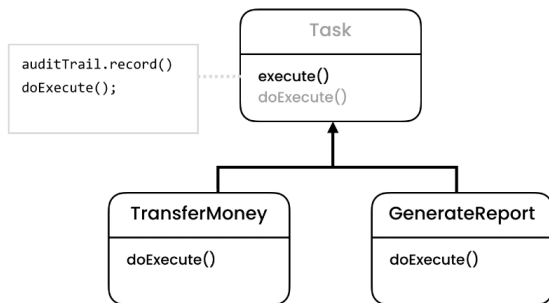


Template method Design Pattern

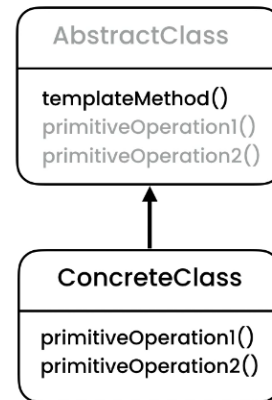
This pattern is used when a task must be done in some classes and there is a need to define a skeleton for an operation.

Class Diagrams

Our Example



The pattern in Gang of Four's book



Explanation

In our imaginary application, there are **TransferMoney** and **GenerateReport** classes that are responsible for money transition generating a report. we need to log every action of a user before the transition or report generating, So there is an **AuditTrail** class that is responsible for logging (this class is not in the pattern). in the abstract **Task** class, we have an `execute()` method that calls `record()` method of an **AuditTrail** object for logging without considering what the user operation is. The abstract `doExecute()` method is called by `execute()` method. The **TransferMoney** and **GenerateReport** classes must overwrite these methods to do their jobs.

- The **GenerateReport** is similar to the **TransferMoney**, class and it is not implemented in code.