

C++ Training: Exploring Refactoring & Design Patterns (CPPDPAT, 4 jours)

Description

The course Exploring Refactoring & Design Patterns (C++ Training) demystifies design patterns with C++. The training includes the design patterns originally defined by the Gang of Four (GOF) and the fundamentals of C++ object orientated programming, Refactoring & UML. The course covers creational, behavioral & structural design patterns in C++ and provides many practical exercises that demonstrate applicability.

Tarifs

- Tarification: \$3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Object Oriented Design with UML

The Happy Video Store

Parameterized Classes and Patterns

Sequence Diagrams

Statechart Diagrams

Activity Diagrams

Proper Coding Practices

What Makes Good Software

Going From Analysis To Design

Object Re-use

Applying Design Patterns

UML Class Notation

Generalization

Aggregation and Composition

Collection Classes

The Refactoring Process

The Refactoring Process

Data Clumps

Primitive Obsession

Switch Statements

Lazy Class

Speculative Generality

Temporary Field

Message Chains

Middle Man

Inappropriate Intimacy

Alternative Classes with Different Interfaces

Code Smells Overview

Data Classes

Refused Bequest

Comments

Refactoring the Shapes Application

Duplicated Code

- Long Method
- Large Class
- Long Parameter List
- Divergent Change
- Shotgun Surgery
- Feature Envy

Creational Design Patterns

- About Object Creation
- Abstract Factory
- Singleton
- Client Code Review
- Builder
- Prototype
- Refactoring Considerations

Structural Patterns

- About Object Structure
- Adapter
- Bridge
- Composite
- Façade
- Other Patterns
- Refactoring Considerations

Behavioural Patterns

- About Object Behaviour
- Command
- Observer
- Strategy
- Visitor
- Other Patterns
- Refactoring Considerations