Company Lockers Pvt. Ltd.

Product LockedMe.com

Prototype of the Application

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GitHub: https://github.com/Instantgaming2356/JAVAFSD-Project01

The prototype of the application is operated as a CLI (Command Line Program) without GUI. Its usage is to do file operations such as create new files along with content, delete a file or search a file from a specified directory and list them afterward in sorting order.

The implementation is done with the help of Java 8 and IDE IntelliJ.

Sprint Planning

The Implementation is done in two sprints which are mentioned below:

Sprint 1:

- Clarify the specification and requirements.
- Implement view content mechanism.
- Implement list of all files in sorted order.
- Implement functionality to close the program safely.

Sprint 2:

- Implement functionality to add create files along the content.
- Implement functionality to delete a file if it is present in that user specified directory.
- Implement functionality to search a file in the same directory.
- Documentation

Documentation of the functionality:

Here is the different Options that user can choose to perform certain file operation of the program.

Welcome Screen

This is the first screen that user will interact.

List all files

This option will let user to see list of files in the specified directory in sorted order.

```
Main Menu

1. Show Files

2. Show File Options Menu

3. Quit
Enter the choice : 1

B.txt
Demo.txt
Sample.txt
```

File Operations

This option will let user to provide several file operations with.

```
Main Menu

1. Show Files

2. Show File Options Menu

3. Quit
Enter the choice : 2

File Options Menu

1. Add A File

2. Delete A File

3. Search A File

4. Return to Menu
Enter the choice :
```

Create a file

This will allow user to create a file along with content inside it.

```
File Options Menu

1. Add A File

2. Delete A File

3. Search A File

4. Return to Menu
Enter the choice : 1

Adding File...
Please Enter the file name with extension to Create : Test1.txt
File Created!!!

Do You Want to add Content

Y
Enter the New Content : Hi Simpillearn
Data is successfully added to the file.
```

Delete a file

This will allow user to delete a file if it is present otherwise it will send a appropriate message.

```
File Options Menu

1. Add A File

2. Delete A File

3. Search A File

4. Return to Menu
Enter the choice : 2

Deleting File...

Please Enter the file name with extension to Delete : 8. txt

File Deleted!!!
```

Search a file

This will allow user to input a file name along with extension to begin the search procedure and give back the appropriate result.

```
File Options Menu

1. Add A File

2. Delete A File

3. Search A File

4. Return to Menu
Enter the choice : 3

Searching the file...
Please Enter the Filename:

**Testal. Oxf

You are searching for a file named: Test1.txt

Found Test1.txt
```

Quit

This will allow user to exit from the program safely.

```
File Options Menu

1. Add A File

2. Delete A File

3. Search A File

4. Return to Menu
Enter the choice: 4

Main Menu

1. Show Files

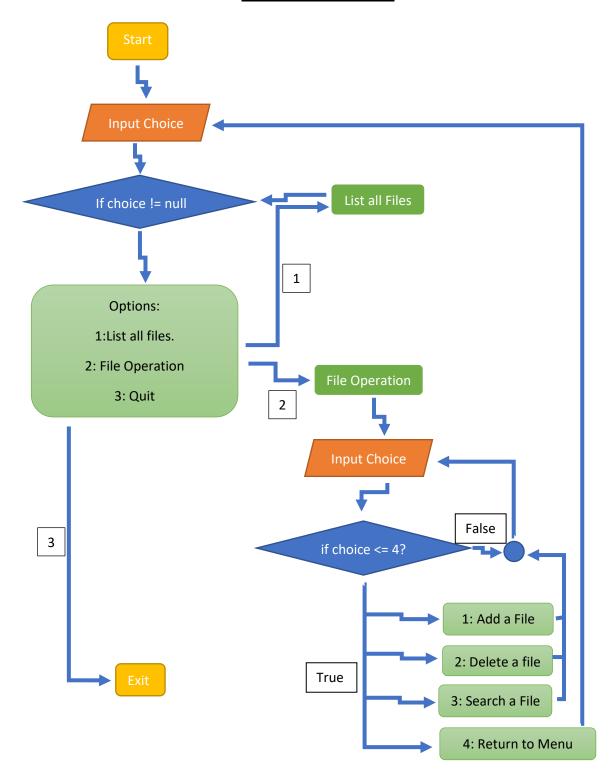
2. Show File Options Menu

3. Quit
Enter the choice: 3

Thank You!!!

Process finished with exit code 0
```

Flow Diagram



Core Concepts used in this project are mostly basic Java libraries such as Class & Objects, Packages, Interfaces, Collections, ArrayList, Access specifier, Try-catch block, File Handling Concepts, Error Exception handling, Inheritance, abstract, final, static methods.

Algorithm

```
Step 1> Start
Step 2> input choice from the user.
Step 3> While choice != 3 then go to step 4.
Step 4> Switch(ch)
        case 1: List all files in the specified directory and go back to step 2.
        case 2: Go to step 5.
        case 3: Go to Step 6.
        default: Return back to step 2.
        [End of switch case block]
[End of while loop]
Step 5> Input another choice sch from the user to perform file operations.
        Step 5.1 > while loop sch != 4 then go to step 5.2.
        Step 5.2> Switch(sch)
                case 1: Add a file.
                case 2: Delete a file.
                case 3: Search a file.
                case 4: Go to step 2.
                default: Return back to step 5.
                [End of switch case block]
        [End of while loop]
Step 6> End the program.
Step 7> Stop
```

Conclusion

- 1: The prototype is robust and platform independent.
- 2: User can easily use the prototype and safely exit out of it.
- 3: The prototype has a good interface with CLI (Command Line Interface).
- 4: As a developer, we can enhance it by introducing several new features such as appending in a file or overwriting a file and the file details for which user selected.
- 5: This prototype though is robust but user can only interact it with terminal or CLI so we can develop a good GUI interface for more better user-friendly.

- 6: This prototype can also be implemented with multithreading to enable better performance.
- 7: And lastly, this prototype can be upgraded by implementing with authentication, validators, and securities patches to make it more versatile and secure in both local environment and global.