Creating Custom Exceptions

Jim Wilson

Mobile Solutions Developer & Architect

@hedgehogjim | jwhh.com

Overview

Throwing an exception

Creating a new exception instance

Defining a custom exception

Chaining exceptions

Dealing with Errors

Responding to Issues That Occur

Catch exceptions

Indicating an Issue Has Occurred

Throw exceptions

Creating an Exception

Create with new Operator

Remember exceptions are classes

Include Information with Constructor

Normally include a string description

Some allow including additional detail

Custom Exceptions

Can Create Custom Exceptions

Define custom exception class

Inherit from Exception

Normally directly inherit

Provides most required features

Class Members to Add

Appropriate constructors

Other members if needed

Chaining Exceptions

Exceptions Can Be Chained

Allows one exception to wrap another

Why Chain Exceptions

Throw more meaningful exception
While preserving underlying exception

Chaining Exceptions

How to Chain Exceptions

Can use inherited initCause method
More commonly include constructor that accepts original exception

Accessing Chained Exception

Use inherited getCause method

Summary

Throw exceptions to indicate error

- Use throw statement
- Must create exception instance first

Summary

Can define custom exception types

- Must inherit from Exception class

Add appropriate class members

- Normally add one or more constructors
- Can add other members if needed

Summary

Exceptions can be chained

- Throw more meaningful exception
- Allows preserving original exception

Chaining exceptions

- Normally passed to constructor
- Access with getCause method