PROSA Online Workshop:

"Design Patterns in C#"

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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
 - Singleton

If Time Permits:

- Factory Method
- Prototype



"Design Patterns in C#" – Day 2

- ▶ Part II: Structural Patterns
 - Adapter
 - Composite
 - Decorator
 - Proxy

If Time Permits:

Façade



"Design Patterns in C#" – Day 3

- ▶ Part III: Behavioral Patterns
 - Strategy
 - Template Method
 - Visitor
 - Mediator

If Time Permits:

Iterator



Workshop Material

- Slides
- Examples for every module
- ▶ Labs (and lab solutions) for selected design patterns
- Loosely based on book (not included in course!)
 - Erich Gamma, Richard Helm, Ralph Johnson, and John Vlissides: "Design Patterns: Elements of Reusable Object-Oriented Software"



Practical Information

- Workshop I: "Creational Patterns"
 Thursday September 28, 2023, 17.00 20.00
- Workshop II: "Structural Patterns"
 Thursday October 5, 2023, 17.00 20.00
- Workshop III: "Behavioural Patterns"
 Thursday October 12, 2023, 17.00 20.00



