7 0 0 0
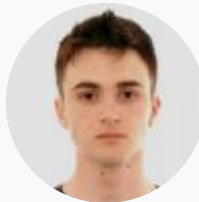Score: 17.500 (=100.0%)

1 🙂 2 🙂 3 🙂 4 🙂 5 🙂 6 🙂 7 🙂

Dominik
Barukčić
db53832@fer.hr
0036538320

4 days
23:51:55

Done

Score: 2.500 (=100.0%)
Id: 42201
Potrebno je napraviti klasu `JavaProjectFileVisitor` koja nasljeđuje `SimpleFileVisitor<Path>`. Klasa mora imati navedene public metode:

```java
public JavaProjectFileVisitor(Set<String> extensionFilter);
public Map<String, Set<Path>> getProjectPathsPerExtension()
```

Kroz konstruktor klasa dobiva skup koji sadrži popis ekstenzija. Metoda `getProjectPathsPerExtension` se izvodi isključivo za datoteke koje NE odgovaraju filteru ekstenzija (tj. njihove ekstenzije se ne nalaze u skupu). Ključevi u mapi su ekstenzije datoteka (npr. ".txt", ".java", ".class", ...) dok su vrijednosti skupovi koji sadrže putanje do datoteka.

Pokretanjem koda nad direktorijem koji je prikazan u nastavku očekujemo prikazane rezultate:

```java
JavaProjectFileVisitor visitor = new JavaProjectFileVisitor(Set.of(".pdf"));
File f = new File("folder1");
Files.walkFileTree(f.toPath(), visitor);
Map<String, Set<Path>> map = visitor.getProjectPathsPerExtension();
for(String key : map.keySet()){
  Set<Path> list = map.get(key);
  for(Path p : list)
    System.out.println("Key: " + key + " - " + p);
}
```

Ispis:

```
Key: .txt - folder1/a.txt
Key: .txt - folder1/folder2/b3.txt
Key: .java - folder1/folder2/b1.java
Key: .java - folder1/folder2/b2.java
```

Izgled direktorija:

```
+--folder1
|  +--a.txt (10 B)
|  +--folder2
|  |  +--b1.java (11 B)
|  |  +--b2.java (15 B)
|  |  +--b3.txt (100 B)
|  |  +--b4.pdf (150 B)
|  |  +--folder3
```

Napomena: Klasu `JavaProjectFileVisitor` napisati bez modifikatora vidljivosti i kopirati u prostor za rješenje bez navođenja paketa kojem pripada. Na vrhu možete dodavati *importe* iz standardnih Javinih biblioteka. Importe na klase iz predavanja, auditornih i pripreme obrisati prije predaje rješenja. Uočite da programski kod koji predajete **ne smije ništa ispisivati**, nego samo vraća tražene podatke.

Student's answer:

```java
1  import java.io.IOException;
2  import java.nio.file.FileVisitResult;
3  import java.nio.file.Path;
4  import java.nio.file.SimpleFileVisitor;
5  import java.nio.file.attribute.BasicFileAttributes;
6  import java.util.*;
7
8  class JavaProjectFileVisitor extends SimpleFileVisitor<Path> {
9
10     private Set<String> extensionsFilter;
11     private Map<String, Set<Path>> setMap = new HashMap<>();
12
13     public JavaProjectFileVisitor(Set<String> extensionFilter) {
14         this.extensionsFilter = extensionFilter;
15     }
16
17     public Map<String, Set<Path>> getProjectPathsPerExtension() {
18         Map<String, Set<Path>> out = new HashMap<>();
19         for (String ext : setMap.keySet()) { // extensions
20             if(!extensionsFilter.contains(ext)) {
21                 if (out.get(ext) == null) {
22                     out.put(ext, setMap.get(ext));
23                 }
24             }
25         }
26         return out;
27     }
28
29     @Override
30     public FileVisitResult visitFile(Path file, BasicFileAttributes attrs) throws
31         String filename = file.getFileName().toString();
32         int index = filename.lastIndexOf(".");
33         if (index != -1) {
34             String extension = filename.substring(index);
35             if (setMap.get(extension) == null) {
36                 setMap.put(extension, new HashSet<>());
37             }
38             setMap.get(extension).add(file);
39         }
40         return FileVisitResult.CONTINUE;
41     }
42 }
43
44
45
46
47
48
```

Hint: Correct. Well done!

Correct answer:

```
1  This test does not have "show solutions" option enabled.
```

Exam results obtained during submission evaluation:

#	stdin	stdout	expected	stderr	percentage	hint	mode	correct?
1	instanceof	OK	OK	EdgarLibrary v0.11.1	25.00	Correct. Well done!	check elements order : false, case sensitive : false, ignore whitespace : true	true
2	projectPathsPerExtension	OK	OK	EdgarLibrary v0.11.1	100.00	Correct. Well done!	check elements order : false, case sensitive : true, ignore whitespace : true	true

Student's result   Correct result

Rerun student's code