Contents

List of boxes page ix
List of figures xi
List of tables xiv
Foreword xv
Preface xvii
Acknowledgements xix

Introduction 1
1 What is this book about and who should read it? 1
2 What will the information be used for? 2
3 Technology’s broken promise 2
4 Component reuse – the genesis 4
5 Scope of this book 6
6 Foundation of knowledge reuse: three pillars 7
7 How this book is organized 11

1 On the nature of reality and the nature of business 14
1 The nature of knowledge 16
2 Modeling the real world 20
3 Metaworld of information 21
4 Basic metaobject inventory 39
5 Metaobjects and the natural repository of knowledge 39
6 The architecture of knowledge and the scope of the metamodel in this book 43

2 The object at the root of it all 51
1 Object class versus object instance 52
2 The state of an object 55
3 Inheriting behavior – subtypes, supertypes, and partitioning of objects 79
4 The problem of perspective 94
5 Repositories of meaning 103
<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3</strong> The nature of attributes</td>
</tr>
<tr>
<td>1 The structure of attributes and states</td>
</tr>
<tr>
<td>2 Attribute constraints</td>
</tr>
<tr>
<td>3 Naming and expressing attributes</td>
</tr>
<tr>
<td><strong>4</strong> Domains and their expression</td>
</tr>
<tr>
<td>1 The meaning and architecture of format</td>
</tr>
<tr>
<td>2 The meaning of units of measure</td>
</tr>
<tr>
<td>3 Domains of meaning and the metamodel of object</td>
</tr>
<tr>
<td>4 Storing abstract meaning</td>
</tr>
<tr>
<td>Appendix: Key shared components of knowledge</td>
</tr>
</tbody>
</table>

_Bibliography_  
_Index_  

© in this web service Cambridge University Press  
www.cambridge.org