

"SOLID Programming in C#"

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TEKNOLOGISK
INSTITUT

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
 - Interfaces
 - Delegates
 - ...
 - Some knowledge of Design Patterns might be helpful (but is not required)
- ▶ An interest in producing maintainable C# code ☺

"SOLID Programming in C#" – Day 1

- ▶ Module 0: Introduction
- ▶ Module 1: The SOLID Principles
 - Single Responsibility Principle
 - Open/Closed Principle
 - Liskov Substitution Principle
 - Interface Segregation Principle
 - Dependency Inversion Principle
- ▶ Module 2: SOLID in Practice
 - Workshop A.1
 - 2.1: Repository Pattern
 - Workshop A.2

"SOLID Programming in C#" – Day 1

- ▶ Module 2: SOLID in Practice (Cont'd)
 - 2.2: Automatic Testing
 - Workshop A.3

- ▶ Module 3: Managing Dependencies
 - Workshop A.4
 - 3.1: Null Object Pattern
 - (Optional) Workshop A.5

"SOLID Programming in C#" – Day 2

- ▶ **Module 04: Workshop B: Create User Service**
 - 4.1: Strategy Pattern
 - 4.2: (Optional) Decorator / Proxy Pattern
 - 4.3: (Optional) Composite Pattern

- ▶ **Module 05: Dependency Injection Containers**
 - Containers
 - Workshop C.1: Adding Unity DI
 - Dependency Injection Patterns
 - Workshop C.2: Interception
 - Lifetime Management

"SOLID Programming in C#" – Day 2

- ▶ Conclusion
- ▶ (For Later) Workshop D: If Time Permits...

Course Material

- ▶ Book
 - Mark Seemann and Steven van Deursen:
"Dependency Injection Principles, Practices, and Patterns"
Manning (2019), 1st Edition
- ▶ Slides
- ▶ Examples for every module
- ▶ Workshop and all workshop solutions
- ▶ Course evaluation after Day 2

Practical Information

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

- ▶ Any questions...?



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