Beginning Visual C#®

A Computer Programming Tutorial 2015 Edition

By Philip Conrod & Lou Tylee

©2015 Kidware Software LLC



KIDWARE SOFTWARE
PO Box 701
Maple Valley, WA 98038

http://www.kidwaresoftware.com http://www.computerscienceforkids.com

This copy of **Beginning Visual C#** is licensed to a single user. Copies of the course are not to be distributed or provided to any other user. Multiple copy licenses are available for educational institutions. Please contact Kidware Software for license information.

Course Description:

Beginning Visual C# is an interactive, self-paced tutorial providing a complete introduction to the Visual C# programming language and environment. The tutorial consists of 10 lessons explaining (in simple, easy-to-follow terms) how to build a Visual C# application. Numerous examples are used to demonstrate every step in the building process. The tutorial also includes detailed computer projects for you to build and try. **Beginning Visual C#** is presented using a combination of course notes (written in Microsoft Word format) and many Visual C# examples and projects.

Course Prerequisites:

To use **Beginning Visual C#**, you should be comfortable working within the Windows environment, knowing how to find files, move windows, resize windows, etc. No programming experience is needed. You will also need the ability to view and print documents saved in Microsoft Word format. This can be accomplished in one of two ways. The first, and easiest, is that you already have Microsoft Word (or a compatible equivalent) on your computer. The second way is that you can download the Microsoft Word Viewer. This is a free Microsoft product that allows viewing and printing Word documents - it is available for download at:

https://www.microsoft.com/en-us/download/details.aspx?id=4

Finally, and most obvious, you need to have Microsoft Visual Studio 2015 Community Edition. This is a separate product that must be obtained. It is available for free download from Microsoft. Follow this link for complete instructions for downloading and installing Visual Studio 2015 Community Edition on your computer:

https://www.visualstudio.com/products/free-developer-offers-vs

Installing Beginning Visual C#:

The course notes and code for **Beginning Visual C#** are included in one or more ZIP files. Use your favorite 'unzipping' application to write all files to your computer. (If you've received the course on CD-ROM, the files are not zipped and no unzipping is needed.) The course is included in the folder entitled **BeginVCS**. This folder contains two other folders: **BVCS Notes** and **BVCS Projects**.

The **BVCS Notes** folder includes all the notes needed for the class. Each file in this folder has a DOC extension and is in Microsoft Word format. The files are:

| StartHere.doc | This file in Word format |
|---------------|---|
| Contents.doc | Course Table of Contents |
| Class1.doc | Class 1. Introducing Visual C# |
| Class2.doc | Class 2. The Visual C# Environment |
| Class3.doc | Class 3. Your First Visual C# Project |
| Class4.doc | Class 4. Project Design, Forms, Command Buttons |
| Class5.doc | Class 5. Labels, Text Boxes, Variables |
| Class6.doc | Class 6. UpDown Controls, Decisions, Random Numbers |
| Class7.doc | Class 7. Icons, Group Boxes, Check Boxes, Radio Buttons |
| Class8.doc | Class 8. Panels, Mouse Events, Colors |
| Class9.doc | Class 9. Picture Boxes, Arrays |
| Class10.doc | Class 10. Timers, Animation, Keyboard Events |
| Projects.doc | Additional Projects |

The **BVCS Projects** folder includes all the Visual C# projects developed during the course.

How To Take the Course:

Beginning Visual C# is a self-paced course. The suggested approach is to do one class a week for ten weeks. Each week's class should require about 3 to 6 hours of your time to grasp the concepts completely. Prior to doing a particular week's work, open the class notes file for that week and print it out. Then, work through the notes at your own pace. Try to do each example as they are encountered in the notes. Work through the projects in Classes 3 through 10 (and the Bonus class). If you need any help, all completed projects are included in the **BVCS Projects** folder.

About The Authors

Philip Conrod holds a BS in Computer Information Systems and a Master's certificate in the Essentials of Business Development from Regis University. Philip has been programming computers since 1978. He has authored, co-authored and edited numerous beginning computer programming books for kids, teens and adults. Philip has also held various Information Technology leadership roles in companies like Sundstrand Aerospace, Safeco Insurance Companies, FamilyLife, Kenworth Truck Company, and PACCAR. Today, Philip serves as the Chief Information Officer for a large manufacturing company based in Seattle, Washington. In his spare time, Philip serves as the President of Kidware Software, LLC. Philip makes his home with his three lovely and "techie" daughters in Maple Valley, Washington.

Lou Tylee holds BS and MS degrees in Mechanical Engineering and a PhD in Electrical Engineering. Lou has been programming computers since 1969 when he took his first Fortran course in college. He has written software to control suspensions for high speed ground vehicles, monitor nuclear power plants, lower noise levels in commercial jetliners, compute takeoff speeds for jetliners, locate and identify air and ground traffic and to let kids count bunnies, learn how to spell and do math problems. He has written several on-line texts teaching Visual Basic, Visual C# and Java to thousands of people. He taught a beginning Visual Basic course for over 15 years at a major university. Currently, Lou works as an engineer at a major Seattle aerospace firm. He is the proud father of five children and proud husband of his special wife. Lou and his family live in Seattle, Washington.