Wrapping Up the Java Executor Framework

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Learning Objectives in this Lesson

• Put all the pieces together
Summary of the Java Executor Framework
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- Java’s Executor framework decouples the creation & management of threads from application logic.

### Cached (Variable-sized) Thread Pool

### Fixed-sized Thread Pool

### Work-stealing Thread Pool
Summary of the Java Executor Framework

- The Java Executor framework forms a big portion of java.util.concurrent

See docs.oracle.com/javase/8/docs/api/java/util/concurrent/package-summary.html
Summary of the Java Executor Framework

- This framework applies many POSA concurrency & GoF design patterns

See en.wikipedia.org/wiki/Concurrency_pattern & en.wikipedia.org/wiki/Design_Patterns
Summary of the Java Executor Framework

There are surprisingly few Java synchronizers used in the Java executor framework.

See [en.wikipedia.org/wiki/The_Few](en.wikipedia.org/wiki/The_Few)
Summary of the Java Executor Framework

• There are surprisingly few Java synchronizers used in the Java executor framework

• Instead, it uses a message-passing model

See en.wikipedia.org/wiki/Message_passing
Summary of the Java Executor Framework

- This framework provides an *imperative* model of concurrent object-oriented programming

See [en.wikipedia.org/wiki/Imperative_programming](en.wikipedia.org/wiki/Imperative_programming)
Summary of the Java Executor Framework

• In contrast, the Java parallel streams & completable futures frameworks provide a *declarative* model of parallel functional programming.

End of Wrapping Up the Java Executor Framework