PROSA Online Workshop:

"Design Patterns in C#"

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TEKNOLOGISK INSTITUT

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 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

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-four-design-patterns-in-c-sharp/k89076

▸ Next course starts: October 30th, 2023

WINCUBATE

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