Technische
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Exercise 05: Data structures

In this exercise, we will be using the `List`, `Set` and `Map` data structures provided by the Java API. Furthermore, the `Exercise05.CorpusReader` class is already implemented, which provides a `thesisTitleIterator` static method. The iterator returned there provides around 380 alphabetically sorted titles of final theses in the Faculty of Computer Science (covering a period of around 10 years).

During the exercise, we will calculate a lot of statistics on these titles. When doing so, it is essential to break up a string into the individual words, using the `split` method:

```java
String title = "Conception and Design of an Application";

// split after blank spaces, and iterate over
for (String w : title.split(" "))
    System.out.println(w);
```

As you know from the lecture, `List` and `Set` are `Collections`, and `Map` can also provide collections via `entrySet`, `keySet` and `values`. We can sort them with `Collections.sort` as well as with a `Comparator`.

Task 1

a) Complete the implementation of the CorpusAnalyser class according to the JavaDoc comments provided.
b) Verify your implementation based on the test cases provided.