

Contents

1 WHY USE DELPHI?	1
Introduction	1
Is This Book For You?	2
How to Use This Book	3
What Computer You Need to Run Delphi	3
What's New in Delphi 2	4
New Versions	4
Speed	4
Converting from Delphi1 to Delphi 2	5
The Visual Component Library	5
Language and Compiler Changes	6
Menu Changes	6
The Object Respository	6
Database Management	7
Conventions	7
 2 RUNNING DELPHI	 9
Introduction	9
Starting Delphi	9
The Delphi Programming Environment	11
The Form	11
The Component Palette	12
The Object Inspector	13
The Code Editor	14
The SpeedBar	15
 3 THE DISAPPEARING MEMO	 16
Introduction	16
Event Driven Software	16
Creating the User Interface	17
Finding Windows	18
Changing Component Properties	19
Running the Program	21
Writing the Pascal Code	21
 4 HOW PROJECTS ARE ORGANISED	 23
Introduction	23
File Types in Delphi Project	23

Design-time Project Files	23
Compiler Generated Files	24
Project Files.	24
Unit Source Files and Graphical Form Files.	24
Files You Need to Edit	24
The Project Manager	25
The SpeedBar.	25
The Program Manager SpeedMenu	26
The Project Options Dialog.	26
The Forms Option	26
The Application Options.	27
The Compiler Options.	28
The Linker Options.	29
The Directories/Conditional Options	30
5 THE STANDARD COMPONENT PALETTE	31
Introduction	31
The TLabel Component	31
The TEdit Component	32
The TMemo Component.	32
The TButton Component	33
The TCheckBox Component.	33
The TRadioButton Component.	33
The TListBox Component.	34
The TComboBox Component	34
The TScrollBar Component.	35
The TGroupBox Component.	35
The TRadioGroup Component	35
Using the Components.	36
6 COMPUTER BUYERS SURVEY	37
Introduction	37
The Completed Form	37
Using the Grid to Align Components	38
Creating the Form	38
Entering List and Combo Box Data.	39
Run-time Properties.	41
Aligning Components.	41
Unit Changes.	44
7 DIALOG BOXES	45
Introduction	45
The ShowMessage Procedure	45
The MessageDlg Function.	46

Return Values from MessageDlg	48
Creating Input Forms	48
Custom Dialog Boxes	49
8 USING FORMS	50
Introduction	50
Modal and Modeless Forms	50
Form Templates	50
Allowing Forms to Use Each Other	53
Password Input Dialog	54
Finding Forms and Units	55
Saving Forms as Templates	56
Custom Dialog Boxes	57
The OpenFile Dialog Box	58
9 MDI FORMS	61
Introduction	61
The FormStyle Property	61
Creating Parent and Child Forms	62
Auto-Creation of Forms	63
Displaying Child Forms	64
Tiling Child Forms	65
10 MENUS	66
Introduction	66
The Menu Designer	66
Designing Main Menus	66
The Caption and Name Properties	67
Adding, Inserting and Deleting Menu Items	68
Separator Bars, Accelerator and Short-cut Keys	68
Creating Sub Menus	69
Designing Pop-up Menus	70
The Menu Designer Speed Menu	70
Using Menu Templates	71
Creating Menu Templates	72
Connecting Menu Events and Code	73
The Font Dialog Box	75
The TColorDialog Component	76
11 DEBUGGING	78
Introduction	78
Run-time and Logic Errors	78
Using the Debugger	79

Stopping Program Execution	81
Setting Breakpoints	81
Restarting After Breakpoints.....	82
Viewing Breakpoints	82
Using Breakpoints	83
Disabling, Enabling and Deleting Breakpoints	83
Conditional Breakpoints.....	84
Stepping	85
Pausing Programs	85
Using the SpeedBar	86
Viewing Data.....	86
Modifying Variables.....	87
Using the Debugger	88
12 GRAPHICS	89
Introduction	89
Creating Graphics	89
The Graphics Controls	89
Adding Graphics at Design-time	90
Using the Image Editor.....	91
Adding Graphics at Run-time	92
The Pen Property	93
Drawing Lines.....	93
Drawing Shapes.....	94
The Brush Property	95
The Pixel Array	96
Creating a Drawing Application	97
SpeedButton Properties	98
Writing the Event Handlers	98
Rubber Banding.....	100
Using the ColorDialog	101
Using the Clipboard.....	103
13 MOUSE AND KEYBOARD EVENTS	104
Introduction	104
The Mouse Events	104
The Scribble Program.....	105
OnMouseDown and OnMouseUp Events.....	105
The Keyboard Events.....	106
Using the OnKeyUp and OnKeyDown Events	108
14 USING DATABASES.....	109
Introduction	109
What is a Database?.....	109
What Databases Can Delphi Use.....	110

The Database Forms Expert	110
Running the Browser	113
Using Data Controls	114
The DataField Property	115
The DataSource Property	115
The TDataSource Component	116
The TTable Component	116
The TQuery Component	117
Creating a Database Application	120
15 DELPHI COMPONENTS REFERENCE	122
Introduction	122
The Standard Page	122
The Additional Page	126
The Data Access Page	132
The Win 3.1 Page	130
The Data Access Page	132
The Data Controls Page	133
The Dialogs Page	134
The Systems Page	140
The OCX Page	144
The Samples Page	145
The WIN 95 Page	147
16 PASCAL PRIMER	152
Introduction	152
Program Structure	152
Program Layout	152
Data Types	153
Operators	154
Bitwise operators	155
Declaring Variables	157
Declaring Constants	157
Converting Between Types	158
Calling Procedures and Functions	159
Passing Parameters	160
Using Functions	161
Controlling Program Flow	162
If Then Else Statements	162
Case Statements	163
Repeat Statements	164
While Statements	164
For Statements	165
Defining Data Types	165

Enumerated Types	166
Subrange Types	167
Arrays	168
Records	170
17 OBJECT PASCAL	171
Introduction	171
What are Objects?	171
The TForm Object	171
Object Classes	173
Private and Public	174
Using the Is Operator.	175
Object Orientation	175
18 DELPHI AND VISUAL BASIC	176
Introduction	176
The Development Environment.	176
Compilers and Interpreters.	177
Declaring Variables	177
Type Checking.	177
Using Strings.	178
High-Level File Commands.	178
Database Access.	178
Which is Better?.	179
INDEX	181