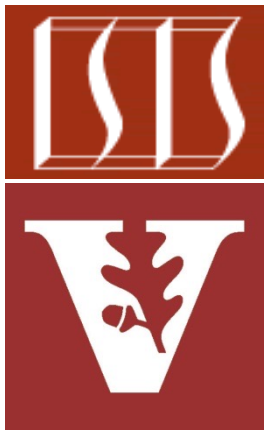
Analyzing the Filter Class Hierarchy



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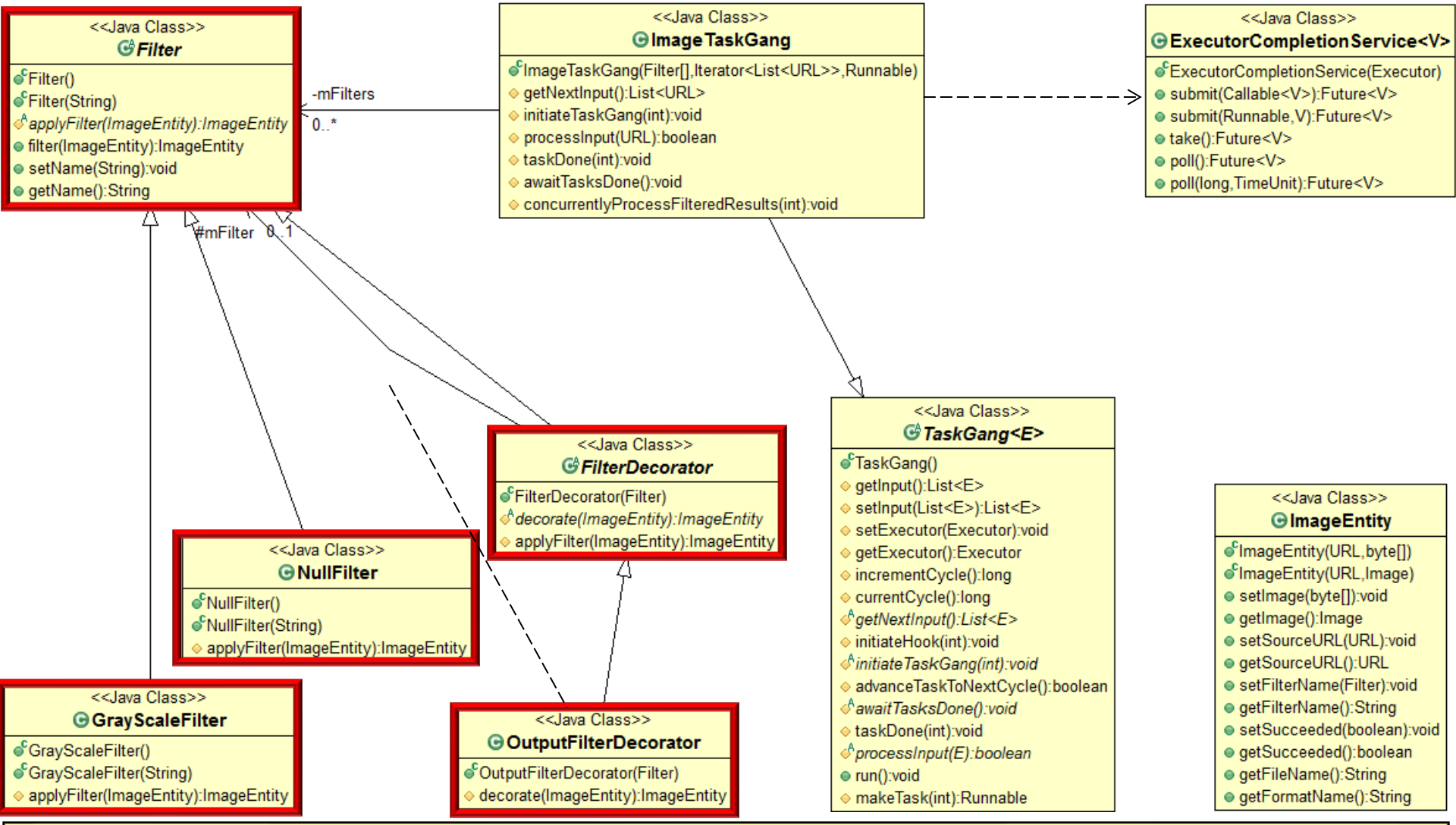
Learning Objectives in this Part of the Lesson

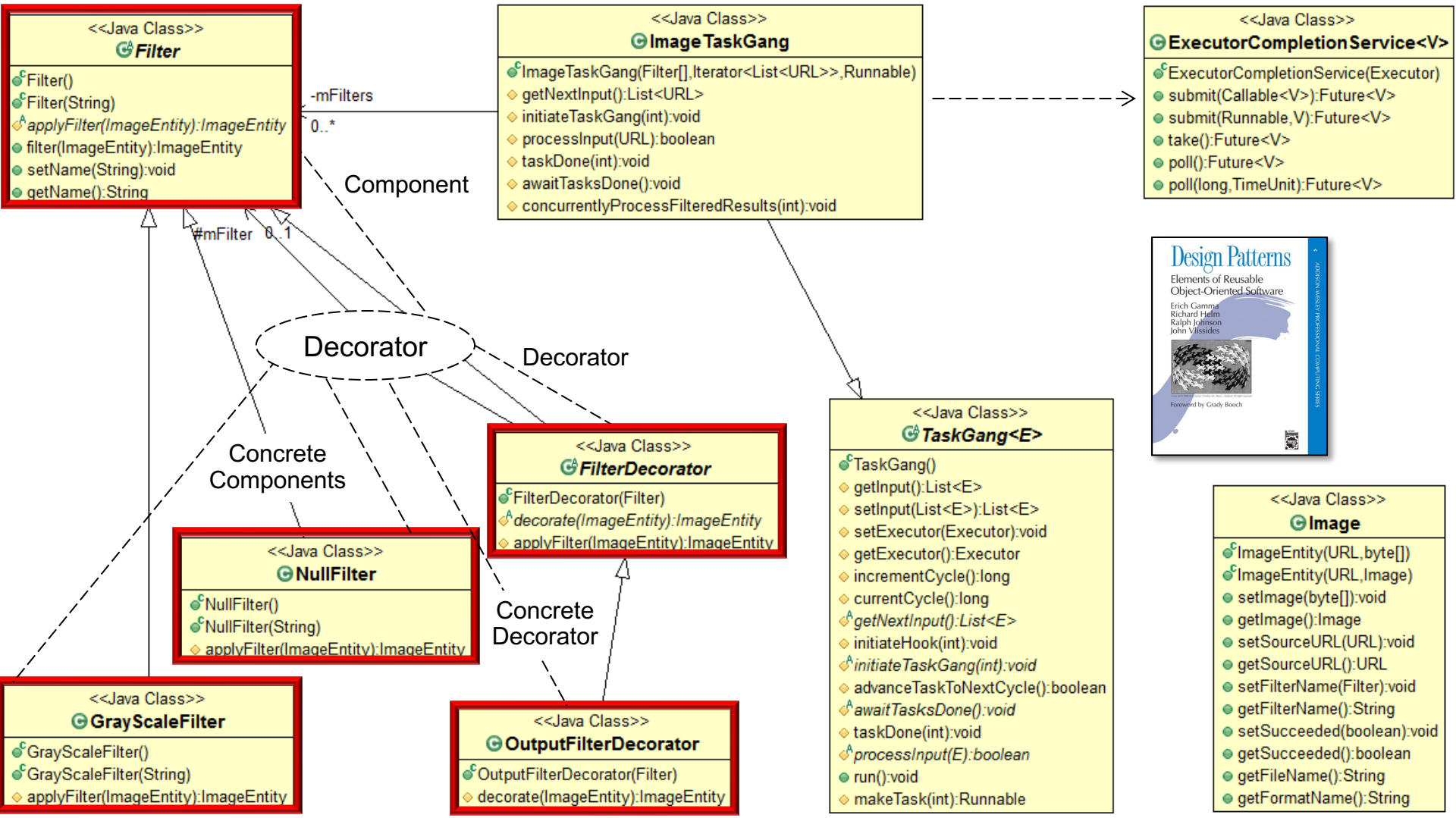
- Understand the pattern-oriented software implementation of the Filter class hierarchy



See ImageTaskGangApplication/app/src/main/java/example/imagetaskgang/filters

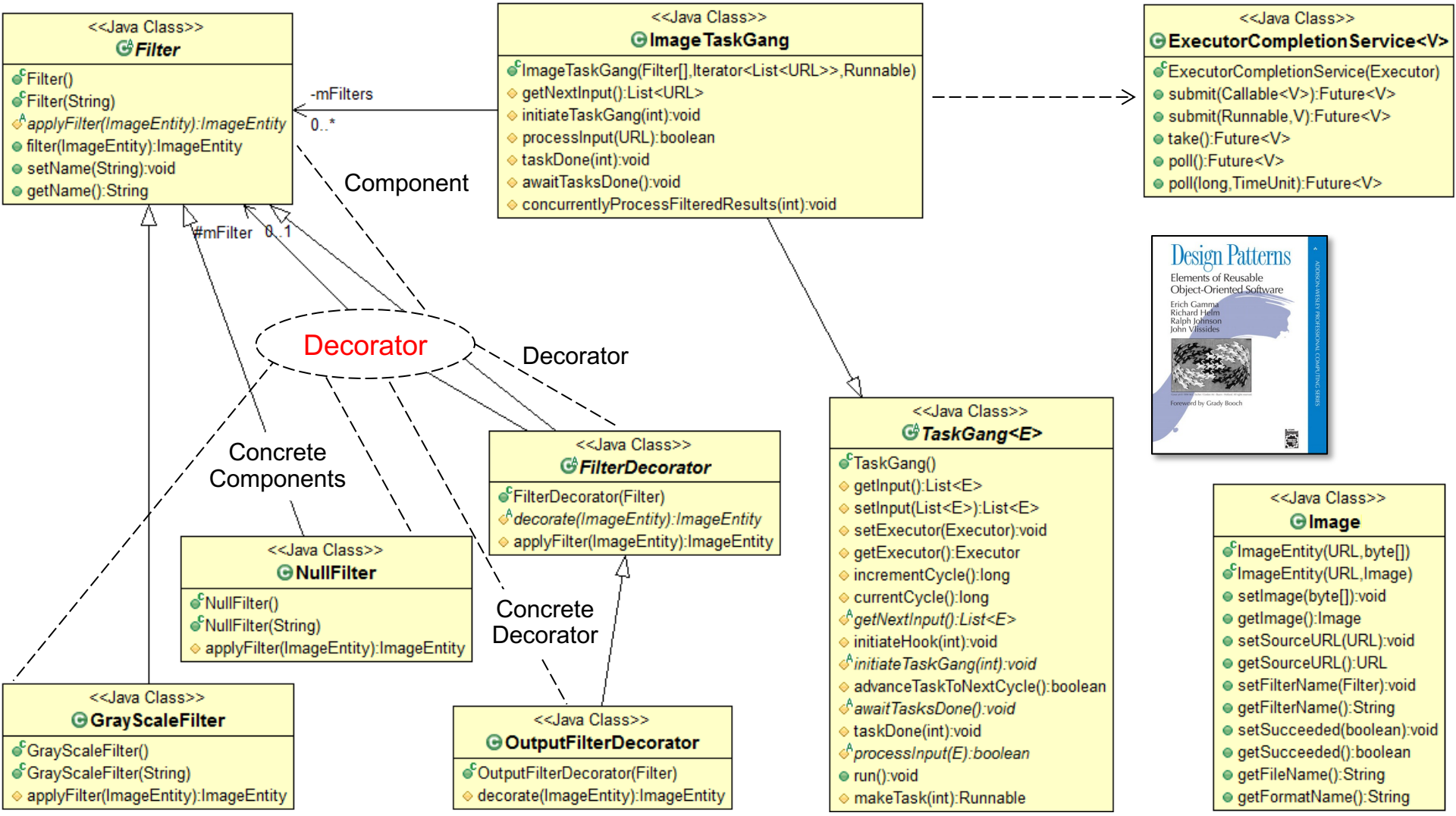
Analysis of the Filter Class Hierarchy Source Code

Analysis of the Filter Hierarchy Classes



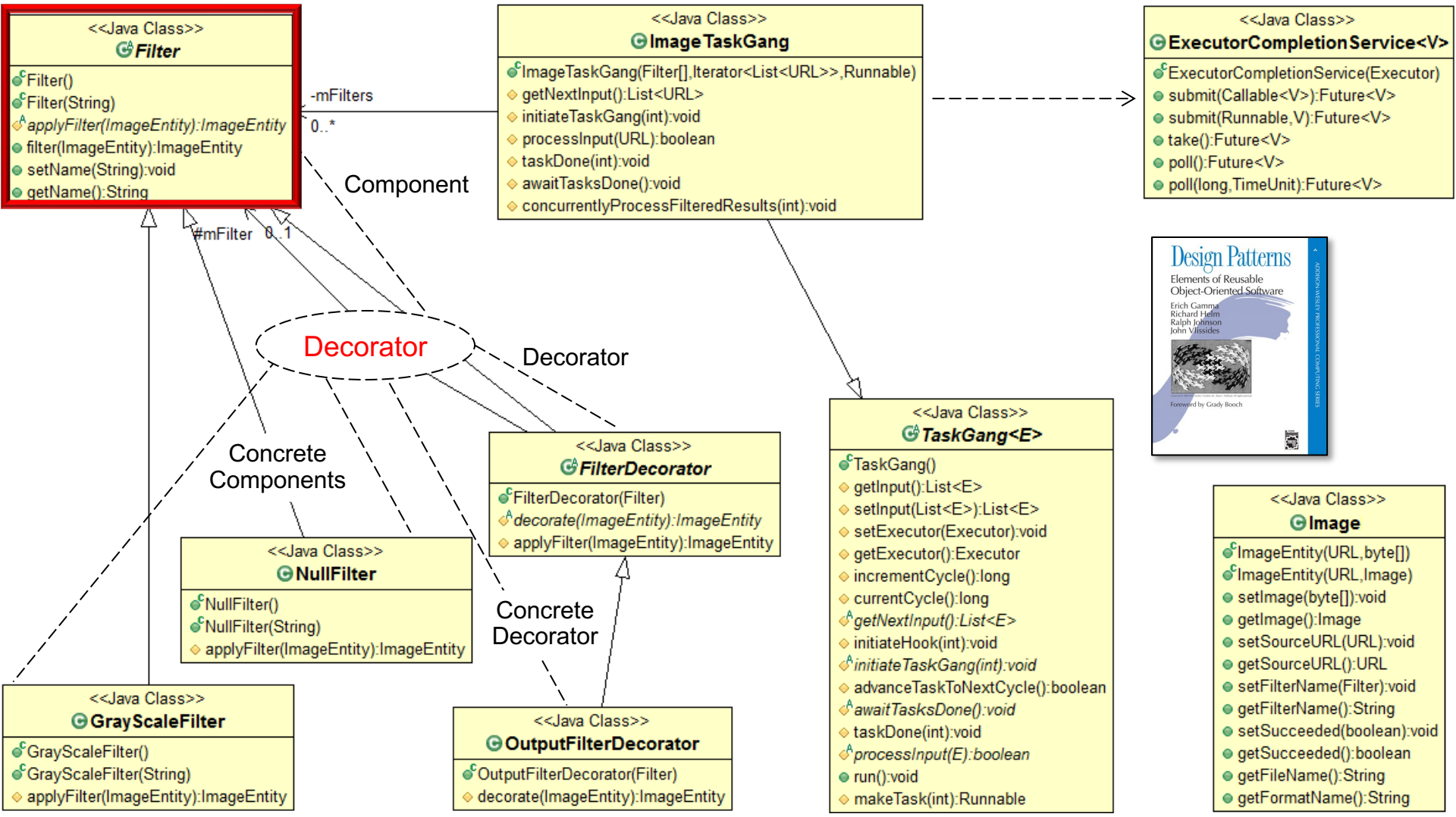
Provides the means to apply a series of filters to process & store each downloaded image

Analysis of the Filter Hierarchy Classes

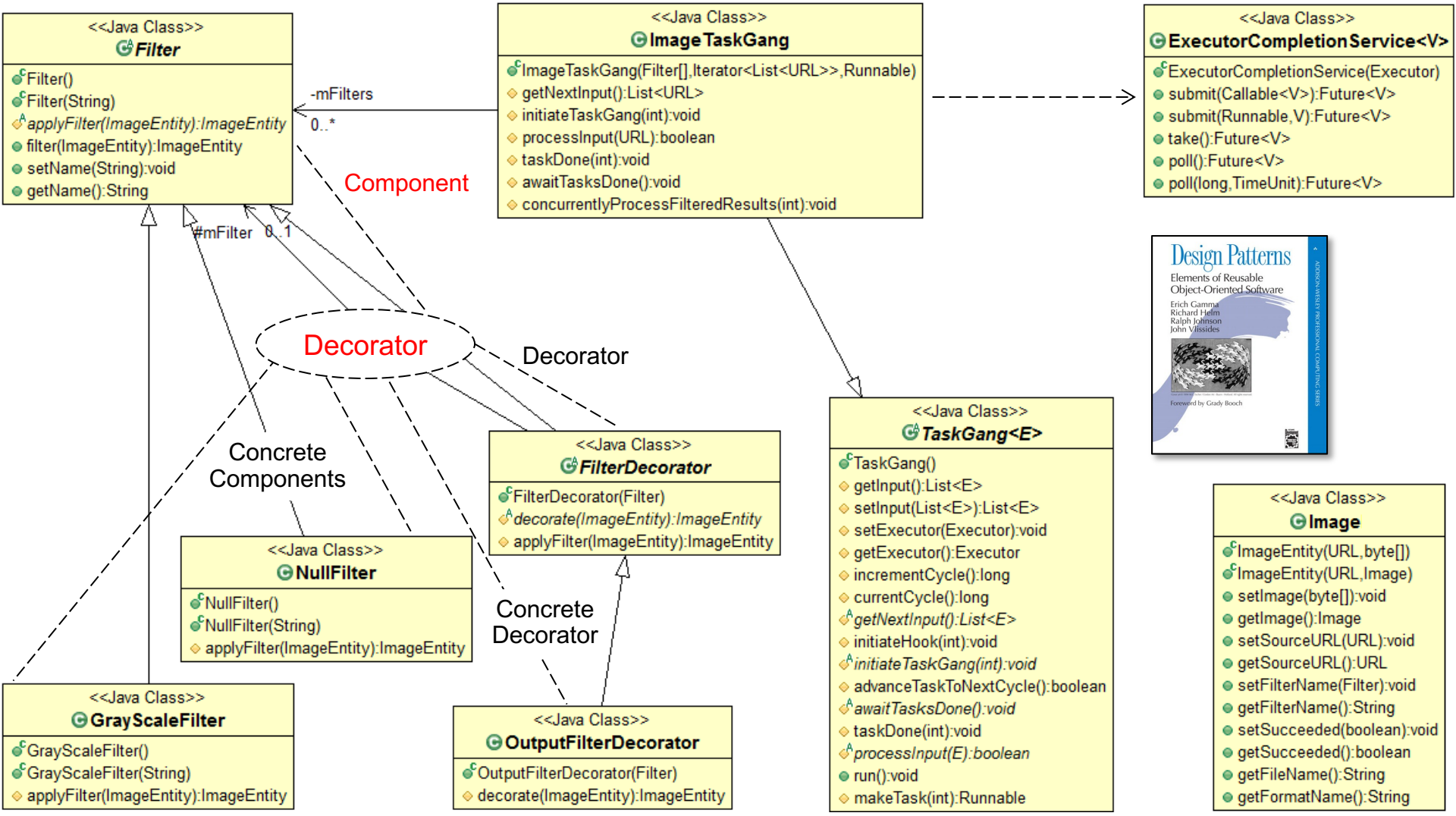


Decorator allows behavior to be added to an individual object transparently, without affecting the behavior of other object's from the same class

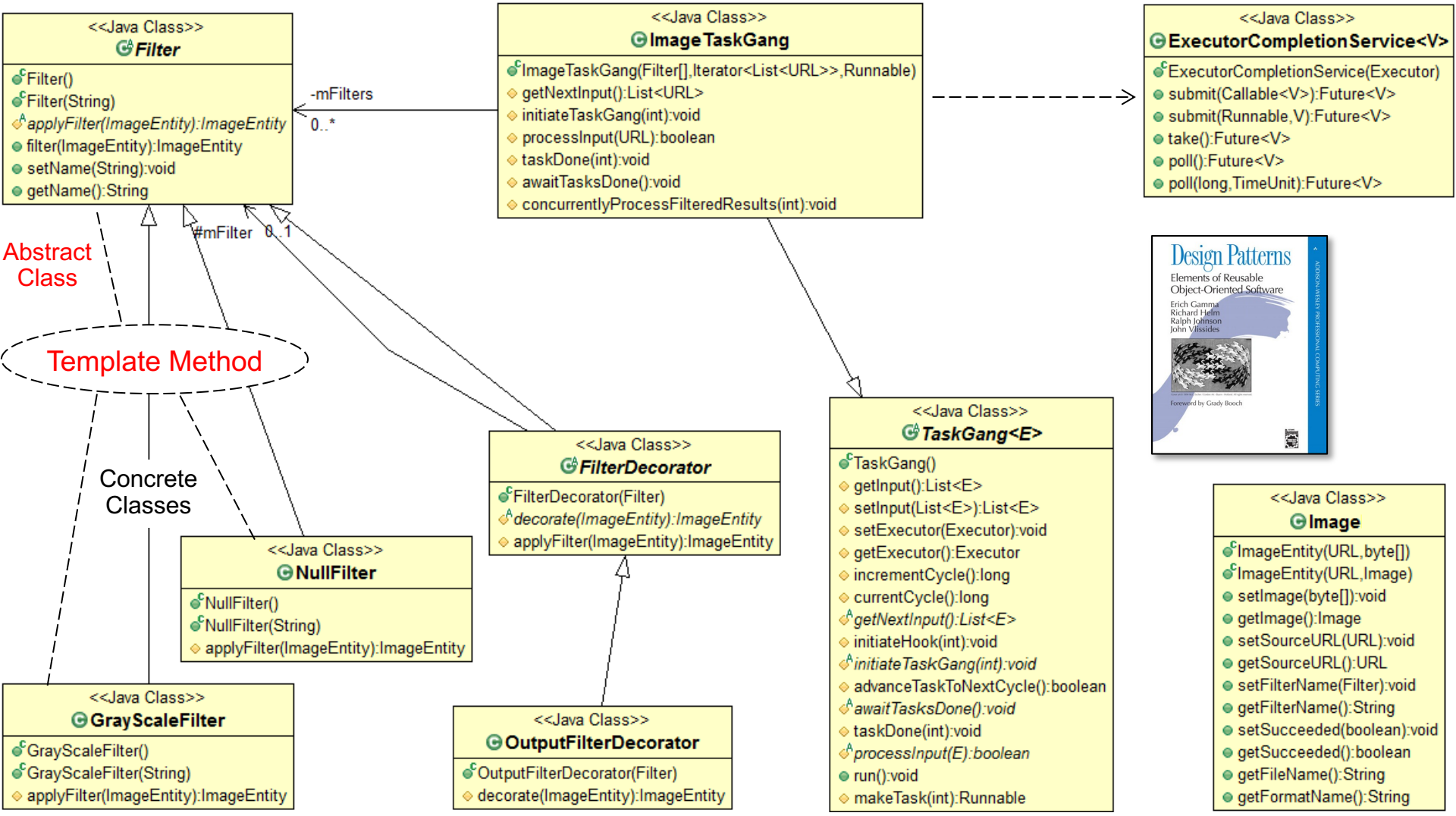
Analysis of the Filter Class



Analysis of the Filter Class

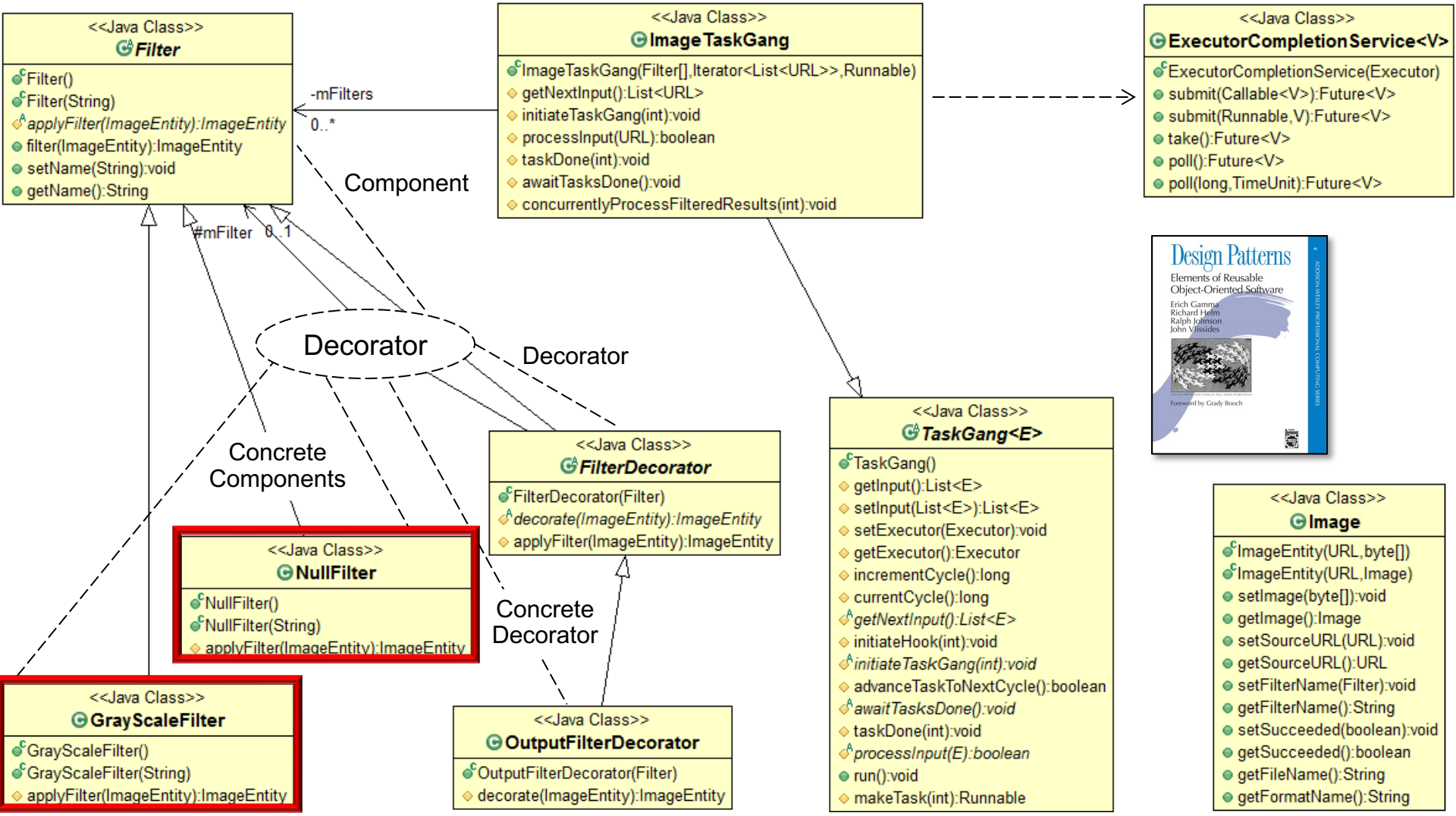


Analysis of the Filter Class

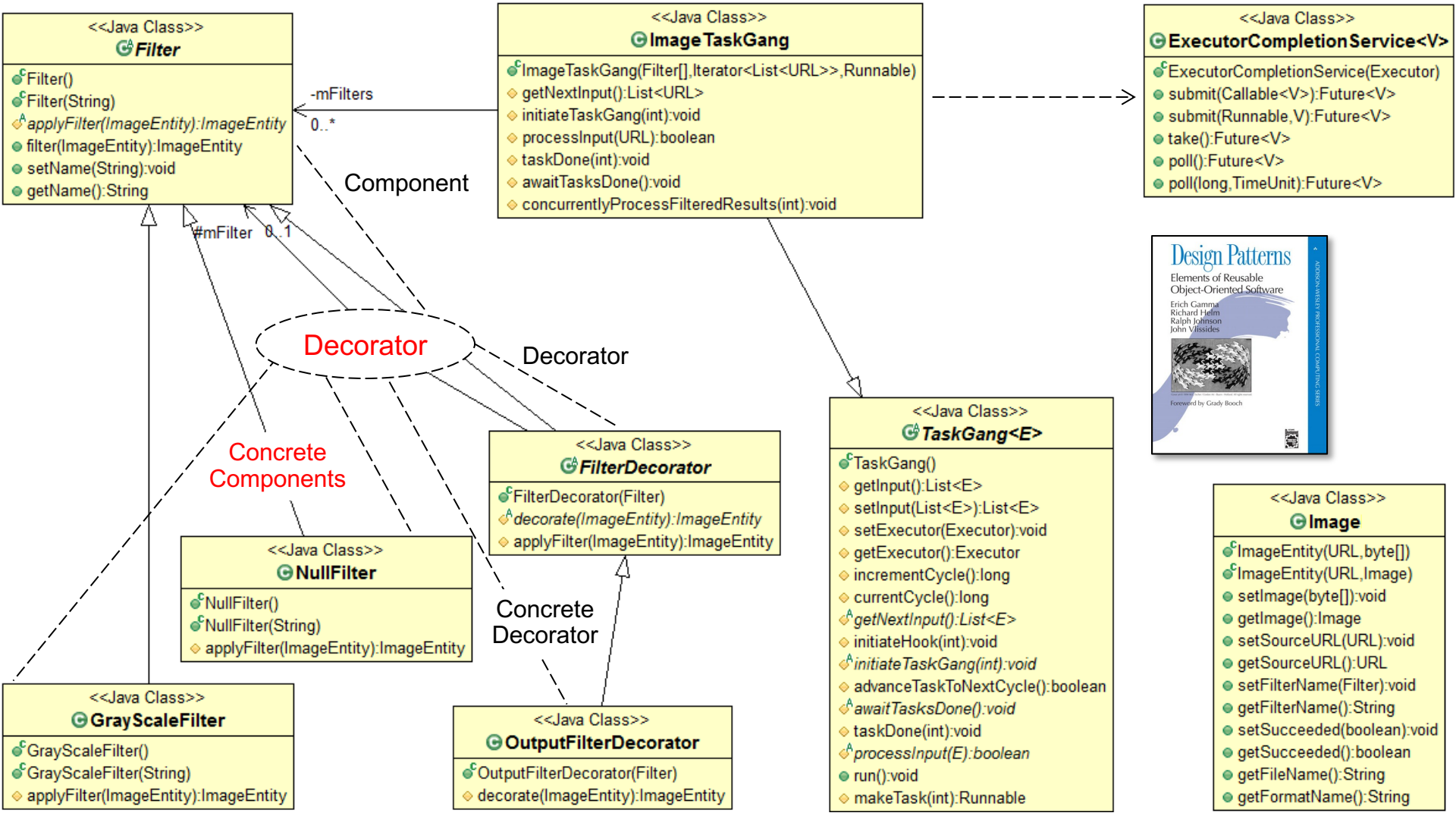


Template Method defines the skeleton of an algorithm in a method, deferring certain steps to subclass methods

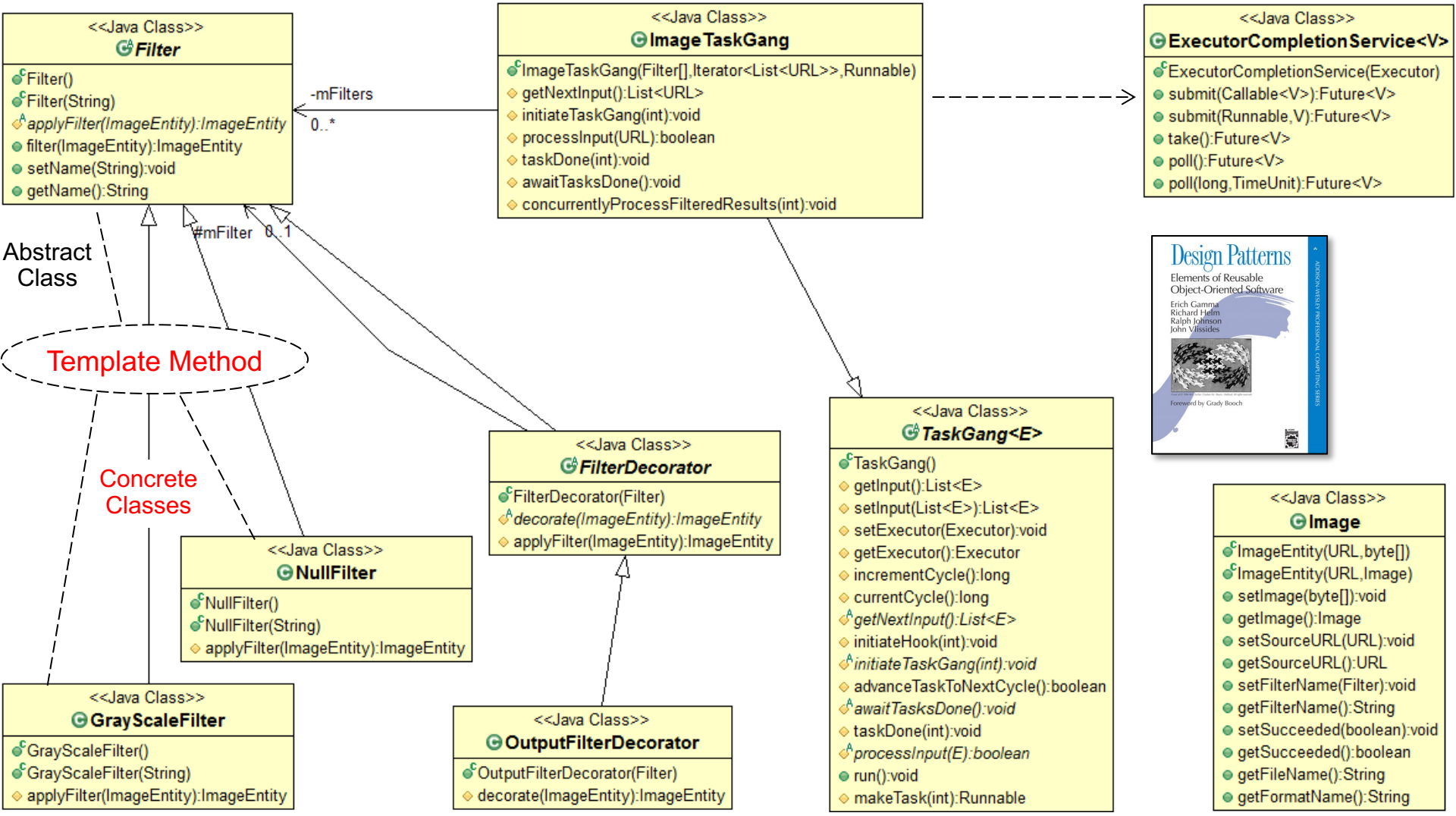
Analysis of the GrayScaleFilter & NullFilter Classes



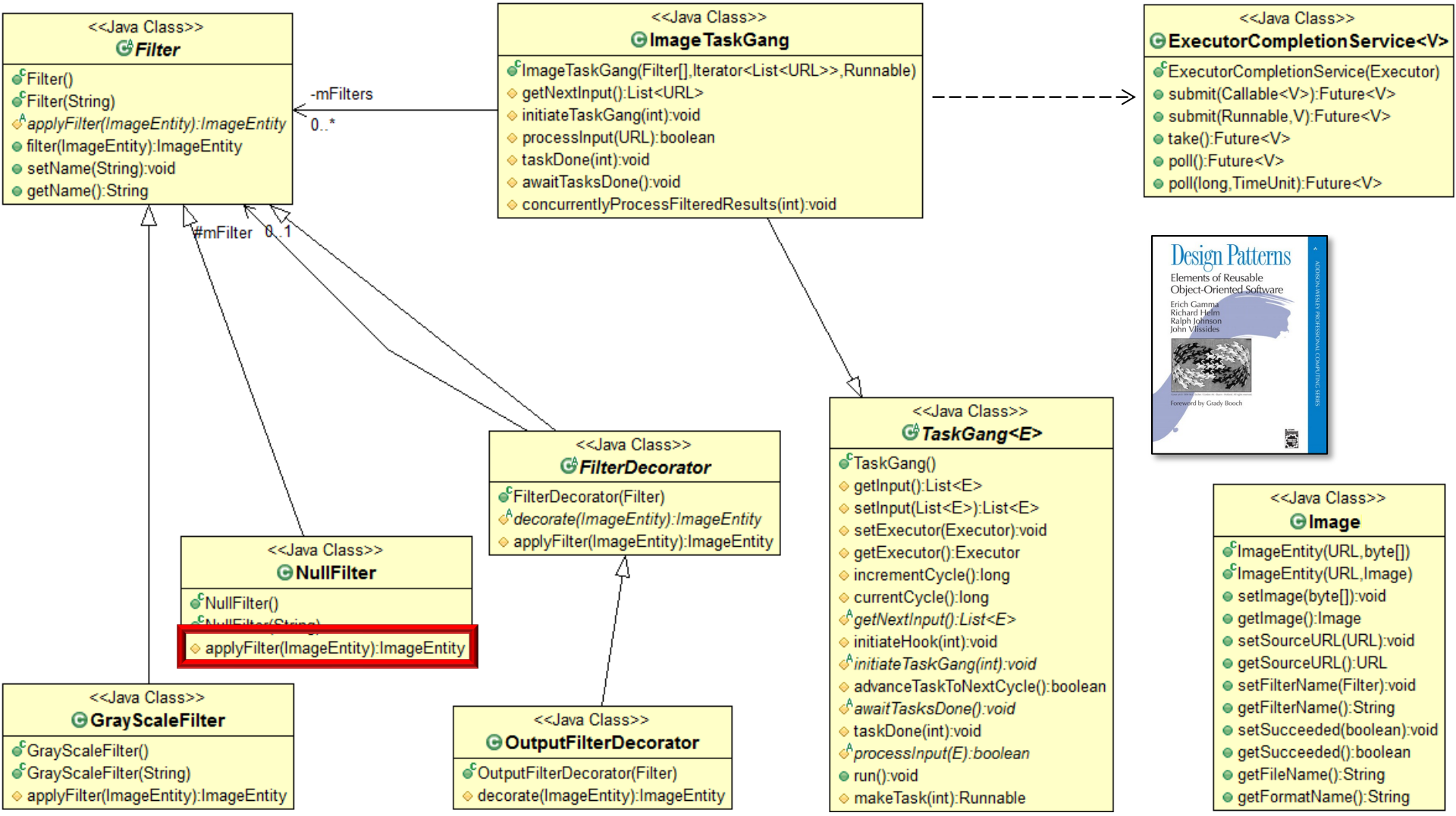
Analysis of the GrayScaleFilter & NullFilter Classes



Analysis of the GrayScaleFilter & NullFilter Classes

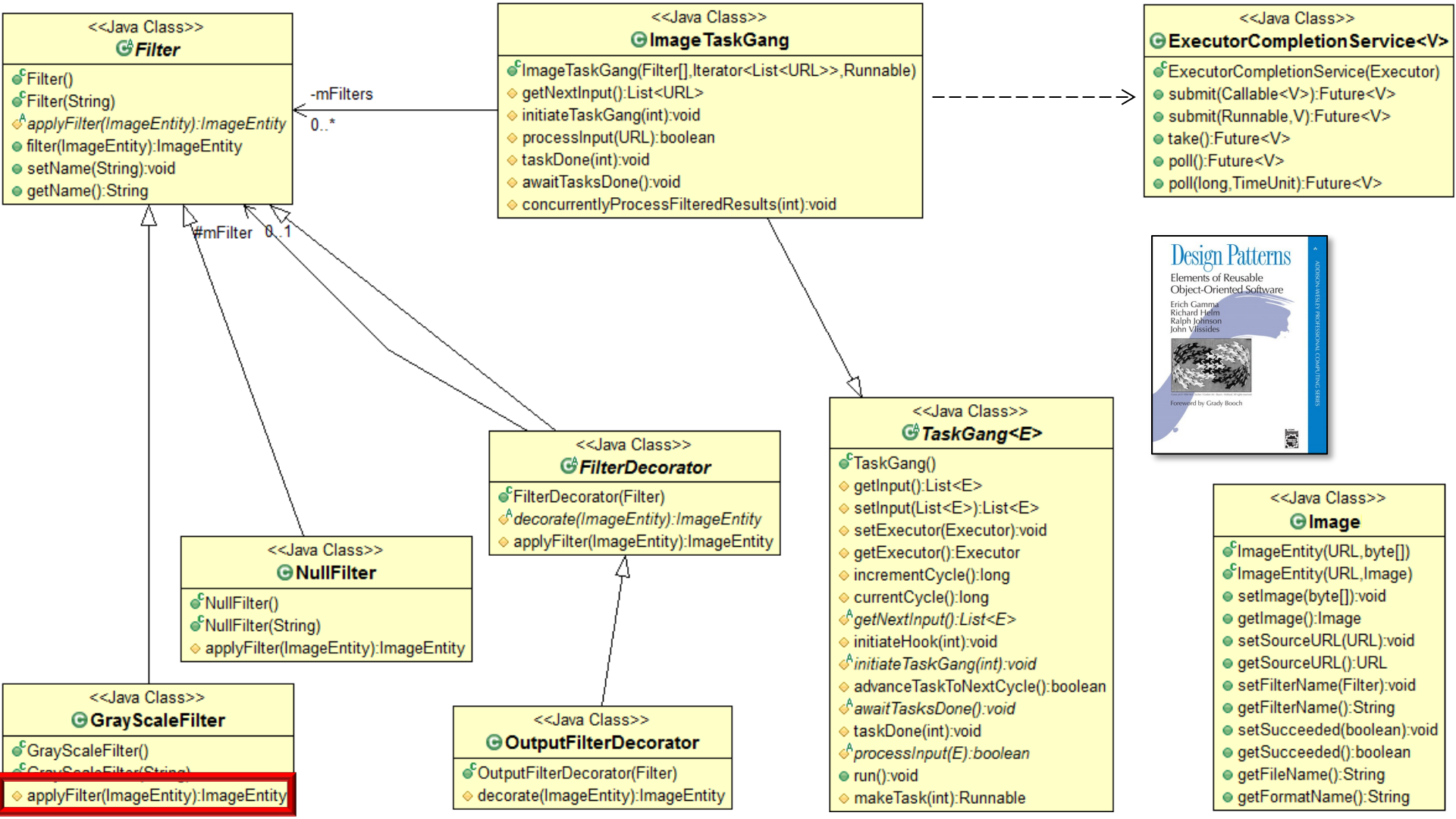


Analysis of the GrayScaleFilter & NullFilter Classes



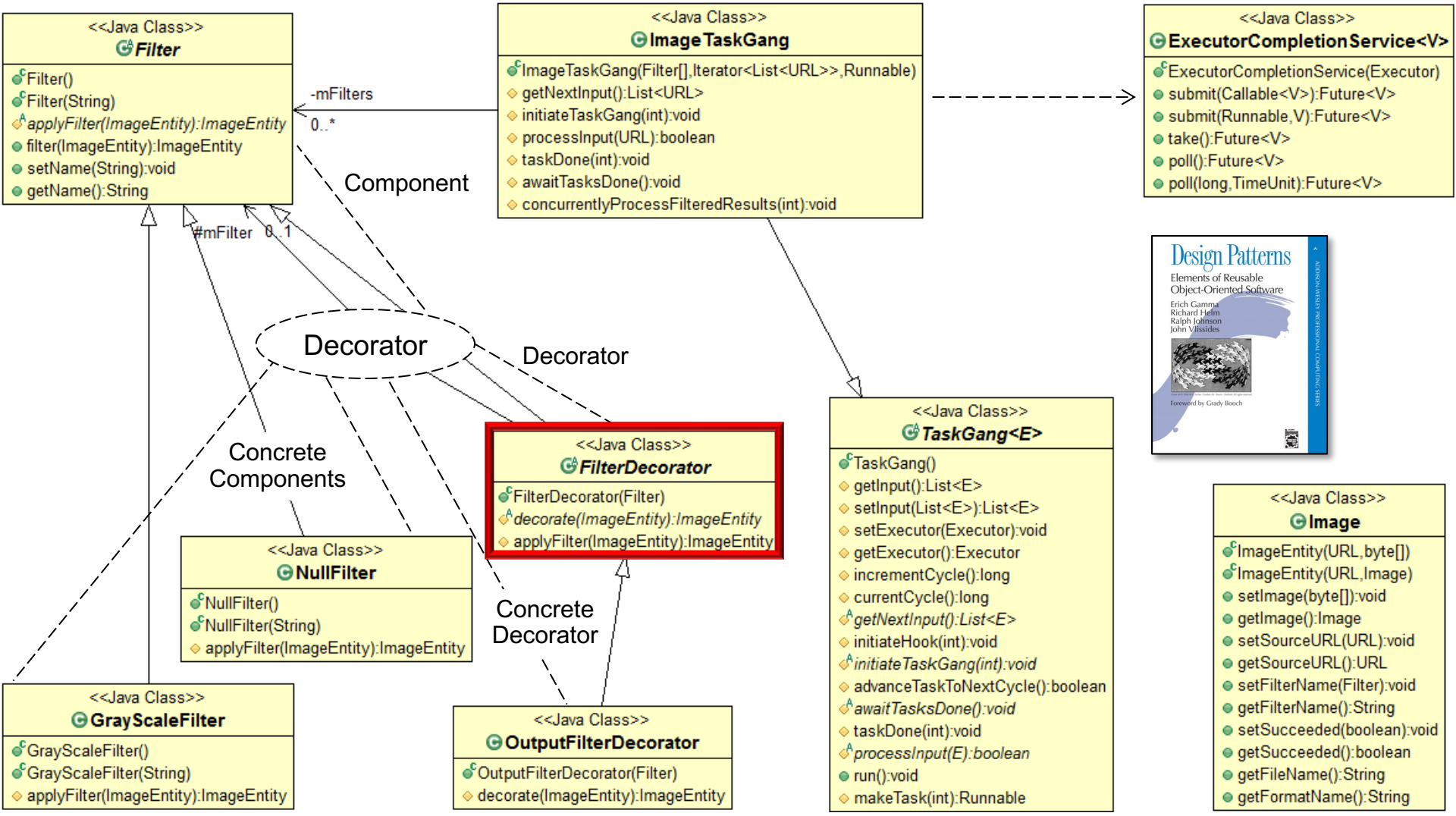
See en.wikipedia.org/wiki/NOP_(code)

Analysis of the GrayScaleFilter & NullFilter Classes

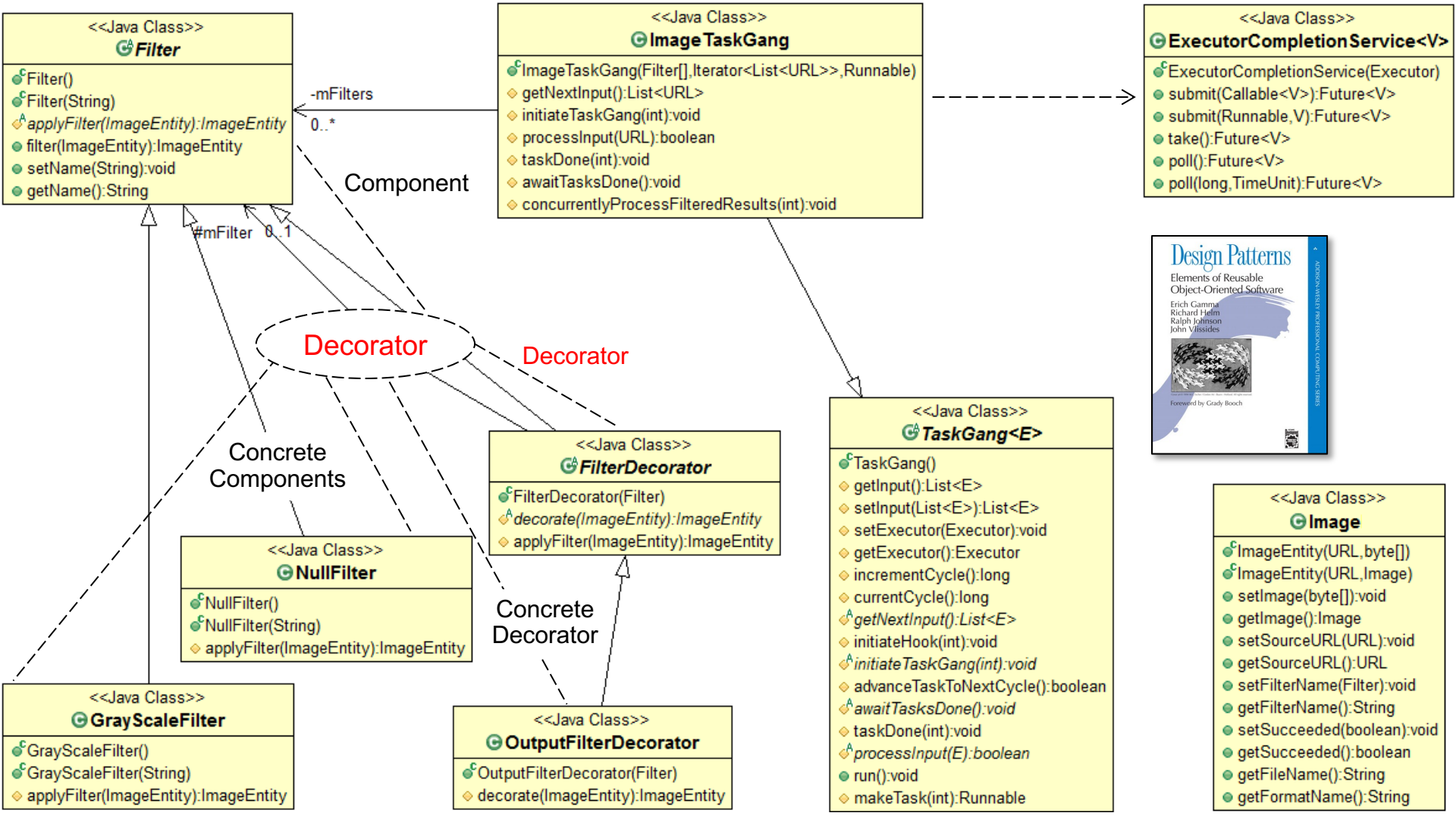


See en.wikipedia.org/wiki/Grayscale

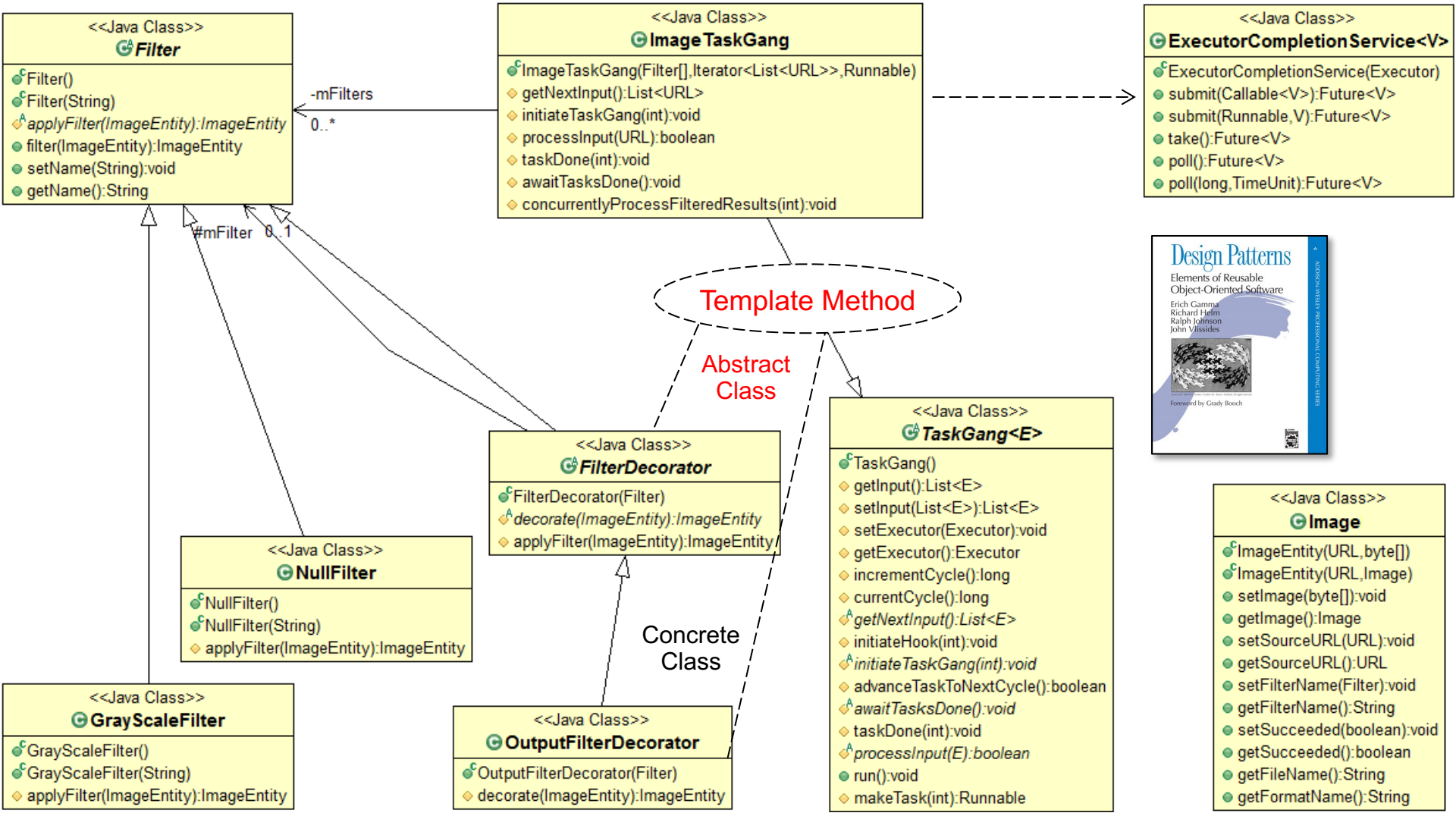
Analysis of the FilterDecorator Class



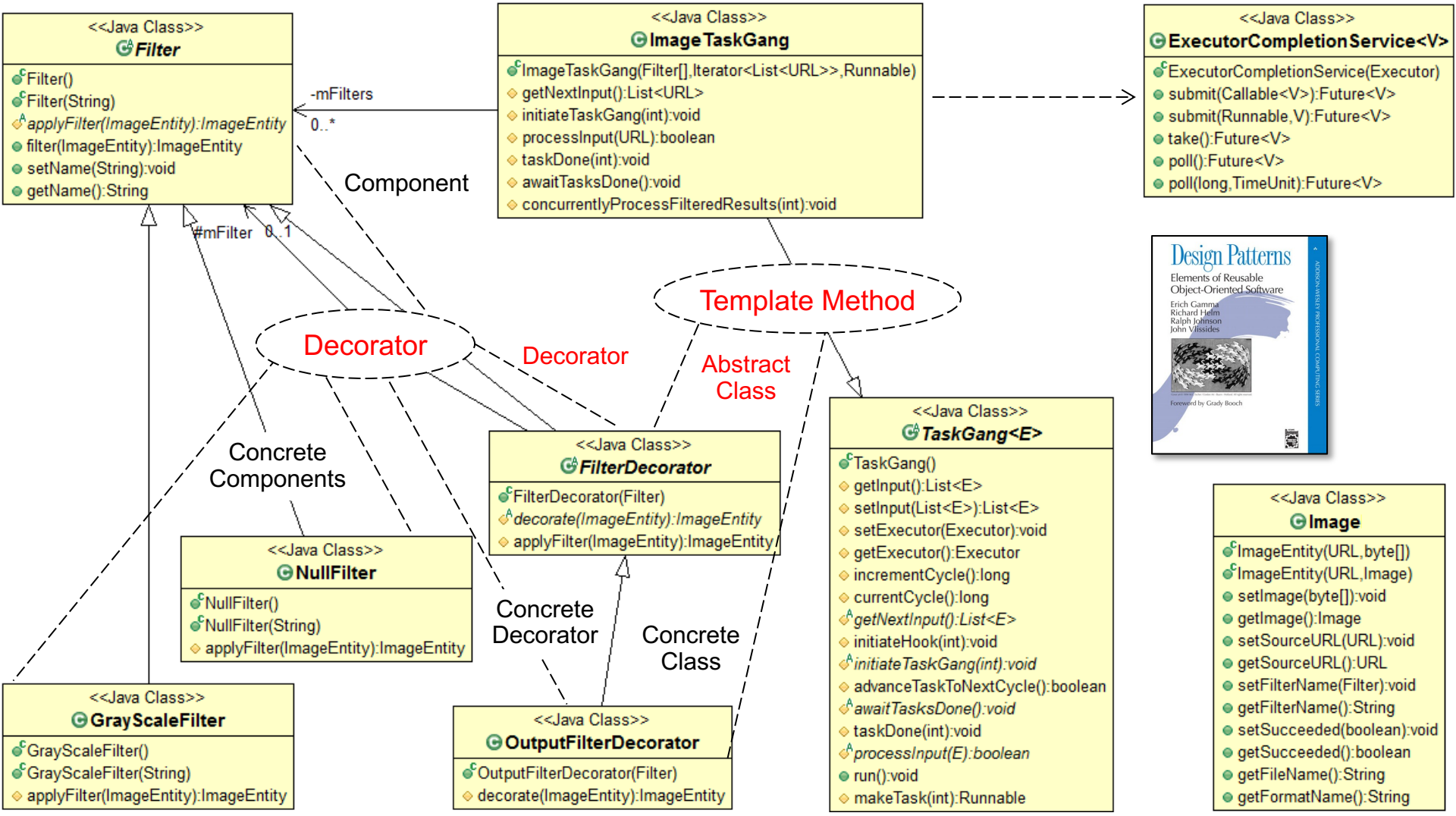
Analysis of the FilterDecorator Class



Analysis of the FilterDecorator Class

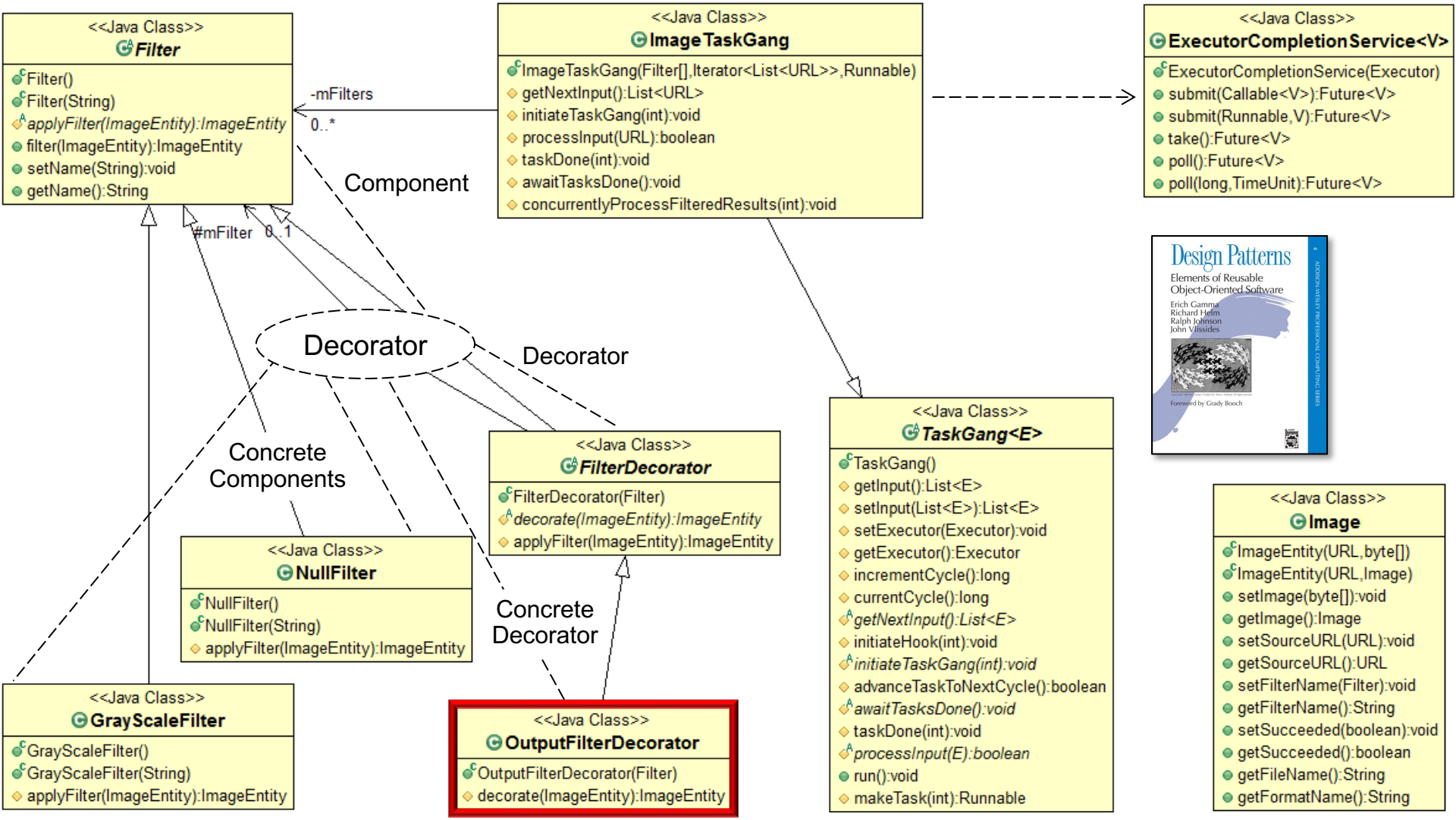


Analysis of the FilterDecorator Class

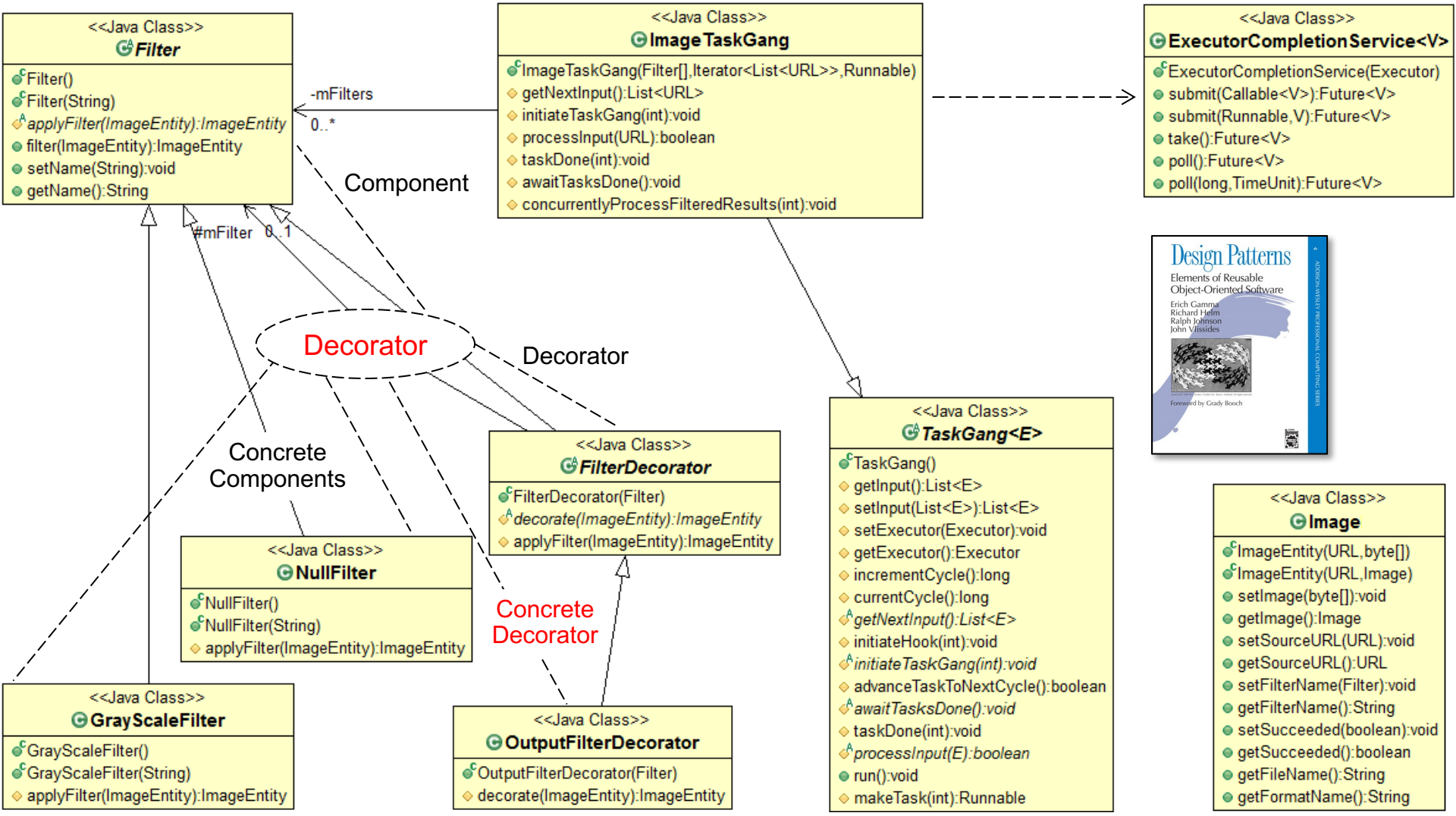


See en.wikipedia.org/wiki/Decorator_pattern & en.wikipedia.org/wiki/Template_method_pattern

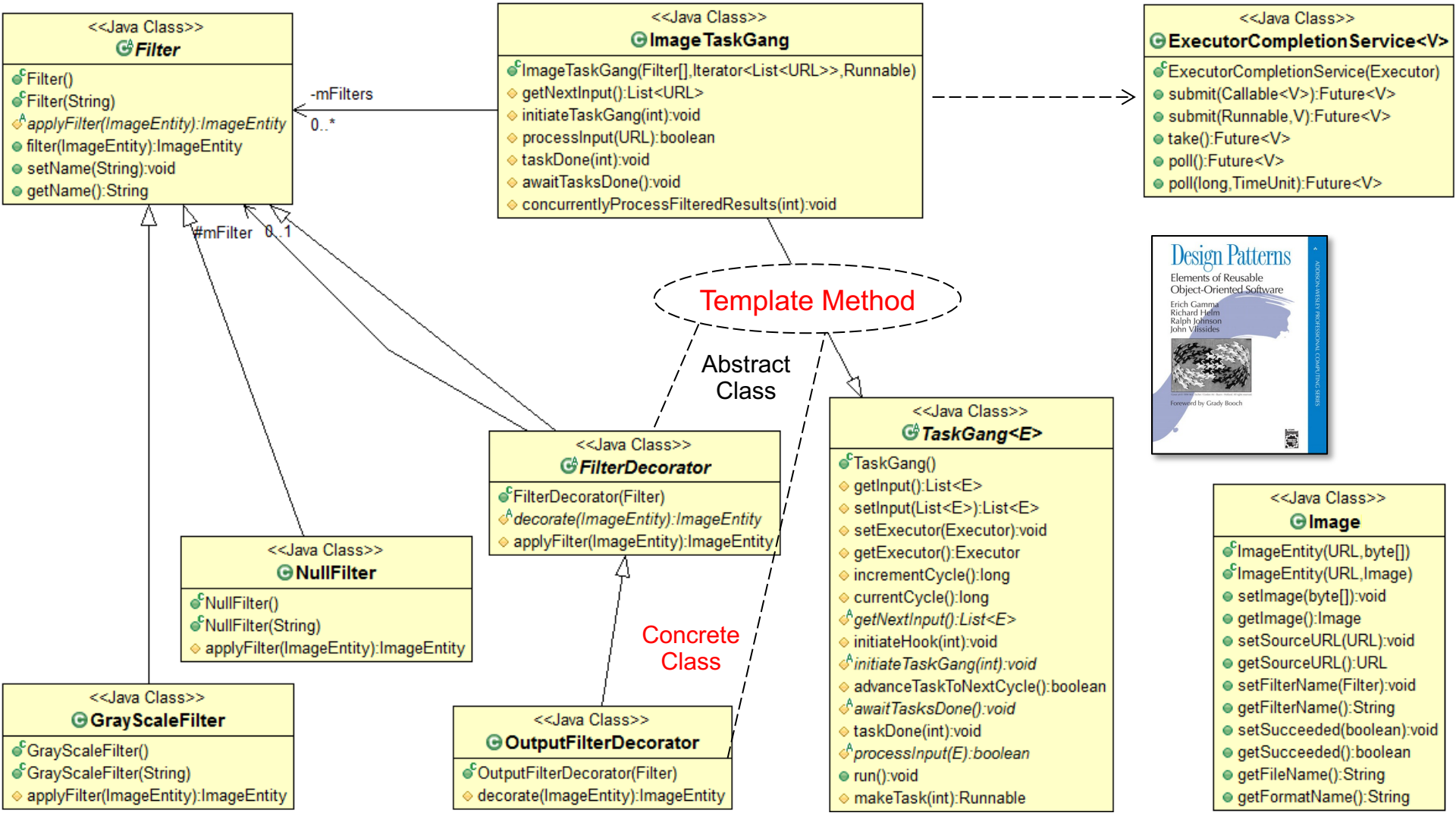
Analysis of the OutputFilterDecorator Class



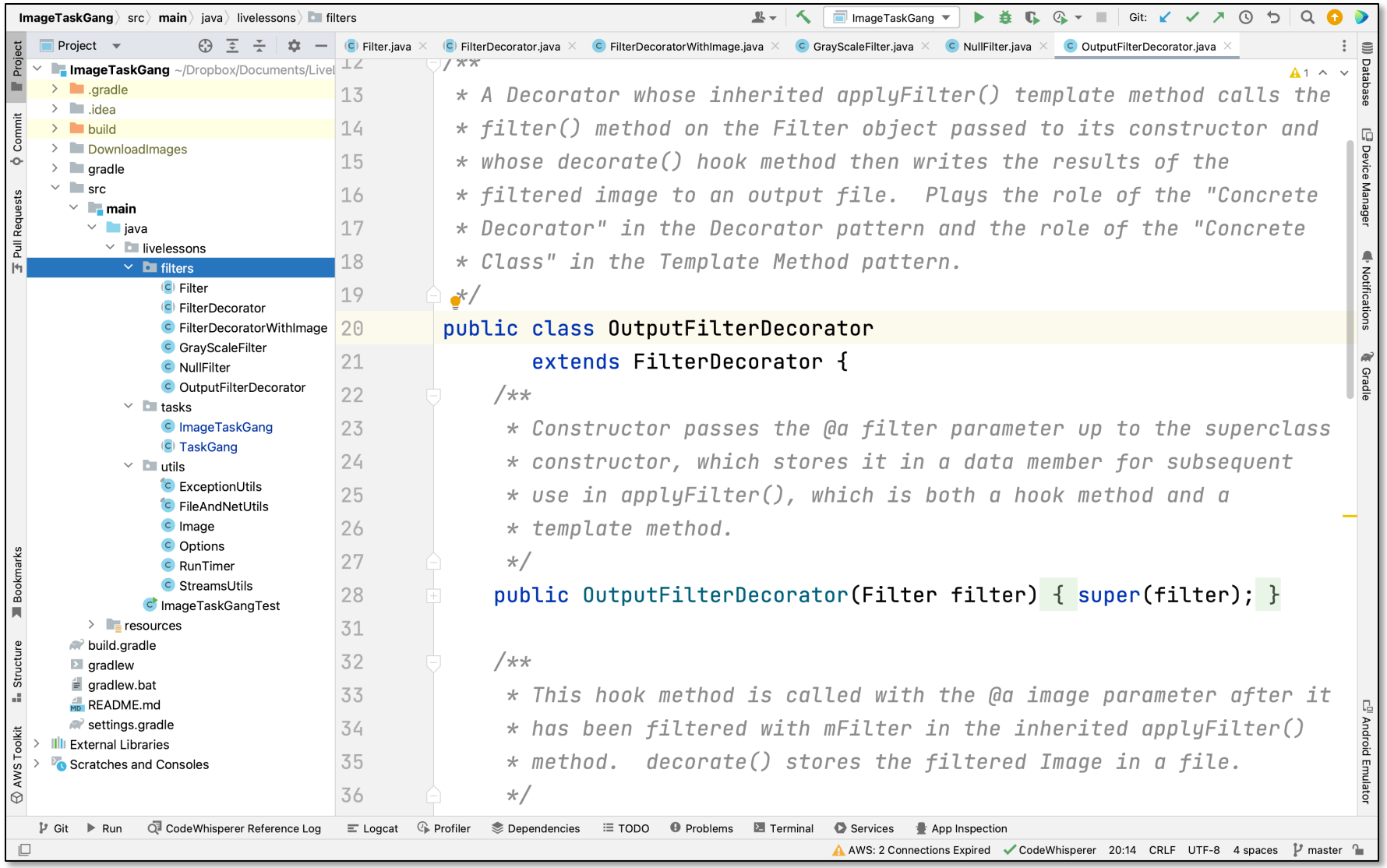
Analysis of the OutputFilterDecorator Class



Analysis of the OutputFilterDecorator Class



Analysis of the Filter Hierarchy Classes



See [ImageTaskGangApplication/app/src/main/java/example/imagetaskgang/filters]

End of Analysis of the Filter Class Hierarchy