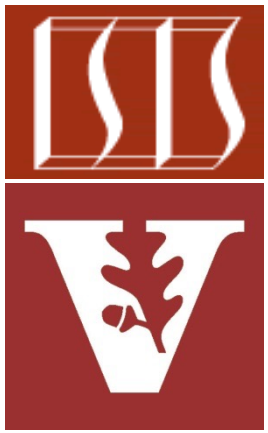
Analyzing the Image TaskGang Class



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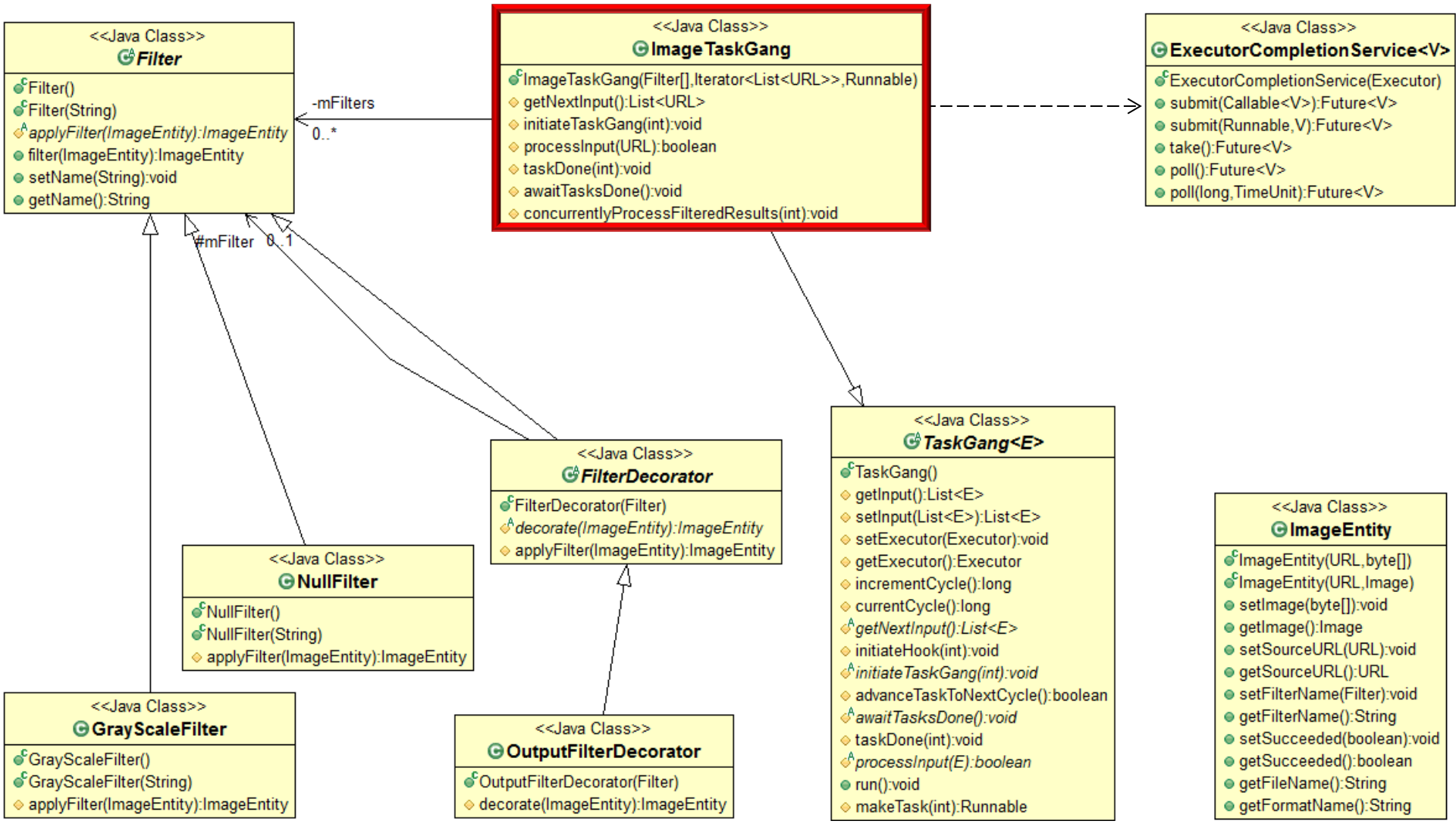
Learning Objectives in this Part of the Lesson

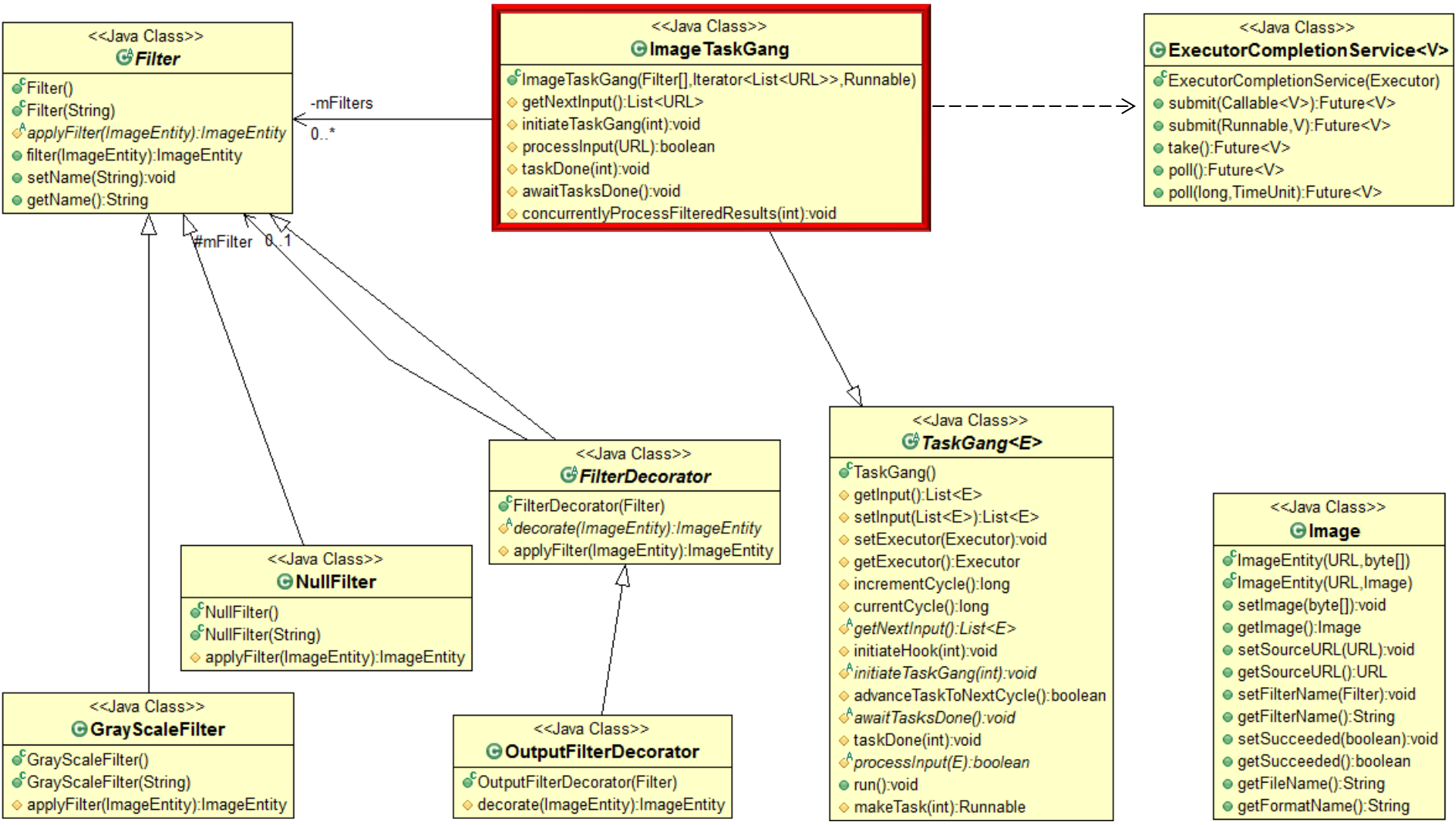
- Understand the pattern-oriented software implementation of the ImageTask Gang class, which extends the abstract TaskGang superclass



See ImageTaskGang/src/main/java/livelessons/tasks/ImageTaskGang.java

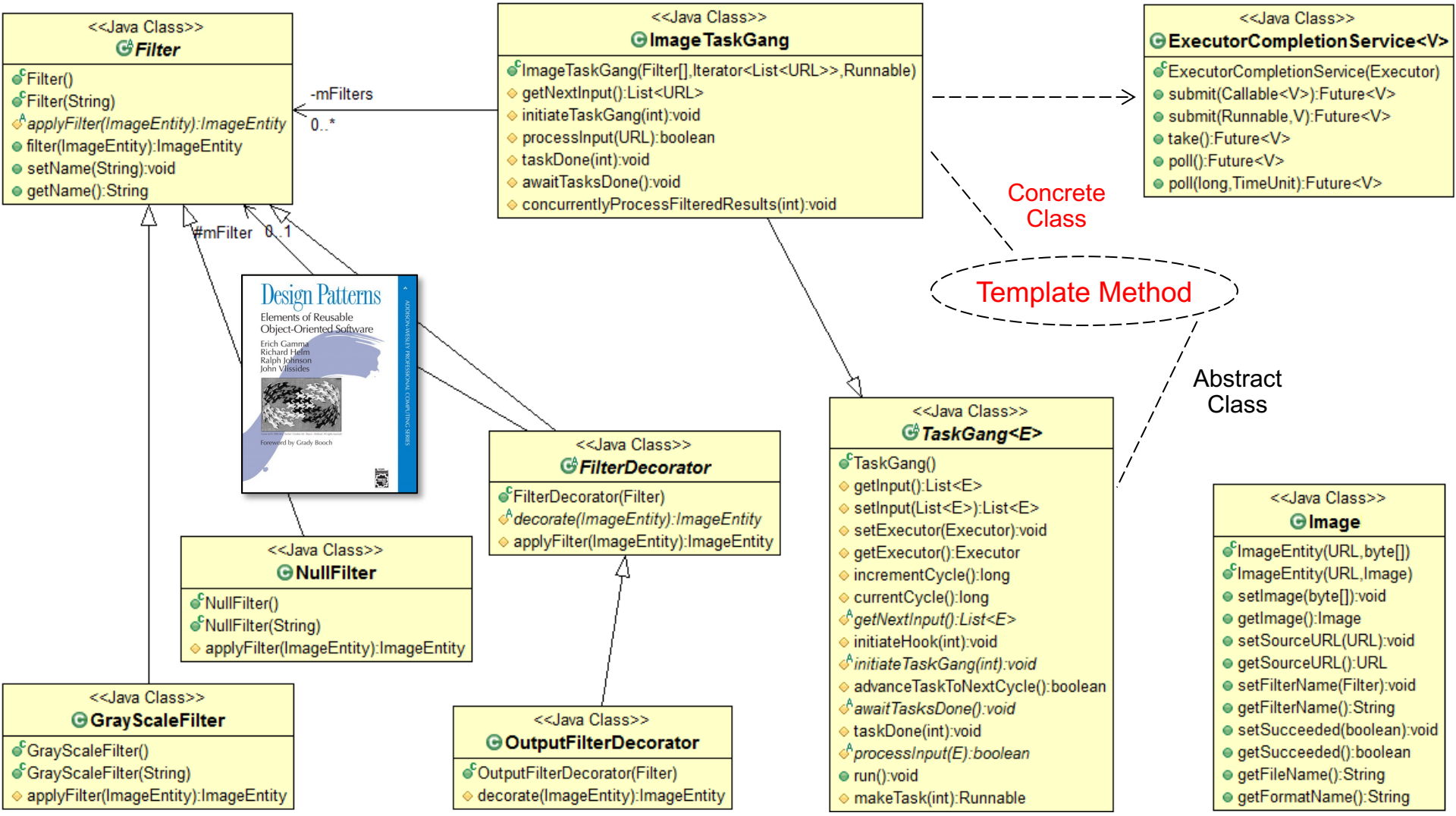
Analysis of the ImageTask Gang Class Source Code

Analysis of the ImageTaskGang Class



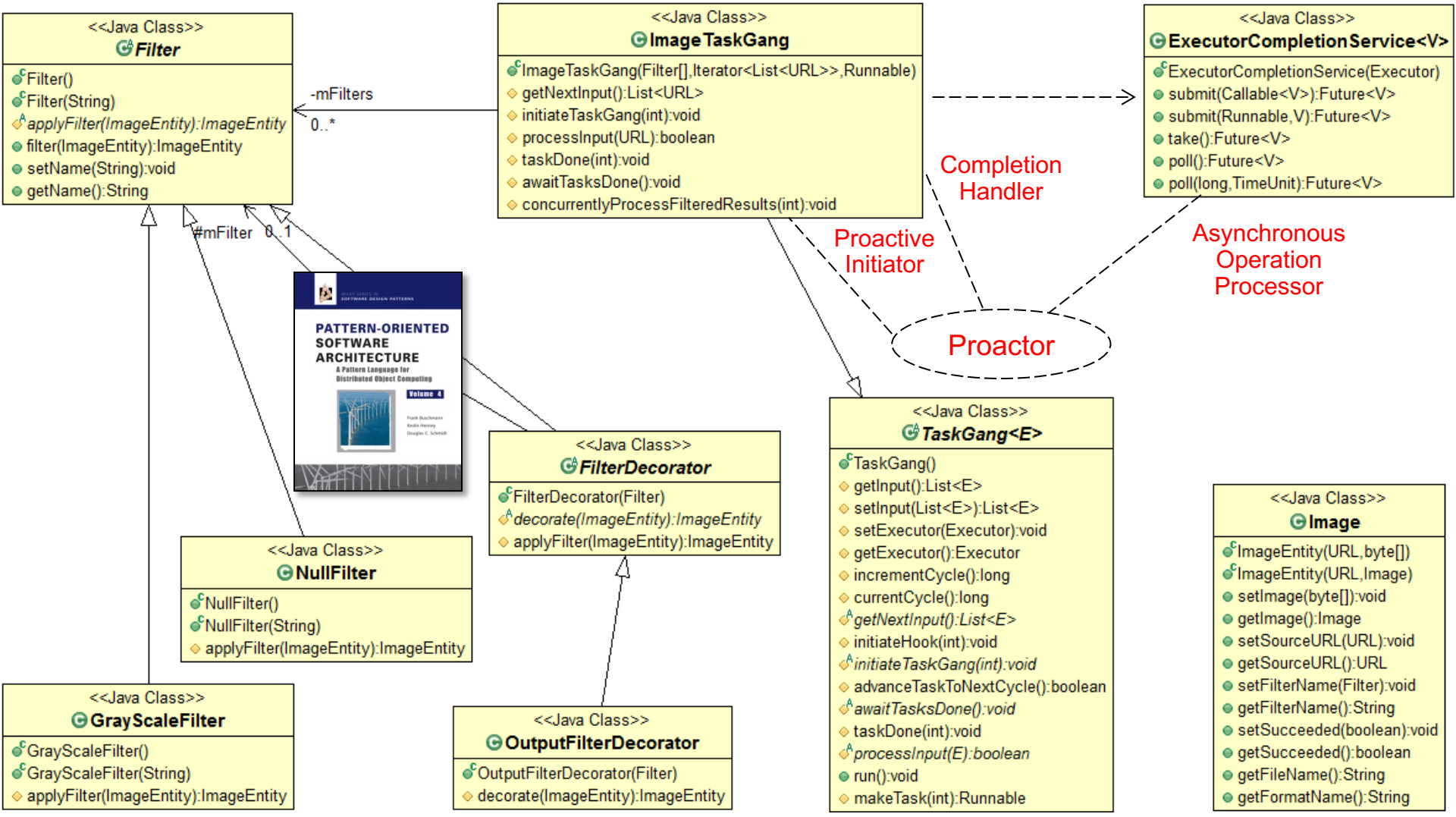
Uses Java ExecutorCompletionService to concurrently download images from web servers, apply image processing filters, & store the results

Analysis of the ImageTaskGang Class



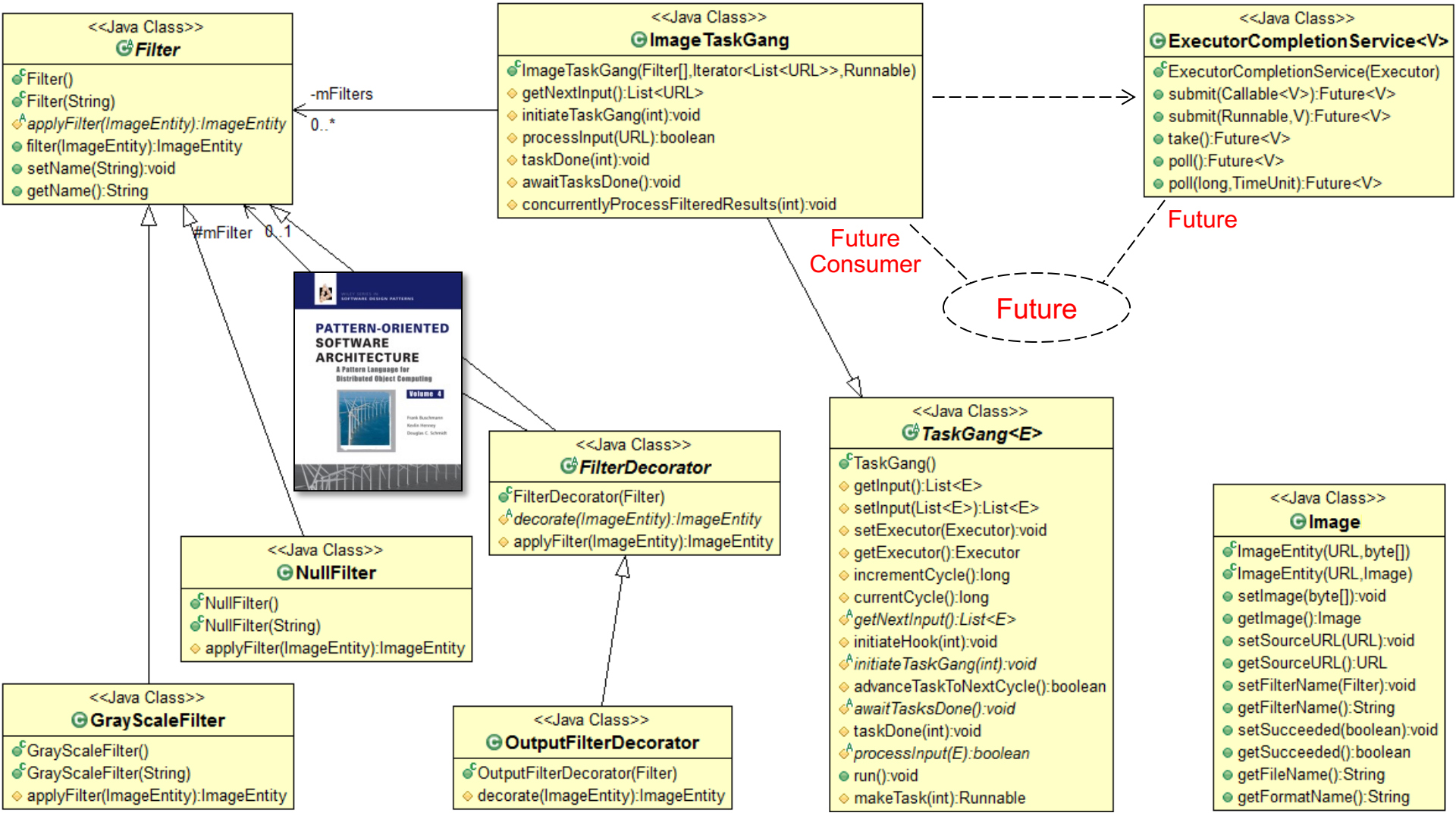
Template Method defines the skeleton of an algorithm in a method, deferring certain steps to subclass methods

Analysis of the ImageTaskGang Class



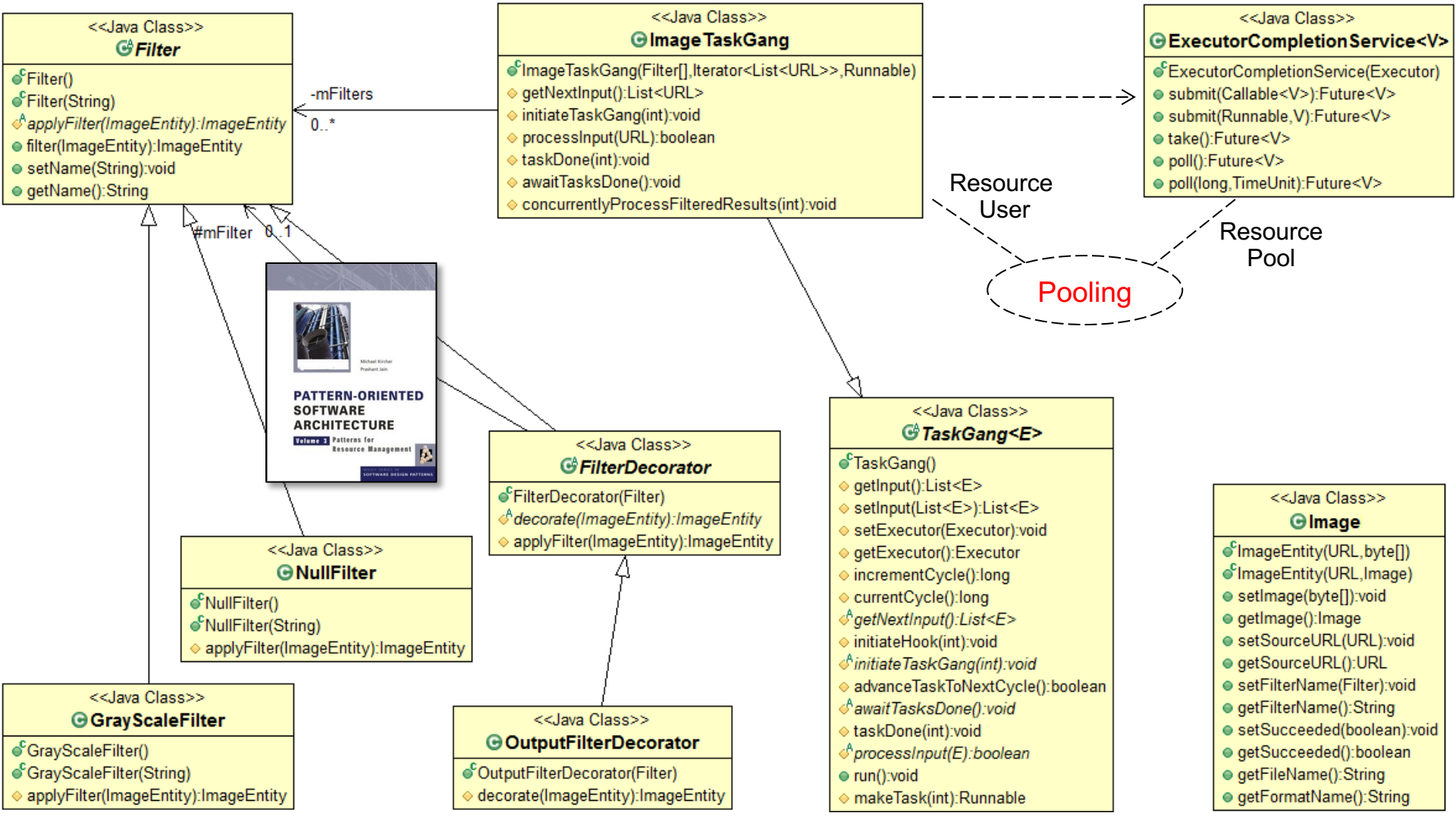
Proactor separates the initiation of asynchronous operations from their handling, enabling efficient & scalable event-driven processing

Analysis of the ImageTaskGang Class



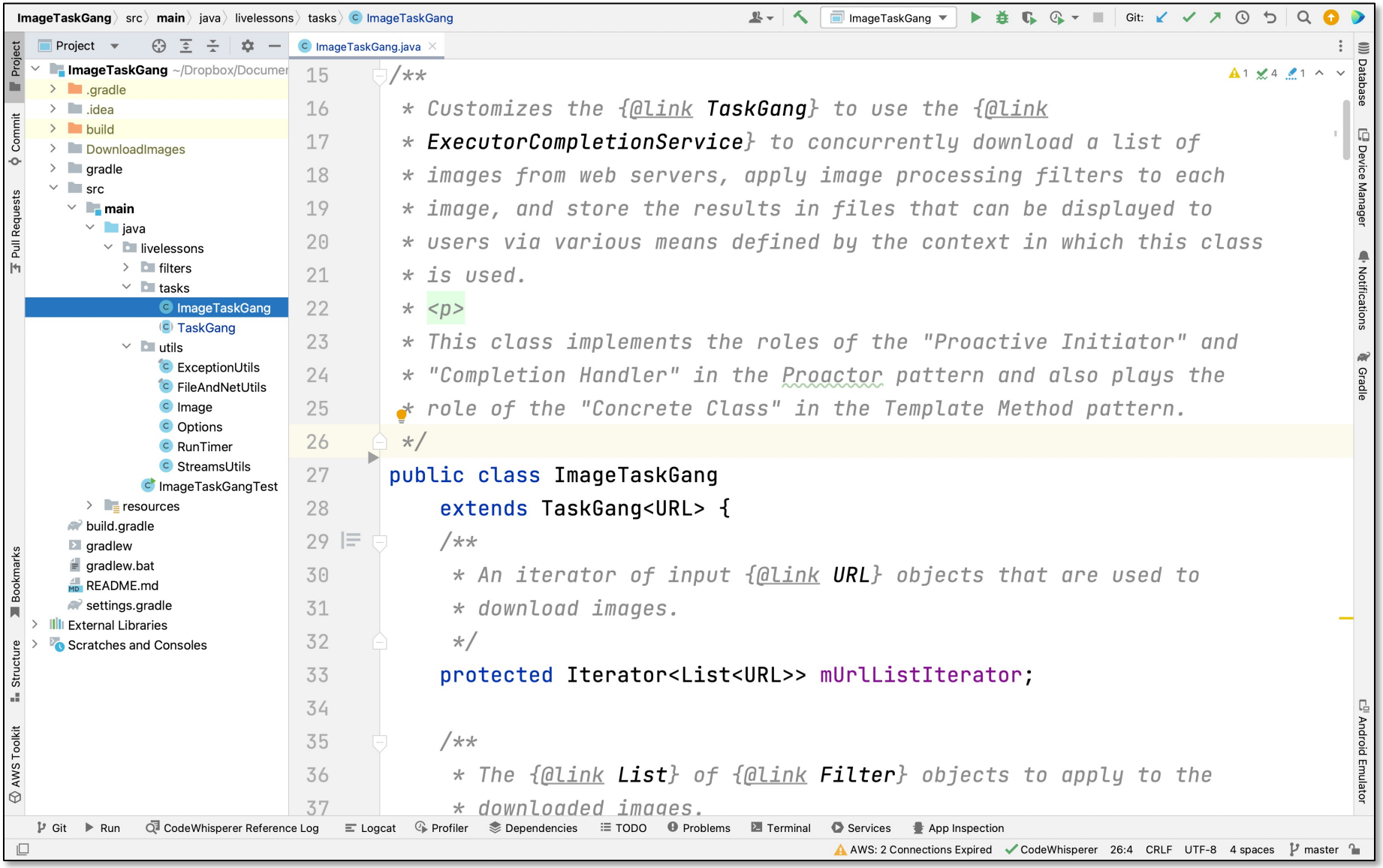
Future provides a proxy for a result that may not be available yet, allowing a program to continue execution without blocking until the result is needed

Analysis of the ImageTaskGang Class



Pooling manages multiple worker threads & optimizes their acquisition & release

Analysis of the ImageTaskGang Class



See [ImageTaskGang/src/main/java/livelessons/tasks/ImageTaskGang.java]

End of Analysis of the ImageTaskGang Class