Applying Java Platform Threads & Virtual Threads: Case Study ex15

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Learning Objectives in this Lesson

- Know the differences between Java platform & virtual threads
  - Be aware of how to create Java platform & virtual threads
  - Understand how to program Java virtual & platform Thread objects

```
Thread makeThread
            (Runnable runnable,
             boolean virtual) {
  var thread = virtual
    ? Thread.ofVirtual()
    : Thread.ofPlatform();

  return thread
    .unstarted(runnable);
}
```

This case study demonstrates how to create, start, & use virtual & platform Thread objects in very modern Java (i.e., Java 19+)

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It also showcases the difference in performance of Java virtual & platform Thread objects

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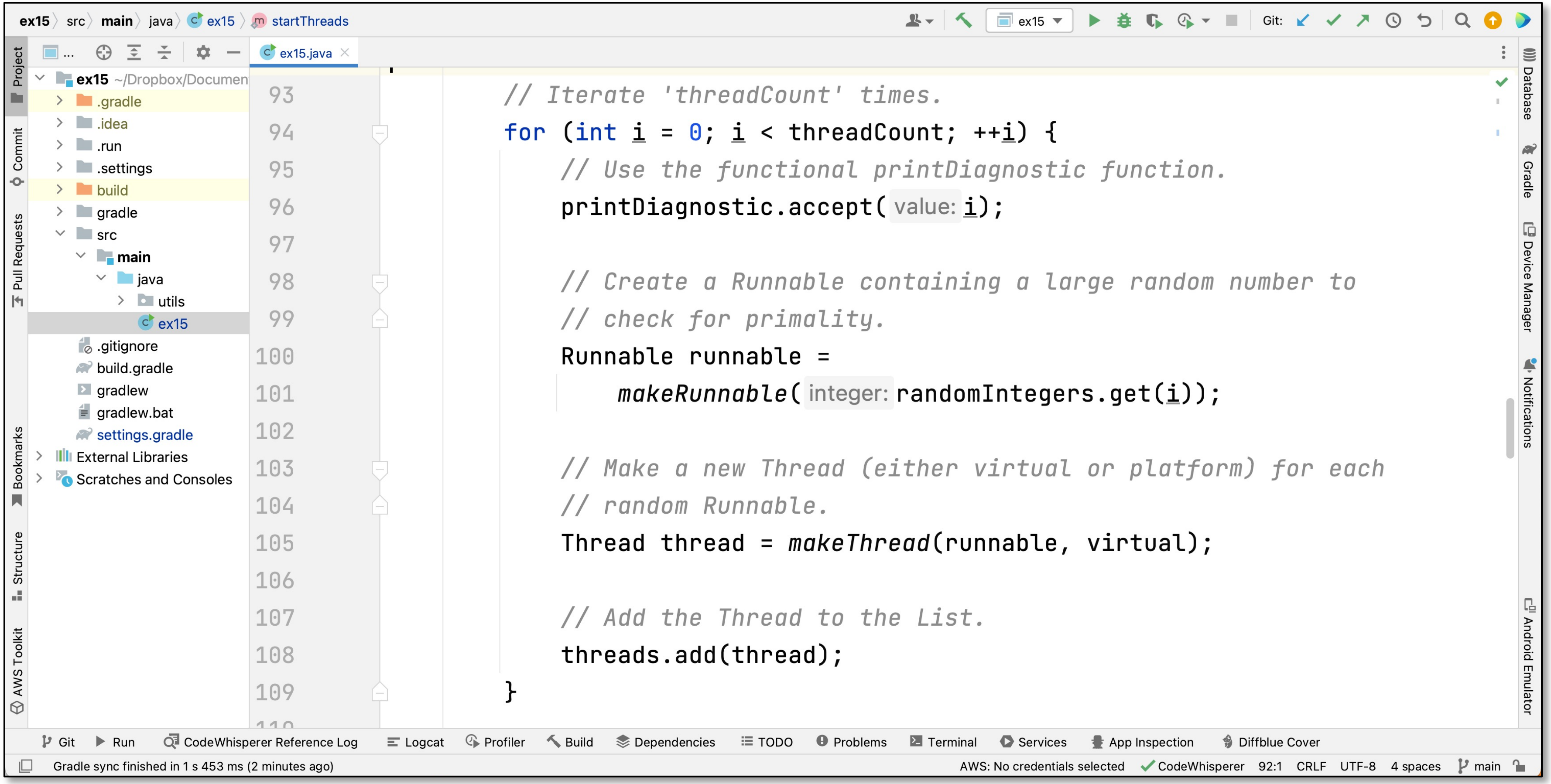

```java
    // Iterate 'threadCount' times.
    for (int i = 0; i < threadCount; ++i) {
        // Use the functional printDiagnostic function.
        printDiagnostic.accept( value: i);

        // Create a Runnable containing a large random number to
        // check for primality.
        Runnable runnable =
            makeRunnable( integer: randomIntegers.get(i));

        // Make a new Thread (either virtual or platform) for each
        // random Runnable.
        Thread thread = makeThread(runnable, virtual);

        // Add the Thread to the List.
        threads.add(thread);
    }
```

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See github.com/douglascraigschmidt/ModernJava/tree/main/FP/ex15

End of Applying Java Platform Threads & Virtual Threads: Case Study ex15