

"Design Patterns in C#"

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Presentation

- ▶ Name
- ▶ Company affiliation
- ▶ Area of expertise
- ▶ C# experience
- ▶ Expectations for the course



Prerequisites

- ▶ Working knowledge of newest C# and Visual Studio
 - Object-oriented development
 - Classes
 - Inheritance
 - Virtual methods
 - Extensions
 - Interfaces
 - Delegates
 - ...

- ▶ An interest in becoming a better C# developer. ☺



"Design Patterns in C#" – Day 1

- ▶ Introduction
 - What Are Design Patterns?
- ▶ Part I: Creational Patterns
 - Abstract Factory
 - Builder
 - Factory Method
 - Prototype
 - Singleton
- ▶ Part II: Structural Patterns
 - Adapter
 - Bridge



"Design Patterns in C#" – Day 2

▶ Part II: Structural Patterns (Cont'd)

- Composite
- Decorator
- Façade
- Flyweight
- Proxy

▶ Part III: Behavioral Patterns

- Iterator
- Chain of Responsibility



"Design Patterns in C#" – Day 3

- ▶ Introduction to Day 3+4

- ▶ Part III: Behavioral Patterns (Cont'd)
 - Template Method
 - Strategy
 - Memento
 - Command
 - State
 - Interpreter
 - Visitor
 - Observer
 - Mediator



"Design Patterns in C#" – Day 4

- ▶ Part VI: Enterprise Patterns
 - Repository (with Entity Framework)
 - Null Object (with Unit Testing)
 - Dispose
- ▶ Part VII: Workshop Exercise
- ▶ Conclusion



Course Material

- ▶ Book
 - Erich Gamma, Richard Helm, Ralph Johnson, and John Vlissides: *"Design Patterns: Elements of Reusable Object-Oriented Software"*
- ▶ Slides
- ▶ Examples for every module
- ▶ Labs (and lab solutions) for every module
- ▶ A larger project on Day 4
- ▶ Course evaluation after Day 4



Practical Information

- ▶ Each course day will be from 9.00 to 16.00
- ▶ Breaks
- ▶ Toilets
- ▶ Food and beverages
- ▶ Phones and devices
- ▶ Smoking

- ▶ Any questions...?



