برنامه نویسی شئ گرا با جاوا

1 Classes and Objects

A Simple Class

- Class Members
- Class Modifiers

Fields

- Field Initialization
- Static Fields
- final Fields

Access Control

Creating Objects

Construction and Initialization

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- Static Methods
- Method Invocations
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this

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The main Method

Native Methods

2 Extending Classes

An Extended Class

Constructors in Extended Classes

Constructor Order Dependencies

Inheriting and Redefining Members

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Accessibility and Overriding

Hiding Static Members

The super Keyword

Type Compatibility and Conversion

Compatibility

Explicit Type Casting

Testing for Type

What protected Really Means

Marking Methods and Classes final

Abstract Classes and Methods

The Object Class

Cloning Objects

- Strategies for Cloning
- Correct Cloning
- Shallow versus Deep Cloning

Extending Classes: How and When

Designing a Class to Be Extended

- Designing an Extensible Framework

Single Inheritance versus Multiple Inheritance

3 Working with inheritance

What is inheritance?

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- Declaring new methods
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Understanding extension methods

4 Interfaces

A Simple Interface Example

Interface Declarations

- Interface Constants
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- Interface Modifiers

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- Inheriting and Hiding Constants
- Inheriting, Overriding, and Overloading Methods

Working with Interfaces

- Implementing Interfaces
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Marker Interfaces

When to Use Interfaces

5 Nested Classes and Interfaces

Static Nested Types

- Static Nested Classes
- Nested Interfaces

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Inheriting Nested Types

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6 Enumeration Types

A Simple Enum Example

Enum Declarations

Enum Modifiers

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Construction

Constant Specific Behavior

java.lang.Enum

To Enum or Not