

Curriculum for 90377: "Design Patterns in C# [Agilent Special Course]"

Agenda

The course has a duration of 2 full course days following the agenda outlined below.

Day 1 (Selected Gang of Four Patterns in C#)	Course Outline Module 01: "What are Design Patterns?" Module 02: "Abstract Factory" Module 03: "Builder" Module 04: "Decorator" Module 05: "Façade" Module 06: "State" Module 07: "Observer" (If time permits) Module 08: "Command"
Day 2 (Data-centric and Application Patterns in C#)	Module 09: "Repository (including EF intro)" Module 10: "Unit of Work" Module 11: "Proxy" Module 12: "Introduction to MVVM" Module 13: "MVVM Problems and Patterns" (If time permits) Module 14: "The SOLID Principles"

Referencer

- [1] Erich Gamma, Richard Helm, Ralph Johnson, and John Vlissides (a.k.a. "Gang of Four ☺")
Design Patterns: Elements of Reusable Object-Oriented Software
ISBN-13: 978-0-201-63361-0
Addison-Wesley (1994)

Module 02: Abstract Factory

- [Gamma et al., Chapter 3, pp. 87 – 95]

Module 03: Builder

- [Gamma et al., Chapter 3, pp. 97 – 106]

Module 04: Decorator

- [Gamma et al., Chapter 4, pp. 175 – 184]

Module 05: Façade

- [Gamma et al., Chapter 4, pp. 185 – 194]

Module 06: State

- [Gamma et al., Chapter 5, pp. 305 – 314]

Module 07: Observer

- [Gamma et al., Chapter 5, pp. 293 – 304]

Module 08: Command

- [Gamma et al., Chapter 5, pp. 233 – 242]

Module 09: Repository

- Martin Fowler: "P of EAA", p. 322
 - <https://martinfowler.com/eaCatalog/repository.html>
- Discussions:
 - <https://www.youtube.com/watch?v=rtXpYpZdOzM&feature=youtu.be>
 - <http://deviq.com/repository-pattern/>

Module 10: Unit of Work

- Martin Fowler: "P of EAA", p. 184
 - <https://martinfowler.com/eaCatalog/unitOfWork.html>

Module 11: Proxy

- [Gamma et al., Chapter 4, pp. 207 – 218]

Module 12: Introduction to MVVM

- <http://msdn.microsoft.com/en-us/magazine/jj694937.aspx>

Module 13: MVVM Problems and Patterns

- <http://www.galasoft.ch/mvvm/>

Module 14: The SOLID Principles

- <https://en.wikipedia.org/wiki/SOLID>