

HW4 Report

CSE222

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Test method:

```
public static void test() {
    fs.createDirectory("home", currentDirectory);

    fs.createDirectory("desktop", currentDirectory);

    fs.createFile("project.txt", currentDirectory);
    System.out.println();

    System.out.println("After adding 2 directory, 1 file");
    fs.listContent(currentDirectory);

    fs.deleteFile("project.txt", currentDirectory);
    System.out.println();

    System.out.println("After delete file");
    fs.listContent(currentDirectory);

    fs.deleteDirectory("desktop", currentDirectory);
    System.out.println();

    System.out.println("After delete directory");
    fs.listContent(currentDirectory);

    System.out.println();
    fs.sortDirectoryByDate(currentDirectory);

    System.out.println();
    fs.createDirectory("path1", currentDirectory);
    fs.createDirectory("path2", currentDirectory);

    fs.createFile("file1.txt", currentDirectory);

    System.out.println();
    fs.printDirectoryTree(fs.getRoot(), "    ");

    System.out.println("*****");

    currentDirectory = fs.changeDirectory("root/home");

    System.out.println("Current directory: " + currentDirectory.getName());

    System.out.println();
}
```

```

        System.out.println("Search and found: " + fs.search("path1",
fs.getRoot()).getName());

        System.out.println();
        Directory d = (Directory) fs.search("home", (Directory) fs.getRoot());
        fs.moveelement("file1.txt", d);
        System.out.println();

        System.out.println("After moving file1.txt root to home");
        fs.printDirectoryTree(fs.getRoot(), "    ");
    }
}

```

Test method output:

```

PS C:\Users\e.kabalci2018\Desktop\hw4> java -cp "C:\Program Files\Java\jdk-17.0.12\bin\
\java.exe" '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\e.kabalci2018\Desktop\hw4\bin' 'Main'

```

After adding 2 directory, 1 file

```

*Directory: root
* Directory: home
* Directory: desktop
* File: project.txt

```

After delete file

```

*Directory: root
* Directory: home
* Directory: desktop

```

After delete directory

```

*Directory: root
* Directory: home

```

Name: homeDate: 2024-04-21 23:52:51.614

```

* home
* path1
* path2
- file1.txt
*****

```

Current directory: home

Search and found: path1

After moving file1.txt root to home

```

* home
- file1.txt
* path1
* path2

```

PS C:\Users\e.kabalci2018\Desktop\hw4>

Output:

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
4
```

```
Enter directory name to create: home
Directory created: home
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
4
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
3
```

```
Enter file name to create: project1.txt
File created: project1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
2
```

```
*Directory: root
* Directory: home
* Directory: desktop
* File: project1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
3
```

```
Enter file name to create: file1.txt
File created: file1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
2
```

```
*Directory: root
* Directory: home
* Directory: desktop
* File: project1.txt
* File: file1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
5
```

```
Enter file name to delete: file1.txt
File deleted: file1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
2
```

```
*Directory: root
* Directory: home
* Directory: desktop
* File: project1.txt
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
4
```

```
Enter directory name to create: direct1
Directory created: direct1
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
2
```

```
*Directory: root
* Directory: home
* Directory: desktop
* File: project1.txt
* Directory: direct1
```



```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
6
```

```
Enter directory name to delete: direct1
Directory deleted: direct1
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
2
```

```
*Directory: root
* Directory: home
* Directory: desktop
* File: project1.txt
```

Current directory: /root
===== File System Management Menu =====

1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit

Please select an option:

7

Current directory: root
Enter the name of file/directory to move:home
Enter new directory pathroot/desktop
File moved: home to root/desktop

Current directory: /root
===== File System Management Menu =====

1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit

Please select an option:

9

- * desktop
- * home
- project1.txt

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
10

Name: desktopDate: 2024-04-22 00:04:09.182
Name: project1.txtDate: 2024-04-22 00:04:36.321
```

```
Current directory: /root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
1

Current directory: root
Enter new directory path: root/desktop
Directory changed to: desktop
```

```
Current directory: /root/root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
8
```

```
Enter search query: home
Search result:Found
```

```
Current directory: /root/root
===== File System Management Menu =====
1. Change directory
2. List directory contents
3. Create file
4. Create directory
5. Delete file
6. Delete Directory
7. Move file/directory
8. Search file/directory
9. Print directory tree
10. Sort contents by date created
11. Exit
Please select an option:
11
```

- ➔ Javadoc is implemented
- ➔ Makefile is implemented
- ➔ Time complexities are implemented in Javadoc

Class Diagram

