

.NET Design Patterns

Course Summary Table

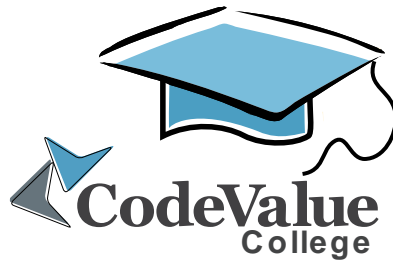
Duration:	4 Days
Target Audience:	Experienced C# developers who want to be exposed to design patterns and their possible implementation with .NET and C#
Objectives:	Understand what design patterns are, the most useful design patterns, how to use them and when. Implement design patterns with C#, while taking advantage of .NET specific features.
Pre Requisites:	Experienced C# developers (at least C# 2.0). Must be well versed in generics, inheritance, polymorphism and interfaces. Basic UML acquaintance is a plus.

Abstract

Design patterns are reusable solutions to common software problems encountered on while programming. This course explores various patterns, mostly from the classic “Gang of Four” (GoF) book and their implementation, while taking advantage of various features of the C# language and the .NET platform. .NET specific patterns are discussed as well.

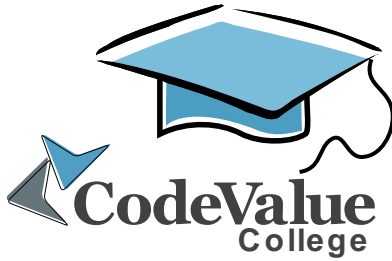
A brief overview of the Unified Modeling Language (UML) is discussed, to become the basis of patterns description.

The course provides labs exercises so the students can leverage the theoretical material in a more practical way.



Syllabus

- ▼ Module 1: Introduction to patterns
 - ▼ Object Oriented Design Overview
 - ▼ OO Design Challenges
 - ▼ The “SOLID” Principles
 - ▼ What are design patterns?
 - ▼ What is UML?
 - ▼ Basic UML notation
 - ▼ UML Class and Sequence diagrams
- ▼ Module 2: Creational patterns
 - ▼ Abstract Factory
 - ▼ Builder
 - ▼ Factory Method
 - ▼ Prototype
 - ▼ Singleton
- ▼ Module 3: Structural Patterns
 - ▼ Adapter
 - ▼ Bridge
 - ▼ Composite
 - ▼ Decorator
 - ▼ Façade
 - ▼ Flyweight
 - ▼ Proxy
- ▼ Module 4: Behavioral Patterns
 - ▼ Chain of Responsibility
 - ▼ Command
 - ▼ Interpreter
 - ▼ Iterator
 - ▼ Mediator
 - ▼ Memento
 - ▼ Observer
 - ▼ State
 - ▼ Strategy
 - ▼ Template Method
 - ▼ Visitor
- ▼ Module 5: .NET Specific Patterns
 - ▼ Deterministic Finalization
 - ▼ Custom Attributes
 - ▼ Iterators
 - ▼ Publisher / Subscriber
 - ▼ Concurrency Patterns



Course Compatibility Questionnaire

Please answer the following questions as accurately as possible:

Name: _____ Email: _____
Company: _____ Phone: _____

Language / Technology / Platform	Years of Experience						Level of Familiarity				
C#	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
UML	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5
Other _____	0-1	1-2	2-3	3-4	4-5	5+	1	2	3	4	5

What is the operating system that as a user you mostly use?

What are your expectations from the course?

Thanks!

<http://college.codevalue.net/>