

Set C: Design

Core Tutorials

1. Use Case Based Design

Drive System Design with Use Cases

2. Design Modeling

Model the System Implementation using UML

3. Component Implementation

Focus on the Interfaces, Classes, and Behavior for a Component

4. Levelization (Managing Dependencies)

Provide Hierarchical Structure and Loose Coupling between Components

Advanced Topics

5. Development Patterns

Review of Common Design Patterns

6. Systematic and Incremental Unit Testing

Evaluating the Design

7. J2EE/.NET Distributed Architectures

Principles of Building Distributed Systems with Java and J2EE, and/or .NET

8. Java Services and APIs

Java Supported Features for Development

9. .NET Services and APIs

.NET Supported Features for Development

10. Data Modeling

Capturing System Data and Data Relationships

11. Database Design

Review Normalization Rules, Schema Definitions, Transaction and Concurrency

12. XML/XSL Overview

Review of XML and XSL Based Data Representation

