

# LEARN .NET WITH PROGRAMMING

## 3-IN-1



Covers .NET using C#, Visual Basic, ASP.NET

DR. S.H. ABBAS



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Registered Office  
310, 3rd Floor, Patidar Tower, Freeganj  
Ujjain (M.P.) 456010  
Phone No. 0734 3554812

Corporate Office  
310, 3rd Floor, Patidar Tower, Freeganj  
Ujjain (M.P.) 456010

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## PREFACE

The present book entitled "Learn .NET with Programming, ( 3-in-1 ) has been designed so as to cover the chapter-wise syllabus of Diploma/O-Level/btech/BCA/MCA of all Indian Universities. The book is dedicated to the description of the latest trends and happening in .NET. This book covers the basic programming fundamentals, professional programming logics and deep concepts of programming in .NET such as the flow control statements in C# and Visual Basic, the basic programming techniques, procedures and procedural programming concepts. This book provides fresh and relevant content to .NET Core in a succinct format that is enjoyable to read. It also delivers concepts, along with the implications, design decisions, and potential pitfalls.

This book is divided into four chapters.

Chapter 1: Which provides an overview of the language and the .NET platform. The first chapters deals with .NET basics.

Chapte 2: Introduces you to the C# language and the .NET platform.

Chapter 3: Describes that Libraries and .Net Advance Features also.

Chapter 4: Covers Windows and Website Development. ASP.NET is the successor to "classic" ASP technology, the world's leading web development tool. ASP.NET solves many of the problems associated with ASP and provides an integrated and consistent approach to software development that builds on the libraries and languages of the .NET platform.

In this book concepts, command and syntax are explained in a simple language with a lot of Example:s. This will enable the students to gain basic as well as in-depth knowledge about the subject. The chapters have been written by various experts in the field. We believe that this book is well suited to self-learning. The concise and sequential nature of the book makes it easier to learn. Although we have made all efforts to make the text error free, yet errors may remain in the text. We shall be thankful to the students and teachers alike if they point these out to us. Any further comments and suggestions for future improvement are welcome and will be most gratefully acknowledged.

By the end of the book, you will have built five solid projects using all the tools and support provided by the .NET Core 2.0 framework.

Authors

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# CHAPTER 1

## INTRODUCTION TO .NET FRAMEWORK

.NET is a software framework which is designed and developed by Microsoft. The first version of the .Net framework was 1.0 which came in the year 2002. In easy words, it is a virtual machine for compiling and executing programs written in different languages like C#, VB.Net etc. It is used to develop Form-based applications, Web-based applications, and Web services. There is a variety of programming languages available on the .Net platform, VB.Net and C# being the most common ones. It is used to build applications for Windows, phone, web, etc. It provides a lot of functionalities and also supports industry standards..NET Framework supports more than 60 programming languages in which 11 programming languages are designed and developed by Microsoft. The remaining Non-Microsoft Languages which are supported by .NET Framework but not designed and developed by Microsoft.

**1.1 Common Language Runtime (CLR):** CLR is the basic and Virtual Machine component of the NET Framework. It is the run-time environment in the .NET Framework that runs the codes and helps in making the development process easier by providing the various services such as

## ABOUT THE AUTHORS



Dr. S. H. Abbas, currently working as an Assistant Professor at the Integral University, Lucknow. He is pursuing his PhD on the topic of "Cancer Detection Using Machine Learning from Biomedical Images" from Christ University, Bangalore. He received his Ph.D. Degree in Computer Science & Engineering from S.V.U University, India, and an M.Tech Degree in CSE from Dr. MGR University, Chennai, India. He authored/ co-authored over 40+ published articles in prestigious journals, Books, Book chapters, and conference papers. Besides, Dr. Abbas authored/edited 10 international book chapters published by recognized publishers such as IEEE, Springer, IGI Global, Elsevier, CRC Press Taylor & Francis. He has also published 04 Books. He has been invited as a resource person for many workshops/FDP. He has organized and chaired many national/international conferences and conducted various workshops. He is editor-in-chief of the International Journal of Multidisciplinary Education Research (IJMER). His 05 patent is published by the Indian Patent

office. Dr. S. H. Abbas has 12 years of teaching experience. His research interest includes Image Processing, Artificial Intelligence, and Machine Learning, CNN.