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Mastering

Pascal and Delphi Programming

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Preface

Pascal is one of the most widely used PC-based programming languages. It is also one of the best programming languages to teach good software development techniques. This book provides an introduction to programming with Pascal and extends this to show how Borland Delphi, which uses Pascal, is used to develop Microsoft Windows programs.

After many years of teaching software development to undergraduates I have found that C and C++ suffer from several pitfalls, especially in parameter passing, pointers and the lack of strong data type checking. These areas may provide flexibility for experienced programmers, but for novices they add to the complexity of the program.

I have also been involved with extensive consultancy work and book writing over the years and I have used C, C++ (Borland C++ and Visual C++), HTML/JavaScript, Java, Visual Basic, Turbo Pascal and Borland Delphi. From this, I can say, without doubt, that Delphi is the easiest and most powerful development system I have found. It provides a great deal of flexibility in that it doesn't try to write all the code for the programmer, and basically it provides a framework for the user to add code to.

The best way to learn a programming language is to write real applications. For this reason the book includes many real-life applications. Chapters 13 to 20 cover some practical applications, such as: software interrupts, hardware interrupts, graphics, date and time, system commands, RS-232 and parallel ports.

The book thus covers three main areas:

- Pascal programming (Chapters 1 to 12).
- Pascal applications (Chapters 13 to 20).
- Delphi programming (Chapters 21 to 26).

Further information and source code can be found on the WWW page:

`http://www.eece.napier.ac.uk/~bill\_b/pascal.html`

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