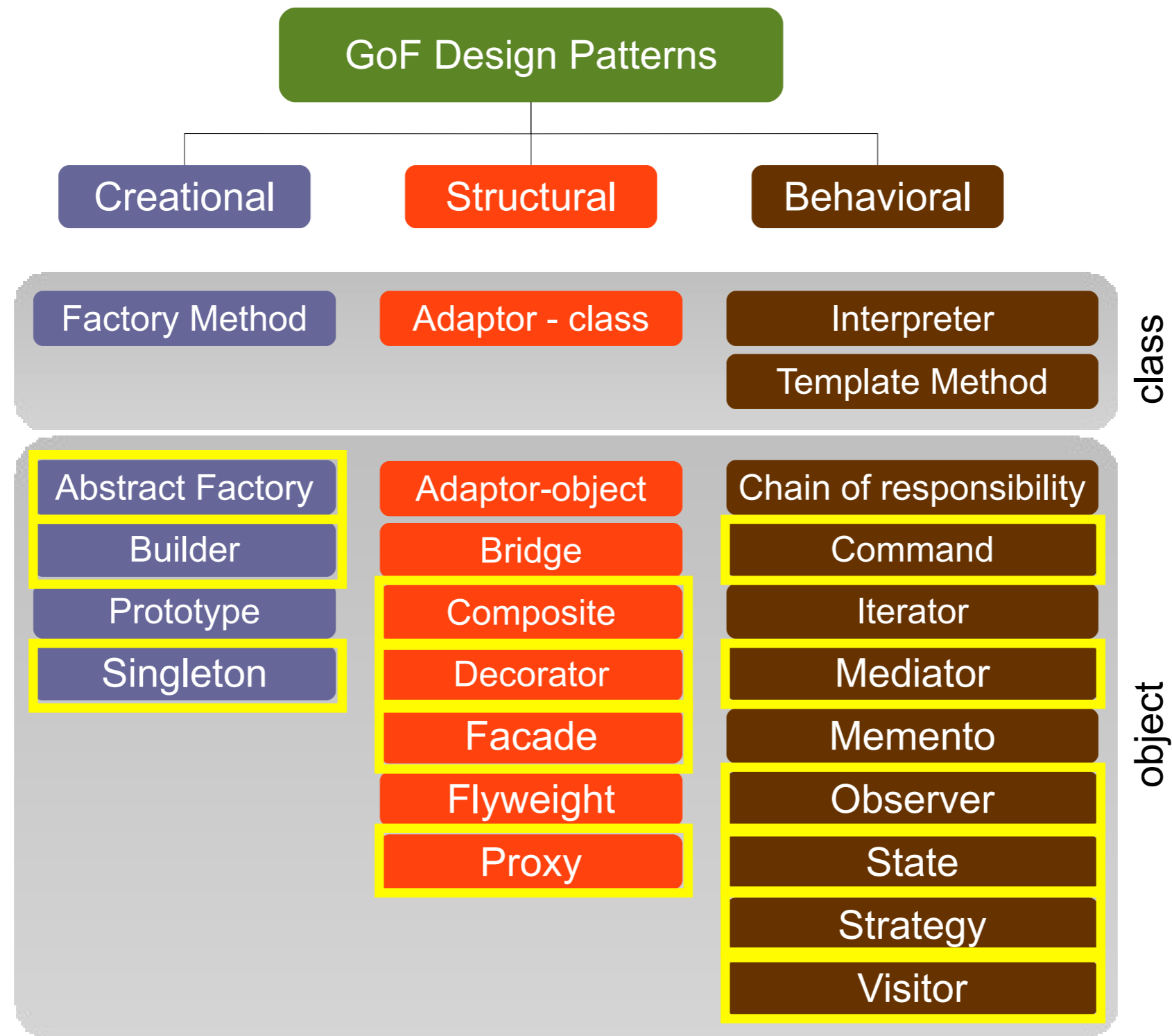


# Design Patterns #4 & MidTerm Postmortem

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# GoF design patterns



# Strategy

- ▶ Intent: “Encapsulate a family of algorithms making them interchangeable.”
- ▶ Motivation: In situations where you want to be able to ?
- ▶ Applicability:
  - ▶ Many classes differ only in their behaviour.
  - ▶ ?
  - ▶ An algorithm uses data a client should not know about.
  - ▶ ?

# Strategy

- ▶ Structure
- ▶ Participants:
  - ▶ Strategy (Compositor) / ConcreteStrategy
  - ▶ Context (Composition)

# Strategy

- ▶ Collaborations:
  - ▶ Strategy and Context collaborate to implement the algorithm. Sometimes it makes sense for the Strategy to call back to its context.
  - ▶ Context forwards requests from client to its strategy.
- ▶ Consequences:
  - ▶ ?
  - ▶ Avoids subclassing; ?
  - ▶ ?
  - ▶ Multiple implementations of the same behaviour can exist.
  - ▶ - Clients need to know about the strategies to use them.
  - ▶ Increased number of objects.

# Strategy

- ▶ Implementation:
  - ▶ 1) Defining Strategy / Context interfaces.
  - ▶ 2) Making Strategy object optional.
- ▶ Related to: **Strategy** objects make good **flyweights**.

# MidTerm Postmortem

