

Advanced Object-Oriented Design

S.Ducasse, L. Fabresse, G. Polito, and P. Tesone



Going to the next level

- Object-oriented design to the roots
- Unique value
- From object designer experts



Why this mooc?

Following the success of the Pharo mooc (<http://mooc.pharo.org>)
I have already learned so much ! I have spent the last 20 years or so in software development and, following this Mooc, I realized I hadn't really grasped the essence of object oriented design. - Anonymous

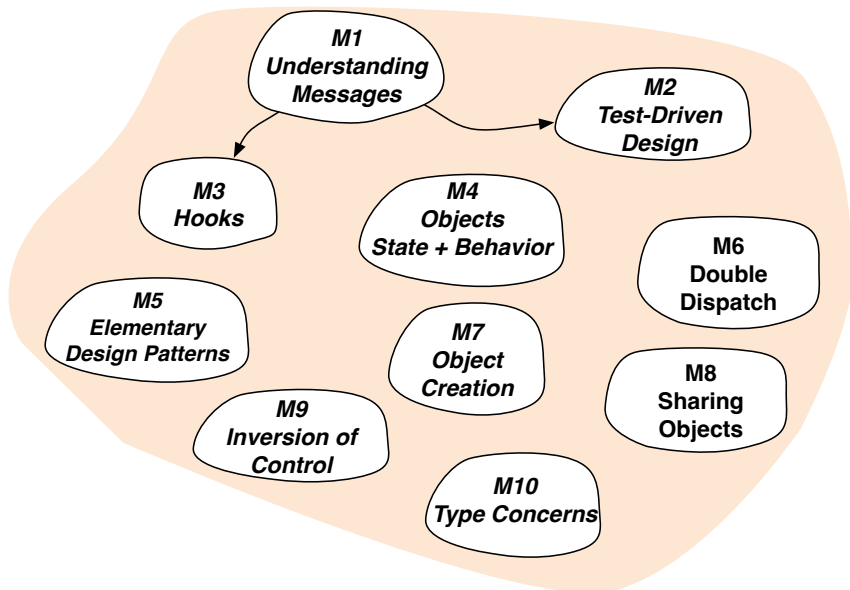


Objectives

- Revisit basic elements such as encapsulation, delegation
- Think about essential aspects of object-oriented design
- Learn key Design Patterns
- Analyze real case studies
- Things about Pharo code idioms



10 modules



Code examples from Pharo



Courtesy Pavel Krivanek

Why Pharo (<http://www.pharo.org>)?

- Pharo is pure and powerful object-oriented language
- With only objects, messages, and lambdas, Pharo helps us to focus on important ideas!
- Complement the excellent Pharo mooc (<http://mooc.pharo.org>)



Our definition of polymorphism

If it walks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck.

We use the terms **polymorphic** or **polymorphism** in the sense of:

- exposing the same API,
- being substitutable,
- an object can be replaced by another one because both present the same API (set of messages),
- polymorphic objects do not have to be subtypes



A unique mooc

- More than 60 years of experience in OO design and practices
- Concrete cases
- Knowledge actionable in many languages



Produced as part of the course on <http://www.fun-mooc.fr>

Advanced Object-Oriented Design and Development with Pharo

A course by

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