

Preface to the First Edition

C# (pronounced ‘C Sharp’) is a new programming language. It has been developed by Microsoft Corporation as part of their .NET strategy to provide web-based services. C# is a pure object-oriented language which supports the component-based approach for software development. According to Microsoft Chairman Bill Gates, the next revolutionary step in software development will be to make the Internet intelligent. C# as a programming tool fits in very well here. C# promises to help us ride the next wave of computing, namely, “software as a service”.

C# is a simple but powerful language. It combines the concept of C, power of C++, elegance of Java, and productivity of Visual BASIC, besides having new features to support component-based programming. Since Microsoft introduced C# as a *de facto* language of their .NET platform, it supports all the key features of .NET natively. C# is, therefore, ideally suited for component-based distributed Web applications.

This book is written for inexperienced as well as experienced programmers. It does not consider any significant programming knowledge as a prerequisite but assumes that the primary objective of the reader is to develop C# programs. While experienced programmers in C, C++, or Java may find the material in some of the initial chapters simple and familiar the beginners will find them new and useful and therefore, would need to understand and master them carefully.

The book comprehensively covers all major aspects of C# language. Since C# is a part of .NET revolution, it is closely linked to the .NET Framework. The book therefore begins with the necessary introduction to the language and its relationship with .NET strategy and then moves on to explore the object-oriented features such as classes, inheritance, interfaces and polymorphism. It also introduces several new features that are unique to C# such as properties, indexers, delegates, events, and namespaces.

Large number of illustrations and example programs are provided to reinforce learning. Wherever necessary, concepts are explained pictorially to facilitate easy grasping and better understanding. Each chapter includes a set of review questions and programming exercises which can be used by the readers to test their understanding of the concepts discussed in the chapter.

I hope everyone who desires to be a part of the next generation of computing will find this book interesting and useful.

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