Introduction

Welcome to *Beginning REALbasic*! REALbasic is a programming language that provides you with everything you need to create software applications that can run on Macintosh, Windows, and Linux. REALbasic is an extremely powerful programming language that is capable of creating world-class software. Yet, at the same time, REAlbasic is easy to learn and makes a perfect programming language for first-time programmers.

Using REALbasic, you can create applications, utility programs, and computer games. If you are a Windows programmer, REALbasic provides you with all the tools you need to write just about any Windows application imaginable: the same goes for Macintosh and Linux programming. By supporting cross-platform application development, REALbasic significantly enhances your ability to distribute your applications. This means you can share your work with more friends and colleagues, and if you are in the business of developing commercial software, REALbasic can help you attract new consumer markets.

Why REALbasic?

Plenty of programming languages are available today that are similar to REALbasic in many aspects. On any given operating system (OS), they may come close to matching REALbasic's core set of features. However, none of the other major modern programming languages based on the Basic programming language support application development on all three major desktop OSs. This makes REALbasic unique and gives REALbasic programmers a competitive advantage over other programmers.

As far as modern programming languages go, REALbasic is easy to learn, yet it is every bit as powerful and full featured as any other modern programming language. So, whether you are a student, a hobbyist, or a professional programmer, REALbasic has something to offer you. REALbasic programmers are supported by a thriving user community and an array of third-party developer support. This means you won't have any trouble finding help or locating companies that do REALbasic software development.

Unlike other programming languages, REALbasic does not require a complex framework to execute. And, unlike Visual Basic .NET, REALbasic applications can run on older versions of Windows, such as Windows 95 or 98, where the .NET Framework is not installed. REALbasic is not restricted to a particular OS. In short, REALbasic is a modern, powerful, cross-platform, object-oriented programming language that is friendly to beginners, yet powerful enough to satisfy the most demanding programmers' needs.

Who Should Read This Book?

The primary purpose of this book is to teach you how to develop applications using REALbasic that can run on Macintosh, Windows, and Linux. Previous programming experience is not required, although it certainly is helpful. This book is also designed to assist Visual Basic

programmers in making the jump over to cross-platform development using REALbasic. It accomplishes this goal by pointing out key differences between the two programming languages where appropriate throughout the book.

At a minimum, you need a good understanding of at least one of the OSs that REALbasic runs on (Macintosh, Windows, or Linux). So, whether you are new to programming or an experienced programmer eager to make the transition to cross-platform application development, this book can help you reach your goal.

What You Need to Begin

REALbasic supports cross-platform application development, meaning you can use it to create applications that can be run on Macintosh, Windows, and Linux. To demonstrate and reinforce REALbasic's cross-platform development capabilities, this book was written using versions of REALbasic that run on all three of these OSs. Therefore, you will see figures and examples of applications running on any combination of these OSs. Except where specifically noted, all the applications you learn how to create in this book run equally well on each OS. Because of differences in how each OS is designed, however, you may notice small differences in the appearance of certain application features. I make every effort to point out where differences occur and to ensure that the examples presented work equally well on Macintosh, Windows, and Linux.

If you do not already have a copy of REALbasic installed on your computer, we have provided Macintosh, Windows, and Linux trial versions on the book's accompanying CD, along with the source code for all the examples featured in the book. Once you have REALbasic installed, you are prompted to enter a license key when you start it up. If you purchased REALbasic online, you receive your license key via e-mail. If you did not purchase REALbasic online, you are prompted to automatically request a demo key via your Internet connection. This enables you to try REALbasic free for ten days. Once this is done, you are ready to go.

Along with this book, we provide everything you need to begin developing world-class software applications for Macintosh, Windows, and Linux!

How This Book Is Organized

Beginning REALbasic is organized into four parts.

Beginning REALbasic is designed to be read sequentially from cover-to-cover. However, more experienced programmers and programmers with previous BASIC programming experience may want to use this book by reading the first few chapters, and then skipping around and selecting the chapters that interest them the most.

Part 1: Introducing REALbasic

This section is made up of two chapters that are designed to provide you with a solid introduction to REALbasic and its integrated development environment.

Part 2: Learning How to Program with Realbasic

This section consists of six chapters, each of which addresses a specific programming topic. These topics include interface development, menu development, storing and retrieving data, conditional logic, loops, and object-oriented programming.
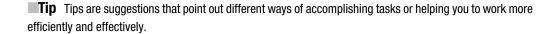
Part 3: Advanced Topics

The Advanced Topics section, which is made up of four chapters, covers processing files, creating and accessing databases, and working with graphics and audio.

Part 4: Appendixes

This section is made up of three appendixes that address porting a Visual Basic application over to REALbasic, the contents of the book's CD-ROM, and different resources available to you as you continue learning about REALbasic.

Conventions Used in This Book

One of the goals I had in writing this book was to make it as clear and easy to understand as possible. Throughout the book, you will find a number of special elements designed to make reading and working with the presented material easier. The following provides a quick review of these special elements.

◼**Tip** Tips are suggestions that point out different ways of accomplishing tasks or helping you to work more efficiently and effectively.

◼**Note** Notes are designed to provide you with additional information about a topic being discussed or to bring additional emphasis to a particular point.

SIDEBAR

Sidebars are designed to provide you with information that, while not necessarily essential to the topic being discussed, is still important and worth learning. Sidebars are also used to identify real-world situations where REALbasic can be applied.