"SOLID Programming in C#"

Jesper Gulmann Henriksen

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)
  • (Optional) 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...?

WINCUBATE

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