2/15/24, 11:36 AM Folder.java

## assignment-1\_1\src\main\java\package4\Folder.java

```
1
    package main.java.package4;
2
3
   import java.util.ArrayList;
4
   import java.util.List;
5
6
   public class Folder {
7
        private String folderName;
8
        private List<File> files;
9
        private List<Folder> subFolders;
10
11
        public Folder(String folderName){
12
            this.folderName = folderName;
13
            this.files = new ArrayList<>();
14
            this.subFolders = new ArrayList<>();
15
        }
16
17
        public String getFolderName() {return folderName;}
18
        public List<File> getFiles() {return files;}
19
        public List<Folder> getSubFolders() {return subFolders;}
20
21
        public void setFolderName(String folderName) {this.folderName = folderName;}
22
        public void setFiles(List<File> files) {this.files = files;}
23
        public void setSubFolders(List<Folder> subFolders) {this.subFolders = subFolders;}
24
25
        public void addFile(File file){files.add(file);}
        public void addSubFolder(Folder subFolder){subFolders.add(subFolder);}
26
27
28
        public void delete(){
29
            for (File file: files){
30
                System.out.println("Deleting file: " + file.getFileName());
31
32
            files.clear();
33
34
            for (Folder subFolder: subFolders){
                System.out.println("Deleteing folder: " + subFolder.getFolderName());
35
36
                subFolder.delete();
37
38
            subFolders.clear();
39
            this.files.clear();
40
41
            this.subFolders.clear();
42
43
            // Added this method to also remove folder itself
44
            removeFromParent(this);
45
        }
46
47
        public void print(){
48
            System.out.println("Folder: " + folderName);
49
            for (File file: files){
50
                file.print();
51
            }
52
            for (Folder subFolder: subFolders){
53
                subFolder.print();
```

```
54
            }
55
56
57
        private void removeFromParent(Folder folder){
58
            if (parent != null){
59
                parent.subFolders.remove(folder);
60
            }
61
        }
62
63
        // added this portion to keep track of parent
        private Folder parent;
64
65
        public Folder getParent() {return parent;}
        public void setParent(Folder parent) {this.parent = parent;}
66
67
   }
```