Walkthrough of the Java ShutdownOnFailure Code

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Learning Objectives in this Part of the Lesson

- Understand Java's structured concurrency model
- Recognize the classes used to program Java's structure concurrency model
- Evaluate the design & performance of various Java concurrency models
- Learn how StructuredTaskScope is implemented
  - Focus on ShutdownOnFailure

```
public class StructuredTaskScope<T>
            implements AutoCloseable {
    private static final VarHandle FUTURES;
    static {
        try {
            MethodHandles.Lookup l = MethodHandles.lookup();
            FUTURES = l
                .findVarHandle( recv: StructuredTaskScope.class,
                                name: "futures",
                                type: Set.class);
        } catch (Exception e) {
            throw new InternalError( cause: e);
        }
    }

    private final ThreadFactory factory;
    private final ThreadFlock flock;
    private final ReentrantLock shutdownLock =
        new ReentrantLock();
```

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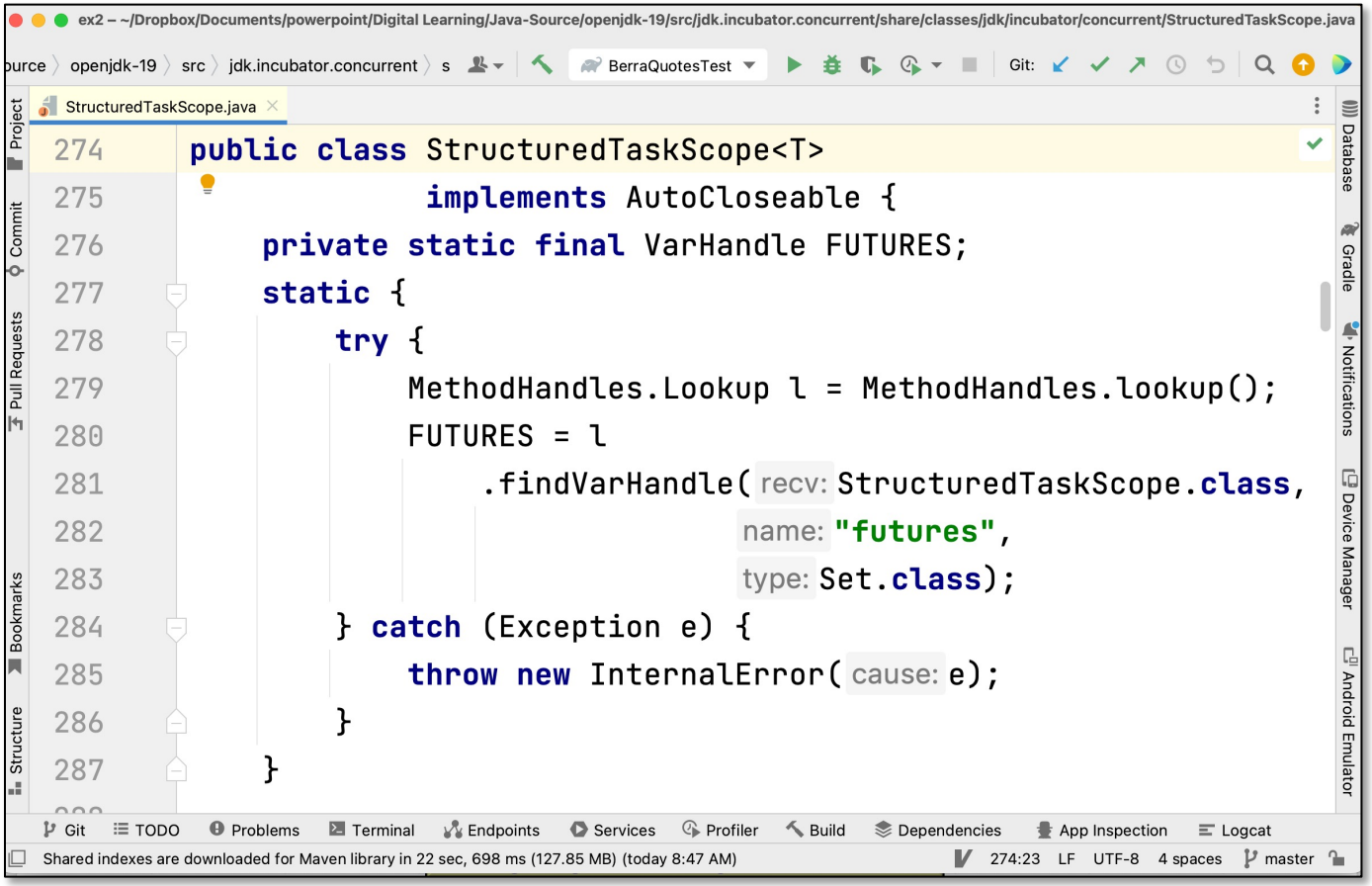

See jdk.java.net/java-se-ri/19

End of Walkthrough of Java StructuredTaskScope Code