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
 - Visitor
 - Template Method
 - Strategy
 - 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 May 23, 2024, 17.00 20.00
- Workshop II: "Structural Patterns"
 Thursday May 30, 2024, 17.00 20.00
- ► Workshop III: "Behavioural Patterns" Thursday June 6, 2024, 17.00 – 20.00



Full Course

- "Gang of Four Design Patterns in C#"
 - All 23 design patterns from Gang of Four book
 - 2 + 2 days
- https://www.teknologisk.dk/kurser/gang-of-fourdesign-patterns-in-c-sharp/k89076
- Next courses:
 - September, 2024
 - October, 2024
 - November, 2024



