

Contents

1. INTRODUCTION.....	1
A PROFILE OF THE EXPECTED READER.....	1
A PROFILE OF THIS BOOK'S CONTENTS	2
THE THREE FUNCTIONS OF MANAGEMENT.....	3
2. CREATING A PLAN	4
IDENTIFYING THE ACTIVITIES IN A SOFTWARE PROJECT.....	4
ESTIMATING THE DEVELOPMENT EFFORT REQUIRED FOR EACH PHASE	5
<i>Project Time Scale</i>	6
AN ALTERNATIVE DIVISION OF PROJECT EFFORT	7
<i>The Project Time Scale for a 2-Stage Development</i>	8
TRANSLATING THE EFFORT INTO PRODUCTION	9
<i>Estimating the Number of Lines of Source Code</i>	9
<i>Estimating the Effort to Create the Detailed Design</i>	9
<i>Estimating the Effort to Write the Project Report</i>	10
<i>Estimating the Effort to Test the Project Software</i>	10
IDENTIFYING DELIVERABLES AND MILESTONES	10
REVIEWING YOUR PROJECT PLAN	13
A TOOL FOR MAINTAINING YOUR PROJECT PLAN.....	13
3. GATHERING YOUR PROJECT SKILLS	15
KEEPING A HARDBACK NOTEBOOK	15
COMMUNICATING WITH YOUR SUPERVISOR	16
<i>Provide Regular Progress Reports</i>	16
<i>Organise Project Meetings</i>	16
<i>Maintaining Your Supervisor's Involvement</i>	18
PUBLISHING YOUR PROJECT	18
<i>Where is the Potential Audience?</i>	19
<i>What is the Best Medium to Reach the Audience?</i>	19
<i>What Knowledge Does the Reader Have of the Subject?</i>	20
<i>What Information Do I Want to Communicate?</i>	20
<i>Is There a Standard Format for Delivery?</i>	20
<i>Writing a Conference Paper</i>	21
<i>Writing a Journal Paper</i>	22
<i>Giving an Oral Presentation</i>	22
MAKING THE MOST OF AN ORAL EXAMINATION	24
<i>Preparing for an Oral Examination</i>	25
<i>At the Examination</i>	26
<i>What to do After the Exam</i>	26

COPING WITH STRESS	26
<i>Strategies for Coping with Stress</i>	27
4. COLLATING YOUR RESEARCH DATA BASE	29
TALKING TO OTHER RESEARCHERS	30
<i>Recommended Reading</i>	31
ACCESSING LIBRARY SERVICES	32
<i>Getting Familiar with Your Local Libraries</i>	32
<i>Finding and Reading the Reports of Remote Researchers</i>	33
GATHERING INFORMATION VIA COMPUTER NETWORKS	33
<i>Electronic Mail (Email)</i>	34
<i>World Wide Web (WWW)</i>	37
<i>News Groups</i>	39
<i>WWW Archives</i>	41
5. SELECTING THE TOOLS FOR REPORT PRODUCTION	43
LEARN TO TOUCH-TYPE	43
USING A WORD PROCESSOR TO WRITE YOUR REPORT	43
<i>Outlining as an Aid to Report Production</i>	44
<i>Including a Table of Contents</i>	48
<i>Including an Index</i>	49
<i>Checking for Spelling and Grammatical Errors</i>	50
PRODUCING GRAPHS AND CHARTS	51
USING A DRAWING PACKAGE TO ILLUSTRATE YOUR REPORT	54
INCLUDING EQUATIONS IN YOUR REPORT	55
6. WRITING YOUR REPORT	56
CREATING A STRUCTURE FOR YOUR REPORT	56
<i>Title</i>	56
<i>Acknowledgements</i>	57
<i>Contents</i>	58
<i>Summary</i>	58
<i>Introduction</i>	58
<i>Method</i>	58
<i>Results</i>	59
<i>Conclusions</i>	59
<i>Recommendations</i>	59
<i>References</i>	60
<i>Bibliography</i>	60
<i>Appendix</i>	61
<i>Glossary</i>	62
<i>Index</i>	63
STRATEGIES TO IMPROVE YOUR WRITING	64
<i>Use a Just-Do-It Approach for Short Reports</i>	64
<i>Use a Top-Down Approach for Longer Reports</i>	64

<i>An Approach to Overcoming Writer's Block</i>	66
<i>Helping the Busy Reader</i>	68
7. DEVELOPING THE SOFTWARE	70
CREATING THE STATEMENT OF REQUIREMENTS	70
EXAMPLE STATEMENT OF REQUIREMENTS	71
ANALYSING THE STATEMENT OF REQUIREMENTS AND WRITING THE REQUIREMENTS SPECIFICATION	72
EXAMPLE REQUIREMENTS SPECIFICATION	73
RAPID PROTOTYPE TO CONFIRM THE REQUIREMENTS	74
ALTERNATIVE APPROACHES TO REQUIREMENTS ANALYSIS	75
PRODUCING THE DETAILED DESIGN	76
REVIEWING THE DESIGN	77
CODING	78
<i>Using an Integrated Development Environment</i>	79
VERIFICATION & VALIDATION	80
TESTING INDIVIDUAL SOURCE CODE MODULES	81
TESTING YOUR INTEGRATED SYSTEM	82
USER ACCEPTANCE TESTING	83
REFERENCES	85
BIBLIOGRAPHY	86
APPENDICES	88
AN EXAMPLE STATEMENT OF REQUIREMENTS	88
OUTLINE OF A PROJECT PLAN	90
OUTLINE OF A PROJECT REPORT	92
<i>Gold Price Prediction System - Report Plan (version 1.0)</i>	92
AN EXAMPLE AGENDA FOR A PROJECT MEETING	93
AN EXAMPLE REPORT OF A PROJECT MEETING	94
OUTLINE OF A CURRICULUM VITAE (CV)	96
GLOSSARY	98
INDEX	101