre>// the value in adapted is now 110111, or 55 in decimal</pre> <p>Should read:</p> <pre>// the value in bits is now 110111, or 55 in decimal</pre>	1/20/2012
341	First code block, sixth line	<p>Reads:</p> <pre>(ref int x, int y) { x++; return x / y; }</pre> <p>Should read:</p> <pre>(ref int x, int y) => { x++; return x / y; ; }</pre>	7/29/2011
342	Sidebar, second sentence	<p>Reads:</p> <pre>...are specified in braces...</pre> <p>Should read:</p> <pre>...are specified in parentheses...</pre>	7/29/2011
350	Step 12, first sentence	<p>Reads:</p> <pre>...from the LocalClickTick event.</pre> <p>Should read:</p> <pre>...from the LocalClockTick event.</pre>	7/29/2011
351	Table, second row, Do this column	<p>Reads:</p> <pre>delegate void myEvent(); class MyClass { public event myDelegate MyEvent; }</pre> <p>Should read:</p> <pre>delegate void myDelegate();</pre> <pre>class MyClass { public event myDelegate MyEvent; }</pre>	7/29/2011
373	Step 6, last sentence	The last sentence in step 6 should be deleted.	7/29/2011

Page	Location	Description	Date corrected
377	Second code block, third line	<p>Reads: <code>int Comparer<object>.Compare(Object x, Object y)</code></p> <p>Should read: <code>int IComparer<Object>.Compare(Object x, Object y)</code></p>	7/29/2011
377	Last code block	<p>Should read: <code>Object x = ...;</code> <code>Object y = ...;</code> <code>ObjectComparer objectComparer = new ObjectComparer();</code> <code>IComparer<object> objectComparator = objectComparer;</code> <code>int result = objectComparator.Compare(x, y);</code></p>	7/29/2011
399	Second code block	<p>Reads: <code>public static IEnumerable<TResult> Select<TSource, TResult>(</code> <code>IEnumerable<TSource> source,</code> <code>Func<TSource, TResult> selector</code> <code>)</code></p> <p>Should read: <code>public static IEnumerable<TResult> Select<TSource, TResult>(</code> <code>this IEnumerable<TSource> source,</code> <code>Func<TSource, TResult> selector</code> <code>)</code></p>	7/29/2011
399	Last paragraph, penultimate sentence	<p>Reads: The method referred to by the selector parameter takes a TSource (in this case, customer) parameter and yields a collection of TResult (in this case, string) objects.</p> <p>Should read: The method referred to by the selector parameter takes a TSource (in this case, customer) parameter, and yields a TResult (in this case, string) object.</p>	7/29/2011
403	Penultimate code block, last line	<p>Reads: <code>Console.WriteLine("Number of companies: {0}",</code> <code>numberOfCompanies);</code></p> <p>Should read: <code>Console.WriteLine("Number of countries: {0}",</code> <code>numberOfCountries);</code></p>	7/29/2011
404	Throughout the page	<p>The term citiesAndCustomers should be updated wherever it is found in text and code.</p> <p>Reads: citiesAndCustomers</p> <p>Should read: companiesAndCustomers</p>	7/29/2011

Page	Location	Description	Date corrected
407	"Querying Data in Tree<ITitem> Objects" section, first paragraph, second sentence	Reads: ...the IEnumerable interface. Should read: ...the generic IEnumerable<T> interface.	7/29/2011
428	Table, last row, Calculation column	Reads: $((a * c + b * d) / (c * c + d * d)) + (b * c - a * d) / (c * c + d * d)i$ Should read: $((a * c + b * d) / (c * c + d * d)) + ((b * c - a * d) / (c * c + d * d))i$	7/29/2011
430	Step 9, code block, sixth and seventh lines	Reads: return new Complex(lhs.Real * rhs.Real + lhs.Imaginary * rhs.Real, lhs.Imaginary * rhs.Imaginary + lhs.Real * rhs.Imaginary); Should read: return new Complex(lhs.Real * rhs.Real - lhs.Imaginary * rhs.Imaginary, lhs.Imaginary * rhs.Real + lhs.Real * rhs.Imaginary);	1/20/2012
431	Screen shot	The screen shot at the top of the page needs to be changed to show the correct results. The result of the multiply operation should be (42 + 40i).	1/20/2012
432	Important reader aid, code block, third line	Reads: ...As... Should read: ...aS...	1/12/2012

Page	Location	Description	Date corrected
435	First code block	<p>Reads:</p> <pre>struct Hour { ... public static implicit operator int(Hour from) { return this.value; } private int value; }</pre> <p>Should read:</p> <pre>struct Hour { ... public static implicit operator int(Hour from) { return from.value; } private int value; }</pre>	7/29/2011
447	First paragraph after graphic, third sentence	<p>Reads:</p> <p>The connectors show that the button is anchored to the top and right edges of the grid.</p> <p>Should read:</p> <p>The connectors show that the button is anchored to the top and left edges of the grid.</p>	7/29/2011
447	Step 6, code block	<p>Reads:</p> <pre><Grid> <Button Content="Button" HorizontalAlignment="Left" Margin="0,84,34,0" Name="button1" Width="75" Height="23" VerticalAlignment="Top"/> </Grid></pre> <p>Should read:</p> <pre><Grid> <Button Content="Button" Height="23" HorizontalAlignment="Left" Margin="374,40,0,0" Name="button1" VerticalAlignment="Top" Width="75" /> </Grid></pre>	7/29/2011

Page	Location	Description	Date corrected
448	Step 10, last sentence	<p>Reads: Also notice that the Margin property now specifies a nonzero value for the left margin.</p> <p>Should read: Also notice that the Margin property now specifies a nonzero value for the right margin.</p>	7/29/2011
469	Step 9, third sentence	<p>Reads: You can obtain the current date from the static Today method of the DateTime class.</p> <p>Should read: You can obtain the current date from the static Today method of the DateTime struct.</p>	1/20/2012
475	Step 4, first sentence	<p>Reads: ...memberFormClosing method:</p> <p>Should read: ...Window_Closing method:</p>	7/29/2011
479	Code block, fourth line	<p>Reads: VerticalAlignment="Top" ></p> <p>Should read: VerticalAlignment="Top" /></p>	7/29/2011
503	Step 6, last sentence	<p>Reads: Notice that the for loop...</p> <p>Should read: Notice that the foreach loop..."</p>	7/29/2011
518	Step 1, code block, second line	<p>Reads: <ticketOrder:Customer x:Key="orderData" /></p> <p>Should read: <ticketOrder:TicketOrder x:Key="orderData" /></p>	7/29/2011
519	Note reader aid	<p>Reads: Make sure you actually delete the contents of the foreName text box rather than just overtyping the text with spaces.</p> <p>Should read: Make sure you actually delete the contents of the customerReference text box rather than just overtyping the text with spaces.</p>	
521	Step 5, first code line	<p>Reads: class Customer</p> <p>Should read: class TicketOrder</p>	7/29/2011

Page	Location	Description	Date corrected
523	Step 2, first paragraph	<p>Reads: 2. Add the PrivilegeLevelConverter class shown next to the end of the file, after the Customer class.</p> <p>Should read: 2. Add the PrivilegeLevelConverter class shown next to the end of the file, after the TicketOrder class.</p>	7/29/2011
525	Step 3, second sentence	<p>Reads: After the list of combo box items...</p> <p>Should read: Before the list of combo box items...</p>	7/29/2011
526	Step 6, paragraph after code block, fourth sentence	<p>Reads: ...the GetBinding method retrieves the object bound to the Text property of the title combo box.</p> <p>Should read: ...the GetBinding method retrieves the object bound to the Text property of the privilegeLevel combo box.</p>	
546	Step 4, second paragraph	<p>Reads: The SQL SELECT statement appears, followed by the orders for this customer, as shown in the following image:</p> <p>Should read: The orders for the customer appear, as shown in the following image:</p>	10/12/2012
554	"Joining Tables and Creating Relationships" section, first paragraph, last sentence	<p>Reads: ...(the SupplierName column...</p> <p>Should read: ...(the SupplierID column...</p>	7/29/2011
558	Last paragraph, fourth sentence	<p>Reads: The example shown here causes the Products property of each Supplier entity to be populated as soon as the data for each Product entity is fetched...</p> <p>Should read: The example shown here causes the Products property of each Supplier entity to be populated as soon as the data for each Supplier entity is fetched...</p>	7/29/2011
587	Code block, second line	<p>In Product,CreateProduct, the comma should be changed to a period.</p> <p>Reads: Product newProduct = Product,CreateProduct(0, "Fried Bread", false);</p> <p>Should read: Product newProduct = Product.CreateProduct(0, "Fried Bread", false);</p>	7/29/2011

Page	Location	Description	Date corrected
622	Steps 2 and 3, first and second code blocks	<p>Code block in step 2 reads: plotXY(data, (int)(-x + (pixelWidth / 2)), (int)(y + (pixelWidth / 2))); plotXY(data, (int)(x + (pixelWidth / 2)), (int)(y + (pixelWidth / 2)));</p> <p>Should read: plotXY(data, (int)(-x + (pixelWidth / 2)), (int)(y + (pixelHeight / 2))); plotXY(data, (int)(x + (pixelWidth / 2)), (int)(y + (pixelHeight / 2)));</p> <p>Code block in step 3 reads: Parallel.Invoke(() => plotXY(data, (int)(-x + (pixelWidth / 2)), (int)(y + (pixelWidth / 2))), () => plotXY(data, (int)(x + (pixelWidth / 2)), (int)(y + (pixelWidth / 2))));</p> <p>Should read: Parallel.Invoke(() => plotXY(data, (int)(-x + (pixelWidth / 2)), (int)(y + (pixelHeight / 2))), () => plotXY(data, (int)(x + (pixelWidth / 2)), (int)(y + (pixelHeight / 2))));</p>	7/29/2011
627	Tip reader aid, code block	<p>Should read: Parallel.Invoke(() => generateGraphData(data, 0, pixelWidth / 8), () => generateGraphData(data, pixelWidth / 8, pixelWidth / 4), () => generateGraphData(data, pixelWidth / 4, pixelWidth * 3 / 8), () => generateGraphData(data, pixelWidth * 3 / 8, pixelWidth / 2));</p>	7/29/2011
633	Code block, last line	<p>Reads: CancellationToken cancellationToken = cancellationToken.Token;</p> <p>Should read: CancellationToken cancellationToken = cancellationTokenSource.Token;</p>	
634	Second code block, second line	<p>Comma should be replaced with a period.</p> <p>Reads: cancellationToken,Register(doAdditionalWork);</p> <p>Should read: cancellationToken.Register(doAdditionalWork);</p>	

Page	Location	Description	Date corrected
693	Note reader aid	<p>Should read:</p> <p>Note The Web services that you build in this chapter require access to the Northwind database. If you have not already done so, you can create this database by following the steps in the section “Creating the Database” in Chapter 25, “Querying Information in a Database.” Additionally, if you have previously been using Visual C# 2010 Express, you cannot use the detached version of the Northwind database for the exercises in this chapter. Instead, you should delete the Northwind.mdf and Northwind_log.ldf files from the C:\Program Files\Microsoft SQL Server\MSSQL10.SQLEXPRESS\MSSQL\DATA folder and then rebuild the Northwind database by running the instwnd.sql script as described in Chapter 25.</p>	7/29/2011
703	Step 2, second paragraph, second sentence	<p>Reads:reads the unit price of the product form the database....</p> <p>Should read:reads the unit price of the product from the database....</p>	7/29/2011
707	Step 5, first sentence	<p>Reads: 5. Add the GetProduct method definition shown next in bold to the IProductsService interface:</p> <p>Should read: 5. Add the GetProduct method definition shown next in bold to the IProductsDetails interface:</p>	7/29/2011