

Template Method

Linda Marshall and Vreda Pieterse

Department of Computer Science
University of Pretoria

4 August 2010

Overview

- 1 Identification
- 2 Structure
- 3 Participants
- 4 Related Patterns
- 5 Example

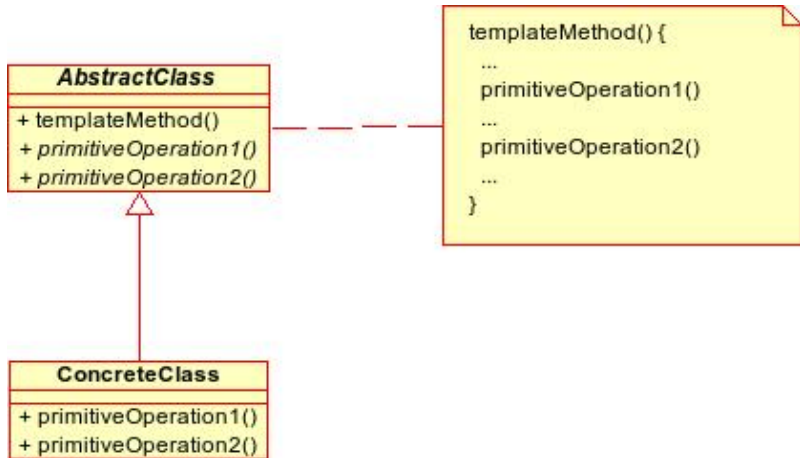
Name and Classification:

Template Method (Class Behavioural)

Intent:

“Define the skeleton of an algorithm in an operations, deferring some steps to subclasses. Template Method lets subclasses redefine certain steps of an algorithm without changing the algorithm’s structure.”

GoF(325)



AbstractClass

- defines abstract primitive operations that need to be defined by the concrete classes
- implements the template method operation that provides a skeleton of an algorithm

ConcreteClass

- implements the primitive operations defined by the Abstract class

Related Patterns

- **Factory Methods** (107): Often called by template methods.
- **Strategy** (315): Varies the entire algorithm while template method varies part of the algorithm.

