Design Patterns in Go
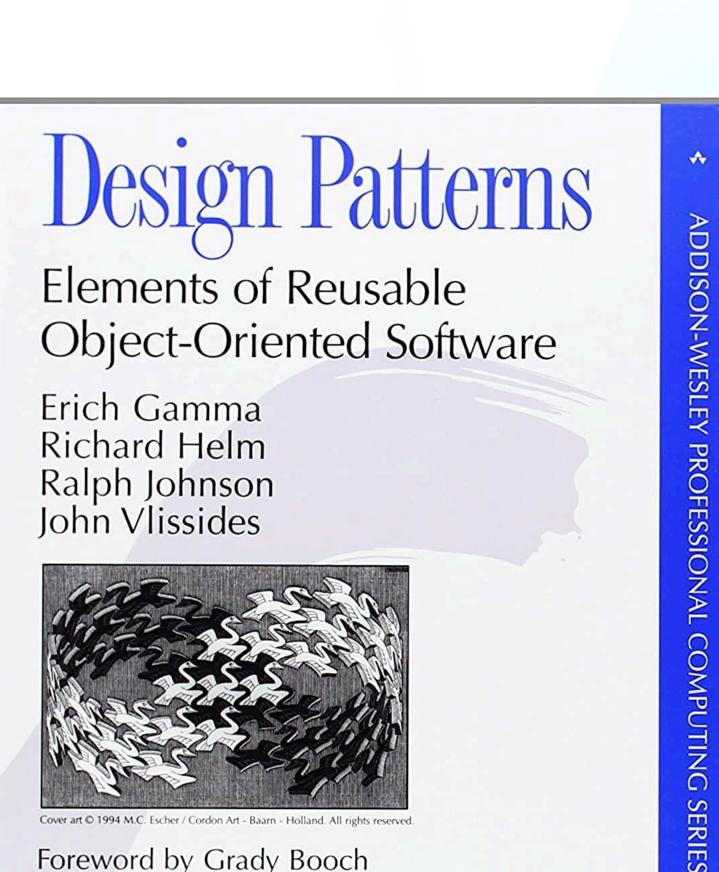
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- Gang of Four (1994)

- Presented a catalog of simple and succinct solutions to **commonly occurring** design problems

- 23 Design Patterns

What are Design Patterns

- Design Patterns are general **repeatable solutions** to a **commonly occurring problems** in software design

- Each pattern is like a **blueprint** that you can customise and adapt to solve a particular **design challenge** in your code

- Design Patterns are not a finished design that can be transformed directly into code. They are a template for how a problem can be solved in different situations

- Design Patterns are categorized by their intent and can be divided into these 3 groups - Creational, Structural and Behavioural.

Types of Patterns

Creational	Design Patterns that deal with object creation mechanisms; trying to create objects fin a manner suitable to the situation.
Structural	Design Patterns that assemble objects and classes into larger structures, while keeping the structures flexible and efficient.
Behavioural	Design Patterns that introduce flexibility for inter-objects communication.

Are Design Patterns always the answer?

- Design Patterns can be a useful tool to help us solve common software design problems, but they should be not used without a clear understanding of their purpose

- It is not a must to use them in every software design problem

- Often, a simple solution is enough

THE END