

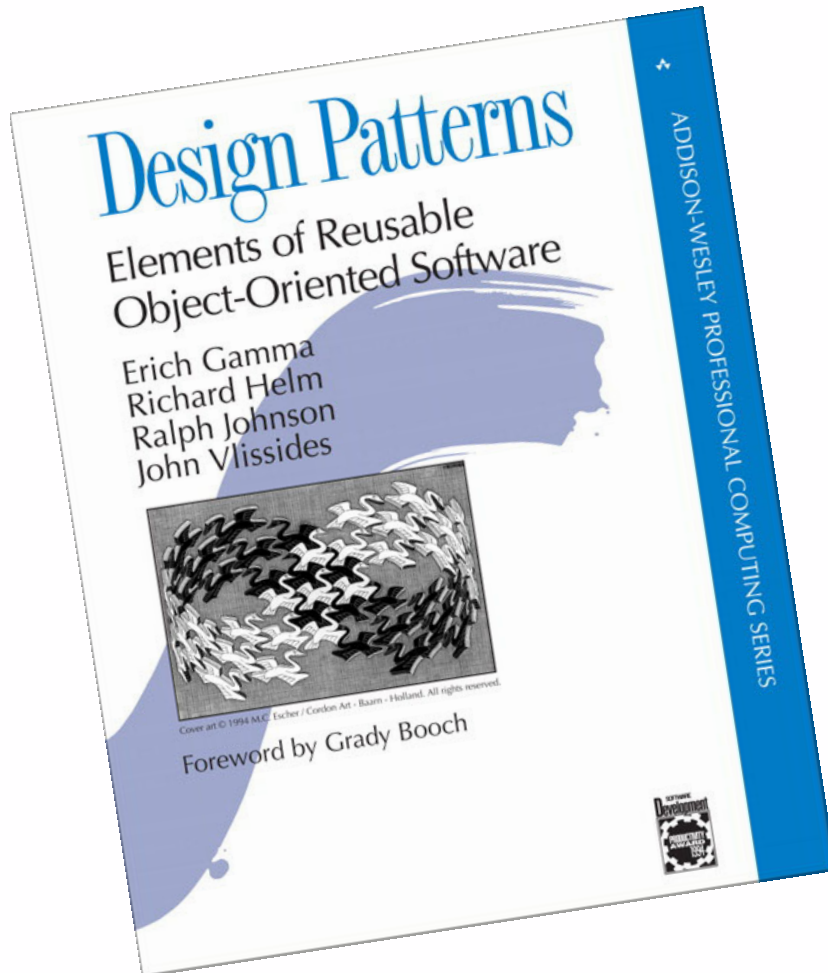
# Design Patterns: Publisher – Subscriber

**Software Systems – Programming – 5M2**

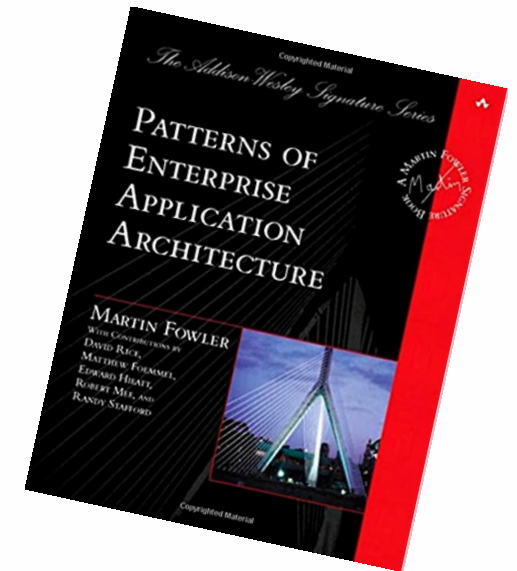
Dr. Vadim Zaytsev aka @grammarware, November/December 2020



# Design Patterns



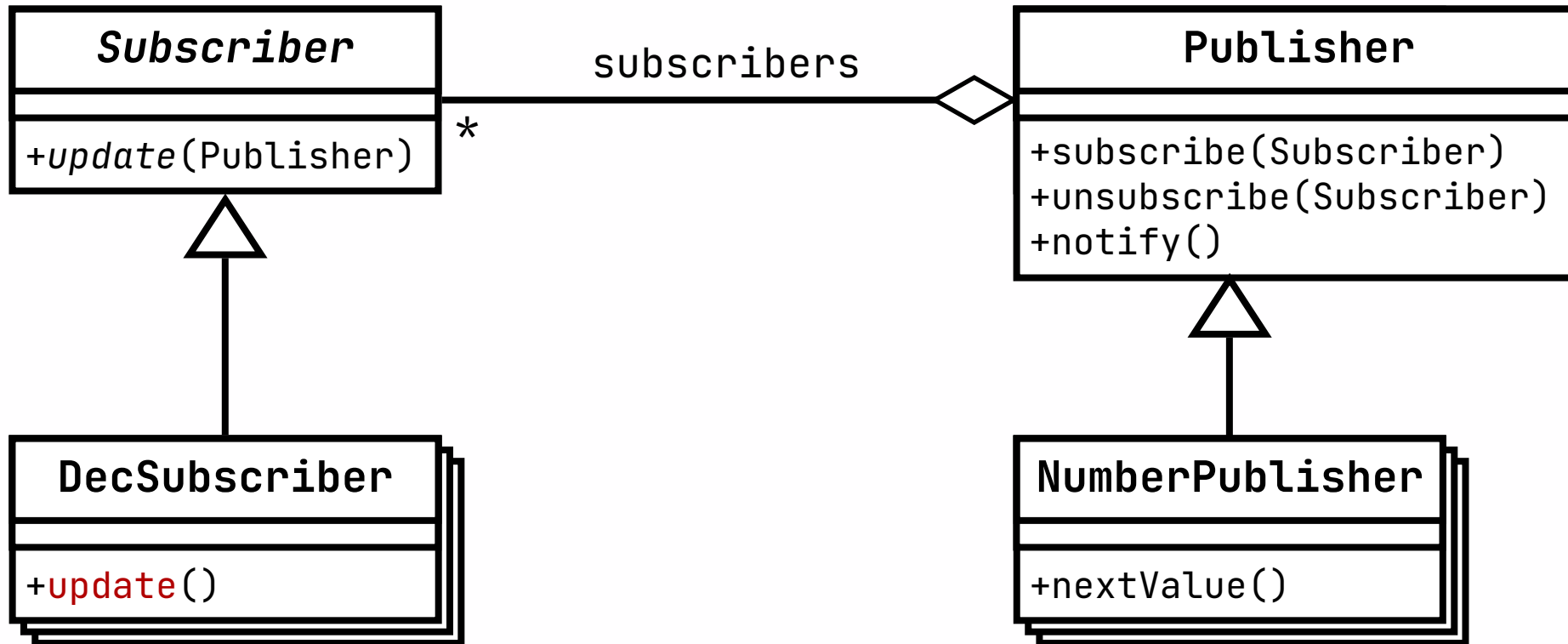
- Publisher – Subscriber
- aka Event – Subscriber
- aka Observer
- aka Listener



Design Patterns (1994), Patterns of EAA (2002)



# Publisher-Subscriber



# Terminology

- Observer
  - in literature
- Listener
  - in Java (e.g., `PropertyChangeListener`)
- Publisher
  - can be `Subject`
  - can be `EventManager`
- `State` can be separate



# Conclusion

- Entity worth observing
  - `Subject`, `Publisher`, `Event`, ...
- The observing entity
  - `Observer`, `Listener`, `Handler`, `Subscriber`, ...
- Two separate hierarchies
  - business logic
    - subscription/notification once
  - observing logic
- Something useful in the setter!