

***** Volume 1 *****

Preface and Foreword

Acknowledgements

Chapter 1. Overview of UML

Chapter 2. Description Software Patterns

Chapter 3. The Software Life Cycle

Design

Chapter 4. Fundamental Patterns

Delegation

++Aggregation

Class Decoupling

Proxy

Immutable

Semantic Interface

Chapter 5. Creational Patterns

Abstract Factory

Builder

Factory Method

Prototype

Singleton

Chapter 6. Partitioning Patterns

Layers

Filters

++Model-View-Controller

Recursive Composition/Composite

++Separate Transaction Processing from Archival

Chapter 7. Structural Patterns

Adapter

Iterator

++Blackboard

Bridge

++Dynamic Linkage

++Broker

++Object Broker

++Database Broker

Cache Management

Descriptor

Facade

Flyweight

++Micro-kernel

++Pipes

Virtual Proxy

Persistent Object

++Reflection

++View Handler

++Representing Relational Database Tables as Objects

++Representing Objects as Relational Database Tables
Wrapper/Decorator

Chapter 8. Behavioral Patterns

Chain of Responsibility

++Repeater

Command

Interpreter

Mediator

Memento

Observer

State

Strategy

Template Method

Visitor

++Access Proxy

Chapter 9. Temporal Patterns

Single Threaded Execution

Exclusive Data Access

Guarded Methods/ Optimistic Concurrency

++Master-Slave

Rendezvous

Balking

Consumer-Producer

++Explicit Synchronization

Asynchronous Invocation

++Thread Safe Iterator

++Two-Phase Termination

++Read/Write locks

++Double Buffering

Chapter 10. Presentation Patterns

++Externalize Resources

++Delegated Validation

++Limited Selection Size

++Hyperlink

++Shared Area

++Window per Task

Chapter 11. Distributed Computing Patterns

++Object Identifier

++Data Lock

++Optimistic Concurrency

++Replication

++Publish-Subscribe

++Registry

++Naming Service

++Client-Dispatcher-Server

++Translator

++Remote Proxy
++Environment Worker

Chapter 12. Business Patterns

++Trader
++ Exception Report

***** Volume 2 *****

Section I. Overview of Software Patterns and the Software Life Cycle

Chapter 1. Overview of UML
Chapter 2. Description Software Patterns
Chapter 3. The Software Life Cycle

Business Case
Requirements
Analysis
Coding
Testing
Deployment

Section II. Analysis Patterns

Chapter 4. GRASP Patterns

Controller
Creator
Expert
High Cohesion
Law of Demeter
Lifelike
Low Coupling
++Plug-In
Polymorphism
Pure Fabrication
++Agent

Chapter 5. Transaction Patterns

++ACID Transaction
Business Transactions and Accounts
Composite Transaction
Adjustment Transactions
Audit Trail
++Two phase commit

Section III. Coding Patterns

Chapter 6. Organizational Patterns

Assertion Testing
Accessor Method
Behavior Extension
++Busy Waiting
Call Back
Case
Classification Table

Conversion Table
++Inner Classes
Instance Counting
Maximize Privacy
Marshaling/Unmarshaling
Meta Constructor
Security Manager
Socket/ServerSocket
++Symbolic Name

Chapter 7. Optimization Patterns

Hashed Adaptor Objects
Promise
Lazy Materialization
Copy on Write Proxy
++Loop Unwinding
++Duff's Device
Lookup Table

Section IV. Testing Patterns

Chapter 8. Test Patterns

Acceptance Testing
Black Box testing
Integration
Layer Testing
System Testing
++Test Bed
Unit Testing
White Box Testing