

Preface	2
Audience	3
Using This Book.....	3
Software and Versions.....	4
Conventions Used in This Book.....	4
Comments and Questions	4
About the Philosophers	5
Acknowledgments.....	7
Feedback for the Author	7
Part I: The JDBC API.....	7
Chapter 1. Java in the Enterprise.....	7
The Enterprise	8
Java as a Tool for Enterprise Development.....	10
The Database	12
Database Programming with Java	14
Chapter 2. Relational Databases and SQL	16
What Is a Relational Database?	16
Databases and Database Engines.....	17
An Introduction to SQL	19
A Note on SQL Versions	22
Chapter 3. Introduction to JDBC	22
What Is JDBC?	23
Connecting to the Database	29
Connection Troubles	30
Basic Database Access	33
SQL Datatypes and Java Datatypes.....	37
Scrollable Result Sets.....	38
The JDBC Support Classes	42
A Database Servlet	43
Chapter 4. Advanced JDBC	47
Prepared SQL.....	47
What Kind of Statement to Use?	50
Batch Processing	51
Updatable Result Sets	54
Advanced Datatypes.....	58
Meta-Data	63

Chapter 5. The JDBC Optional Package	74
Data Sources	74
Connection Pooling.....	76
Rowsets	77
Distributed Transactions	79
Part II: Applied JDBC.....	81
Chapter 6. Other Enterprise APIs	81
Java Naming and Directory Interface	81
Remote Method Invocation.....	83
Object Serialization	89
Enterprise JavaBeans	90
Chapter 7. Distributed Application Architecture.....	97
Architecture	97
Design Patterns	106
The Banking Application	110
Chapter 8. Distributed Component Models	111
Kinds of Distributed Components	112
Security	119
Transactions	125
Lookups and Searches	130
Entity Relationships	131
Chapter 9. Persistence	139
Database Transactions	139
Mementos and Delegates	147
JDBC Persistence.....	148
Searches	150
Chapter 10. The User Interface	156
Swing at a Glance	157
Models for Database Applications	159
Distributed Listeners	166
Worker Threads	167
Part III: Reference	169
Chapter 11. JDBC Reference	169
Reference	170
Chapter 12. The JDBC Optional Package Reference.....	227
Reference	228