# skillsoft global knowledge™

## Design Patterns in Java

**Cursusduur: 3 Dagen     Cursuscode: DESPAT     Trainingsmethode: Virtual Learning**

### Beschrijving:

### Design Patterns in Java Course Overview

This course aims to teach what design patterns are and how they can help to design well-structured,reusable object-oriented software.
It is acknowledged that designing reusable object-oriented software is hard. It involves finding pertinent objects,factoring them into classes at the right granularity,and then defining class interfaces and inheritance hierarchies and establishing appropriate relationships among them. This seems almost impossible and yet experienced object-oriented developers somehow manage to produce good designs. New developers,however,are often overwhelmed by the options available and may be tempted to fall back on non-object-oriented techniques.
This course is about transferring knowledge of design patterns which are the result of years of experience. This experience is captured in solutions consisting of recurring patterns of classes and communicating objects that solve specific problems in a way that is flexible,elegant and ultimately reusable. By learning these design patterns,developers will be able to apply them immediately without having to rediscover or reinvent them.
This course focuses on the design patterns listed in the original 'Gang of Four' book and delegates will learn to use them in real-life scenarios with hands-on practical exercises.
Note that we do not cover every pattern listed in detail,rather we select a subset in each category for detailed examination and have the delegates implement said patterns in Java code.
Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Virtueel en Klassikaal™

Virtueel en Klassikaal™ is een eenvoudig leerconcept en biedt een flexibele oplossing voor het volgen van een klassikale training. Met Virtueel en Klassikaal™ kunt u zelf beslissen of u een klassikale training virtueel (vanuit huis of kantoor )of fysiek op locatie wilt volgen. De keuze is aan u! Cursisten die virtueel deelnemen aan de training ontvangen voor aanvang van de training alle benodigde informatie om de training te kunnen volgen.

### Doelgroep:

### Who will the Course Benefit?

This Design Patterns in Java course is aimed at developers,designers,architects,and anyone else involved in the design and production of well-structured,reusable software written in Java or any other object-oriented language.

### Doelstelling:

■ Course Objectives

■ This course aims to provide the delegate with an understanding of what a design pattern is,how they're classified,and why they're important. It also seeks to  provide the delegate with the skills necessary to apply commonly used patterns as and when it is appropriate to do so.

### Vereiste kennis en vaardigheden:

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Delegates attending this course should be familiar with object-oriented principles and will be able to write simple applications in Java or an equivalent  object-oriented language. This knowledge can be obtained by attendance on the pre-requisite Java Programming 1 / Java Developer or equivalent level course.

## Vervolgcursussen:

Further Learning

- Developing Applications with Java EE
- Core Spring (4 day)

## Cursusinhoud:

Design Patterns in Java Training Course
Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: INTRODUCTION

- What is a Design Pattern?
- Why use Design Patterns?
- Categories of Design Pattern
- The Gang of Four Design Pattern Catalogue

Session 2: CREATIONAL PATTERNS

- Singleton
- Factory Method
- Abstract Factory
- Builder
- Prototype
- Object Pool  Design Patterns in Java Training Course  Course Contents - DAY 2

Session 3: STRUCTURAL PATTERNS

- Adapter
- Composite
- Proxy
- Flyweight
- Facade
- Bridge
- Decorator

Session 4: BEHAVIOURAL PATTERNS

- Template Method
- Strategy
- Observer
- Mediator  Design Patterns in Java Training Course  Course Contents - DAY 3

Session 4: BEHAVIOURAL PATTERNS (CONT.)

- State
- Command
- Chain of Responsibility
- Iterator
- Interpreter
- Memento
- Visitor
- Null Object

Session 5: ANTI-PATTERNS

- God Class
- Dead Code
- Functional Decomposition
- Poltergeists
- Boat Anchor
- Old Yeller
- Dead End
- Spaghetti Code
- Clipboard Coding
- And more!

## Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk  030 - 60 89 444

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