

## **Project Phase – 1**

### **Virtual Key for Your Repositories**

#### **Locked.IN**

##### **Project details:**

*This is a console based java application that can list (in ascending order) create, delete and search for files. It does not crash and provides options to exit.*

##### **Developer detail's:**

*This Project is Developed by Aman Garg .*

##### **USES CASES:**

*.The main usage is , that we can add file , delete , search and list file in very efficient way by using nio file classes .*

##### **Link to the GitHub Repository:**

<https://github.com/Virtual-Key-for-Repository/Aman-Garg-Project1.git>

##### **Sprint 1:**

- 1. Design FlowChart of the program*
- 2. Add One Feature:Display Files on Console In Ascending Order*
- 3. Add the First Feature code in Github*

##### **Sprint 2:**

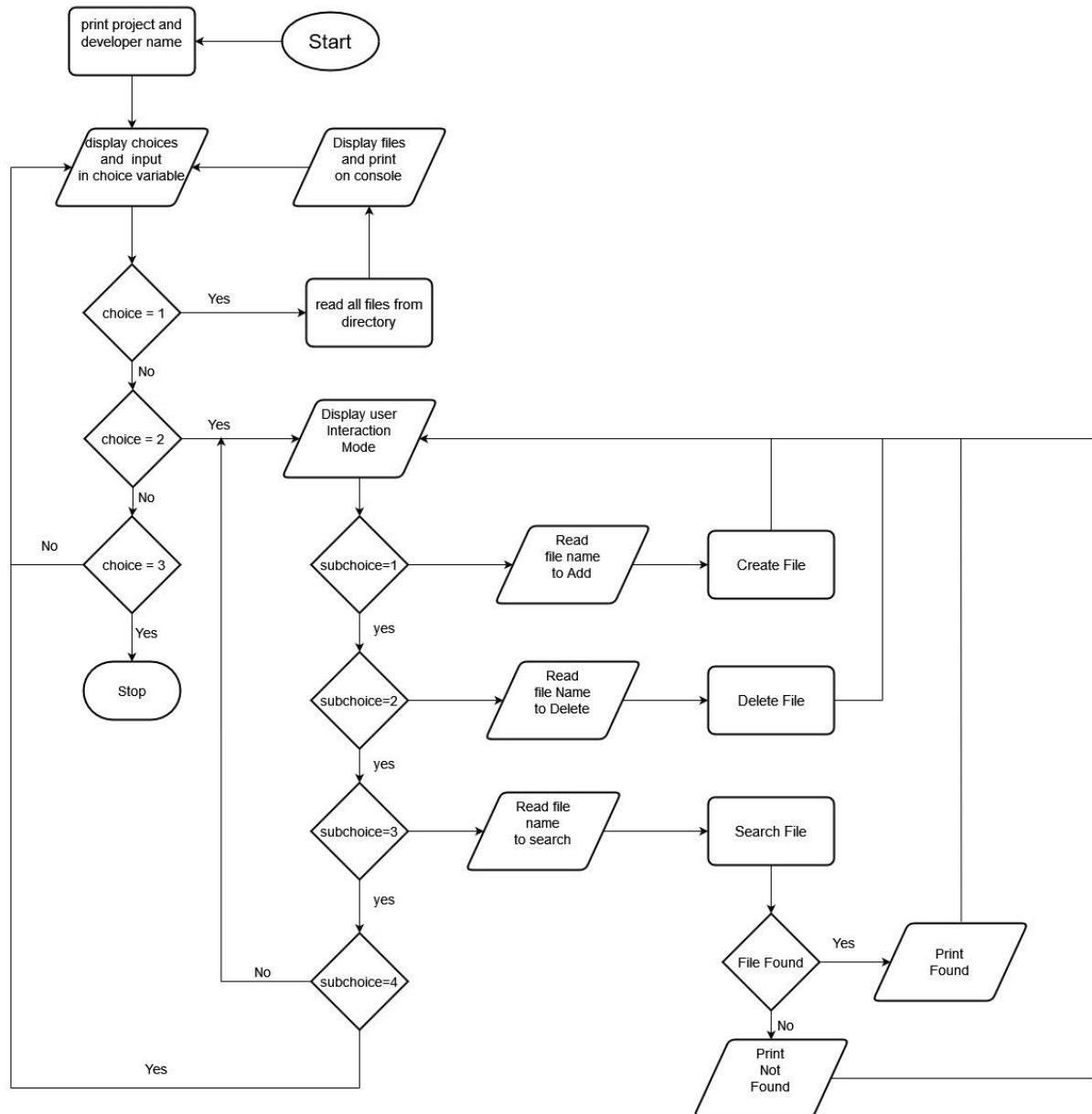
## *Second Feature: User Interaction Mode*

- a. Create File Method*
  - b. Search File Method*
  - c. Delete File Method*
  - d. Option For main Menu*
- 2. Exit Option*

## **Algorithm:**

- 1) Start*
- 2) Print Options to list, manage files and exit*
- 3) If choice is 1*
  - a) Read all files in the directory*
  - b) Sort files in ascending order using Arrays.Sort*
  - c) Print all the files*
- 4) If the choice is 2*
  - a) Print Options to add, search and delete files*
  - b) If the subchoice is 1*
    - i) Accept file name from the user*
    - ii) Create a new file with that name*
  - c) If the subchoice is 2*
    - i) Accept file name from the user*
    - ii) Delete the file with that name*
  - d) If the subchoice is 3*
    - i) Accept file name from the user*
    - ii) Search for file with that name*
    - iii) If file found print file name*
    - iv) Else print Not found*
  - e) If the subchoice is 4 goto 2*
- 5) If the choice is 3 goto 7*
- 6) Stop*

## Flowchart of the System:



## **Concepts Implemented:**

- 1.Encapsulation*
- 2.Switch Case*
- 3.Do While Loop*
- 4.Exception Handling*
- 5.Use OF NIO File Classes*
- 6.Use OF Try Catch Block*
- 7.Use Of throw IOEXCEPTION*
- 8.Use of IO File Classes*

✧ **SCREENSHOTS OF PROGRAM OUTPUT:**

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer Virtual-Key-For-Repository
FileManagementSystem.java Console Terminal
FileManagementSystem [Java Application] C:\Users\DELL\p2\prof.plugin\org.eclipse.jdt.openide.hotspot.jre.full.win32.x86_64_17.0.4.v20220903-1030\prebuilt\javaw.exe (14-Oct-2022, 2:19:50 pm) [pid: 2288]

WELCOME TO VIRTUAL KEY FOR YOUR REPOSITORIES
Application Name:LOCKED.IN
Developer Name:Aman Garg
Directory Path : D:\project1phase1Directory
File Menu
-----
1)List Filenames In Ascending Order
2)User Interaction Options
3)EXIT
-----
Enter your choice:
```

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer Virtual-Key-For-Repository
FileManagementSystem.java Console Terminal
FileManagementSystem [Java Application] C:\Users\DELL\p2\prof.plugin\org.eclipse.jdt.openide.hotspot.jre.full.win32.x86_64_17.0.4.v20220903-1030\prebuilt\javaw.exe (14-Oct-2022, 2:19:50 pm) [pid: 2288]

File:.txtcghgfdhg.txt
File:aege.txt
File:ahstebka.txt
File:aman.txt
File:ardtrdytrtyfkfytuihu.txt
File:ashebd.txt
File:ddhd.txt
File:mahs.txt
File:mzagedhd.txt
Directory:sgge
File:vcvds.txt
Directory:wteb
Directory:zsded
File:zxvcgdbd.txt
File Menu
-----
1)List Filenames In Ascending Order
2)User Interaction Options
3)EXIT
-----
Enter your choice:
```

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer | FileManagementSystem.java | Console | Terminal
Virtual-Key-For-Repository
Directory:wteb
Directory:zsded
File:zxvcgdbd.txt
File Menu
-----
1)List Filenames In Ascending Order
2)User Interaction Options
3)EXIT
-----
Enter your choice: 2
-----
User Interaction Options:
-----
1)Add File
2>Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 1
-----
Enter the file Name to be add : simplelearn
File is created :D:\project1phase1Directory\simplelearn.txt
User Interaction Options:
-----
1)Add File
2>Delete File
3)Search File
4)Main Menu
-----
Enter your choice:
```

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer | FileManagementSystem.java | Console | Terminal
Virtual-Key-For-Repository
-----
User Interaction Options:
-----
1)Add File
2>Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 1
-----
Enter the file Name to be add : simplelearn
File is created :D:\project1phase1Directory\simplelearn.txt
User Interaction Options:
-----
1)Add File
2>Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 2
-----
Enter the file Name to be deleted : simplelearn
File Deleted Successfully
User Interaction Options:
-----
1)Add File
2>Delete File
3)Search File
4)Main Menu
-----
Enter your choice:
```

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer Console Terminal
FileManagementSystem [Java Application] C:\Users\DELL\p2\post-plugin\org.eclipse.jdt\org.eclipse.jdt.core.full.win32.x86_64_17.0.4.v20220903-1030\jre\bin\java.exe (14-Oct-2022, 2:19:50 pm) [pid: 2288]
Virtual-Key-For-Repository
File is created :D:\project1phase1Directory\simplilearn.txt

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 2
-----

Enter the file Name to be deleted : simplilearn
File Deleted Successfully

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 3
-----

Enter the filename to be search : aman
D:\project1phase1Directory\aman.txt

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice:
```

```
SimpleLearnProject - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Package Explorer Console Terminal
FileManagementSystem [Java Application] C:\Users\DELL\p2\post-plugin\org.eclipse.jdt\org.eclipse.jdt.core.full.win32.x86_64_17.0.4.v20220903-1030\jre\bin\java.exe (14-Oct-2022, 2:19:50 pm) [pid: 2288]
Virtual-Key-For-Repository
File Deleted Successfully

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 3
-----

Enter the filename to be search : aman
D:\project1phase1Directory\aman.txt

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice: 3
-----

Enter the filename to be search : simplilearn
File not Found

User Interaction Options:
-----
1)Add File
2)Delete File
3)Search File
4)Main Menu
-----
Enter your choice:
```





**Conclusion:**

*The file management System was created using the implement the pillars of the OOPS. Best practices were followed as and when possible. All exceptions are handled. Some Exceptions are handled using Custom exception classes. The throws keywords were used to handle exceptions. Arrays.sort class method used to sort the file In ascending order and whole project is integrated git and github by which it can easily be update any code in very ease*