

# The FileCount Case Study: FileCounterParallelStream

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# Learning Objectives in this Part of the Lesson

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- Understand the design of the FileCounter case study
- Walkthrough the program implementation
  - Main driver & associated helper classes
  - FileCounterForkJoinTask
  - FileCounterSequentialStreamTask
  - FileCounterParallelStream
    - Applies the Java parallel streams framework

```
return forks = Stream
    .of(mFile.listFiles())

    .parallel()

    .mapToLong(new
        FileCounterParallelStream
            (file,
             mDocumentCount,
             mFolderCount) .compute());

    .sum();
```

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# Walkthrough of the FileCounterParallelStream

# Walkthrough of the FileCounterParallelStream

```
13 public class FileCounterParallelStream
14     extends AbstractFileCounter {
15     /**
16      * Constructor initializes the fields.
17      */
18     public FileCounterParallelStream(File file) { super(file); }
19
20
21     /**
22      * Constructor initializes the fields (used internally).
23      */
24
25     private FileCounterParallelStream(File file,
26                                       AtomicLong documentCount,
27                                       AtomicLong folderCount) {
28         super(file, documentCount, folderCount);
29     }
30
31     /**
```

The IDE interface shows the project structure on the left, with the file `FileCounterParallelStream.java` selected. The code editor displays the class definition. The constructor `public FileCounterParallelStream(File file) { super(file); }` is highlighted in yellow. The IDE also shows various toolbars and a status bar at the bottom.

See [Folders/ForkJoin/src/main/java/counters/FileCounterParallelStream.java](#)

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# End of the FileCount Case Study: FileCounterParallelStream