

# Advanced Groovy

Tips & Tricks

# Contact Info

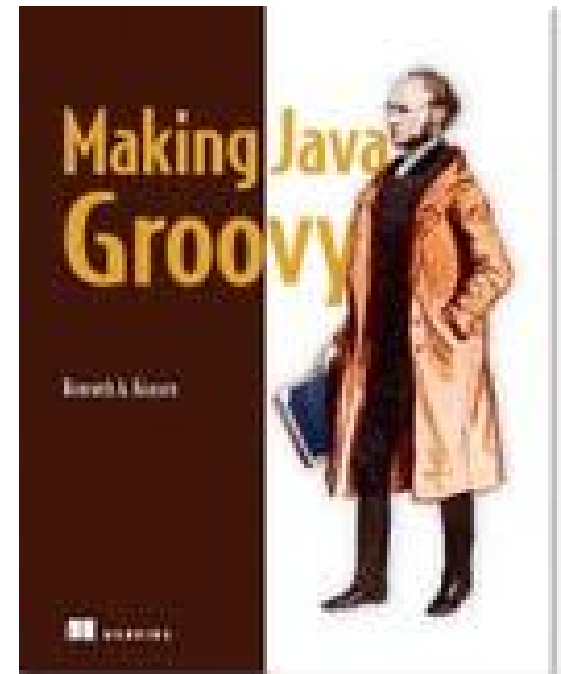
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**Making Java Groovy**

<http://manning.com/kousen>



# Coerced Closures

Use closures to implement interfaces

Replaces anonymous inner classes

# Coerced Closures

Examples:

Filename Filter

ICNDB

# Coerced Closures

Use single closure

or

Map of method names to closures

# Coerced Closures

Example

Utility Methods

(also shows GroovyTestCase additions)

# Runtime metaprogramming

Use the metaClass

Make Java classes easier to use

Used in Grails dynamic finders

# Runtime metaprogramming

Examples:

Complex

Additional Logging methods



# Operator Overloading

Adding operator methods  
plus, minus, leftShift  
equals

# Operator Overloading

Example:

Human resources

# Creating a Range

Implement Comparable interface

Override

next

previous

# Creating a Range

Example:

Train Stations

# Groovy JDK methods

Functional methods  
collect and inject

Collection

find, findAll

combinations

eachPermutation(Closure)

max, min, sum, count, join, ...

# Groovy JDK methods

Examples:

- sorting strings

- summing numbers

- permutations

- combinations

- ... others also fall in this category ...

# Groovy JDK Methods

`"...url...".toURL().text`

Use `groovy.sql.Sql`  
call stored procedures

Easy `java.io.File` processing

# Groovy API

## Examples

- summing numbers, revisited

- calling a stored procedure

- basic authentication

- (also shows multiple returns)



# AST transformations

@Immutable

@Delegate

@Singleton

@TupleConstructor

@EqualsAndHashCode

@ToString

@Canonical

# Thanks for coming!

Source code located in GitHub at:

<https://github.com/kousen/AdvancedGroovy.git>

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