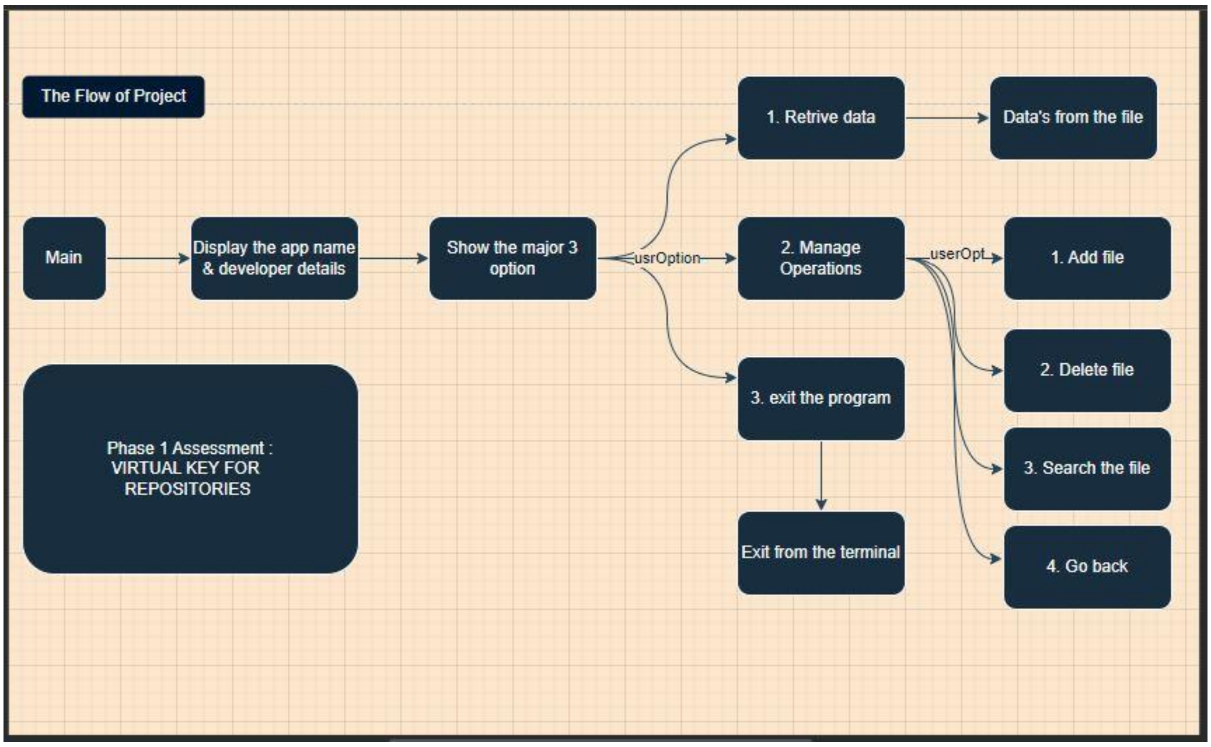
VIRTUAL KEY For REPOSITORY

This document contains the:

Sprint Planning:

For this project, I've planned to complete the project in 2 Sprints. And the task is completed according to that.

Flow of Project:



Concepts used in Project:

- File Handling
- Flow Control
- Exeption Handling

Working on Eclipse IDE:

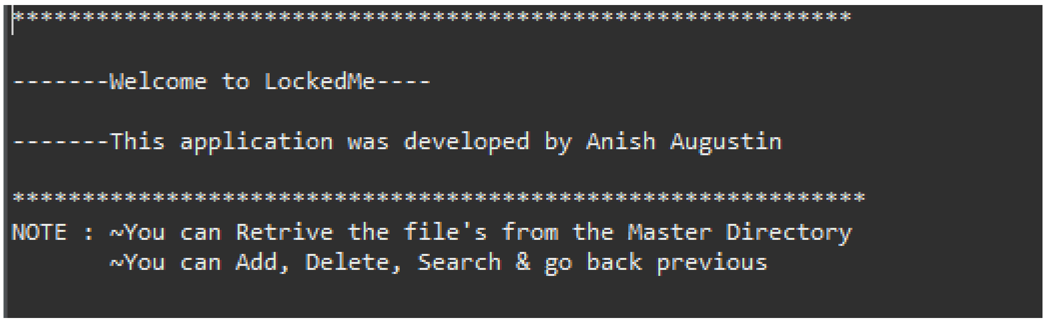
Step 1: Creating a new project in Eclipse

- Open Eclipse
- Go to File -> New -> Project -> Java Project -> Next.
- Type in any project name and click on “Finish.”
- Select your project and go to File -> New -> Class.
- Enter LockedMain in any class name, check the checkbox “public static void main(String[] args)”, and click on “Finish.”

Step 2: Writing a program in Java for the entry point of the application (**LockedMain.java**)

```
package LockedMe.com;

import java.io.IOException;

public class LockedMain {

	public static void main(String[] args) throws IOException {

		// Calling a method to display the application and the developer
details
		DisplayRecords.entryRecords("Anish Augustin");

		//As it shows the application name and developer details, the
program will directly start from this function
		LockedFile.beginingOfProgram();
```

Output :



```
**************************************************************

-------Welcome to LockedMe----

-------This application was developed by Anish Augustin

**************************************************************
NOTE : ~You can Retrive the file's from the Master Directory
       ~You can Add, Delete, Search & go back previous
```

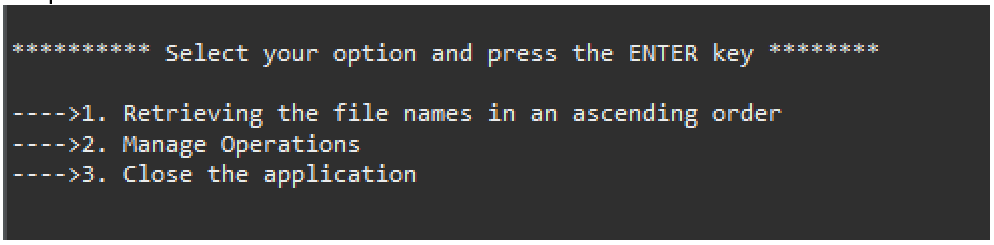
```
        }

}
```

Step 3: Writing a new class to display all the options of the application (**DisplayRecords.Java**).

```
package LockedMe.com;



//This class will be shown in the output
public class DisplayRecords {

        public static void entryRecords(String Devep) {

                // Creating the application name and developer name
                // In the NOTE point, the user get to know what all things can do in
this application

        System.out.println("*********************************************************
*****\r\n"
                                        + "\r\n"
                                        + "-------Welcome to LockedMe----\r\n"
                                        + "\r\n"
                                        + "-------This application was developed by "+ Devep +"
\r\n"
                                        + "\r\n"
                                        +
"**************************************************************"
                                        + "\r\n"
                                        + "NOTE : ~You can Retrive the file's from the Master
Directory\r\n"
                                        + "       ~You can Add, Delete, Search & go back
previous\r\n"
                                        + "\r\n");

        }
        // Creating method for the user idea, what to do first
        public static void initialOperationRecords() {
                //This is is the beginning of the Process
                //The user have to click either 1 or 2 or 3 to do the functions
                System.out.println("********** Select your option and press the
ENTER key ********\r\n"
                                        +"\r\n"
```

```
                                + "---->1. Retrieving the file names in an ascending
order\r\n"
                                + "---->2. Manage Operations\r\n"
                                + "---->3. Close the application ");
        }

        // Creating a method to display the Operations
        public static void displayOperationRecords() {

                // For user interactions
                System.out.println("1. Add file in the Master Directory\r\n" + "2.
Delete file From the Master Directory\r\n"
                                + "3. Search the file in the Master Directory\r\n" +
"4. Go back to Previous Option\r\n" + "");
        }
```

Output:



```
********** Select your option and press the ENTER key ********

---->1. Retrieving the file names in an ascending order
---->2. Manage Operations
---->3. Close the application
```

```
}
```

Step 4: Writing a new class to implement the backend functions (**LockedFile.java**).

The class consist of two Static variables

Specifying each methods:

- public static void fileCreation()
- public static void beginingOfProgram() throws IOException
- private static void manageOperation() throws IOException
- private static void filesinFolder() throws IOException
- private static void addFile() throws IOException
- private static void deleteFile() throws IOException
- private static void searchFile() throws IOException
- private static void programEnds()

__**public static void fileCreation():**__

```
public static void fileCreation() {
        Path = System.getProperty("user.dir");
        fileName = new File(Path + "/ Master");
        if (!fileName.exists()) {
            fileName.mkdirs();
        }
    }
```

public static void beginingOfProgram() throws IOException:

```
// Backend process for user interactions starts here.
    public static void beginingOfProgram() throws IOException {
        // Calling "filecreation" method to check the directory is created
or not
        fileCreation();
        // Calling a method from another class to display the process can
done
        DisplayRecords.initialOperationRecords();
        Scanner sc = new Scanner(System.in);
        int userOpt = sc.nextInt();
        // Creating switch case to get the userOption to the process
        switch (userOpt) {
        case 1:
            filesinFolder();
            break;
        case 2:
            manageOperation();
            break;
        case 3:
            programEnds();
            break;
        default:
            System.out.println("Invalid option, Please enter the right
option");
        }

    }
```

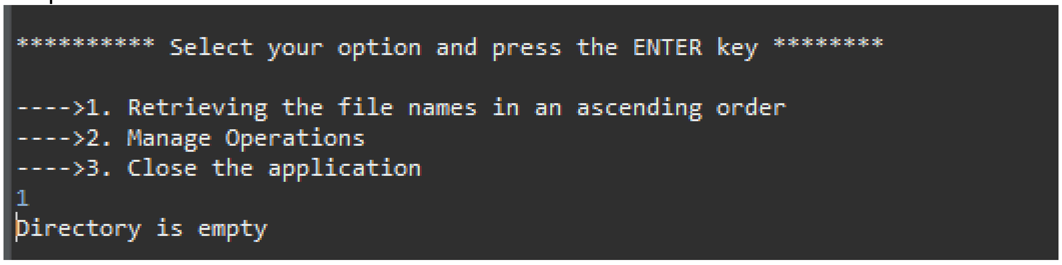
private static void manageOperation() throws IOException:

```
// To process the Main operations like add, delete, search & go back
    private static void manageOperation() throws IOException {
        fileCreation();
        DisplayRecords.displayOperationRecords();
        Scanner sc = new Scanner(System.in);
        int userOpt = sc.nextInt();
        switch (userOpt) {
        case 1:
            addFile();
            break;
        case 2:
            deleteFile();
            break;
        case 3:
            searchFile();
            break;
        case 4:
            beginingOfProgram();
            break;
        default:
            System.out.println("Invalid Option, Please enter the right 
one");
        }

    }
```

private static void filesinFolder() throws IOException:

```
// To see the files in the directory
    private static void filesinFolder() throws IOException {
        if (fileName.list().length > 0) {
            String[] list = fileName.list();
            Arrays.sort(list);
            for (String files : list) {
                System.out.println("--- " + files);
            }
            System.out.println("Files are displayed");
            System.out.println();
            beginingOfProgram();
        } else {
            System.out.println("Directory is empty");
            System.out.println();
            beginingOfProgram();
```

Output:



```
********** Select your option and press the ENTER key ********

---->1. Retrieving the file names in an ascending order
---->2. Manage Operations
---->3. Close the application
1
Directory is empty
```

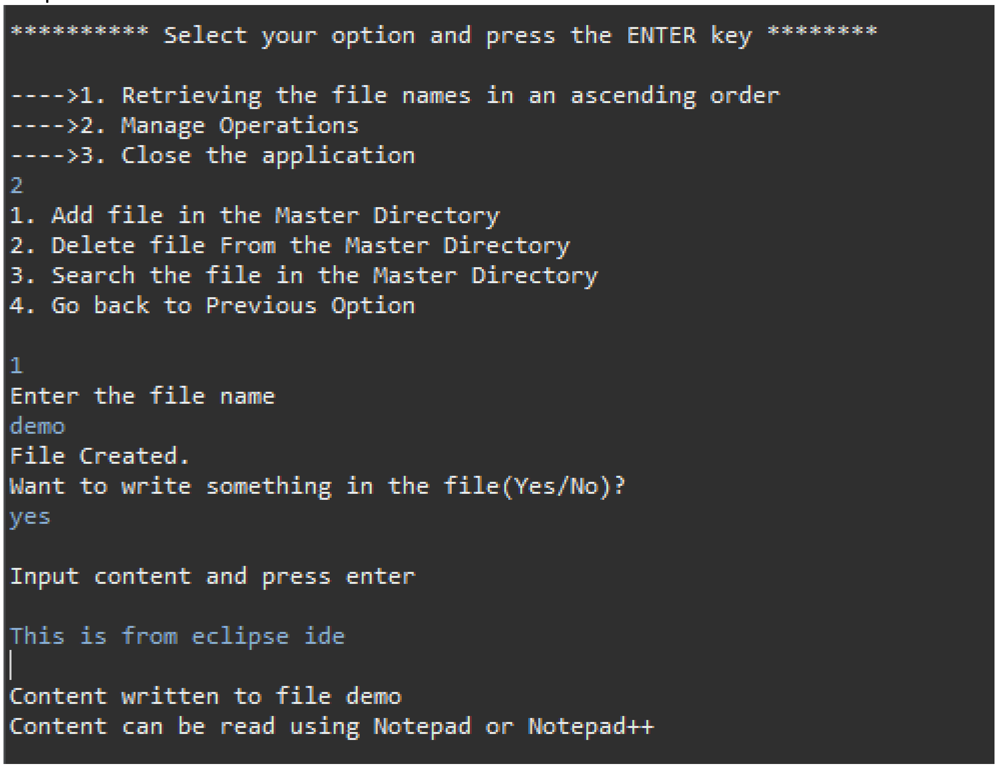
```
        }

    }
```

private static void addFile() throws IOException:

```
// To add files in the directory
    private static void addFile() throws IOException {
        // TODO Auto-generated method stub
        System.out.println("Enter the file name");
        Scanner sc = new Scanner(System.in);
        String fName = sc.nextLine();
        File file = new File(fileName + "/" + fName);
        if (!file.exists()) {
            file.createNewFile();
            System.out.println("File Created. \r\n" + "Want to write 
something in the file(Yes/No)?");
            String useOpt = sc.nextLine();
            if (useOpt.equalsIgnoreCase("Yes")) {
```

```
                        FileWriter Writer = new FileWriter(fileName + "/" +
fName);
                        System.out.println("\nInput content and press
enter\n");
                        String content = sc.nextLine();
                        Writer.write(content);
                        Writer.close();
                        System.out.println("\nContent written to file " +
fName);
                        System.out.println("Content can be read using Notepad
or Notepad++");
                        System.out.println();
                        manageOperation();
                    }
                    manageOperation();

                } else {
                    System.out.println("NOTE - !File Name " + fName + " already
exist, Enter a new name");
                    addFile();
```

Output:

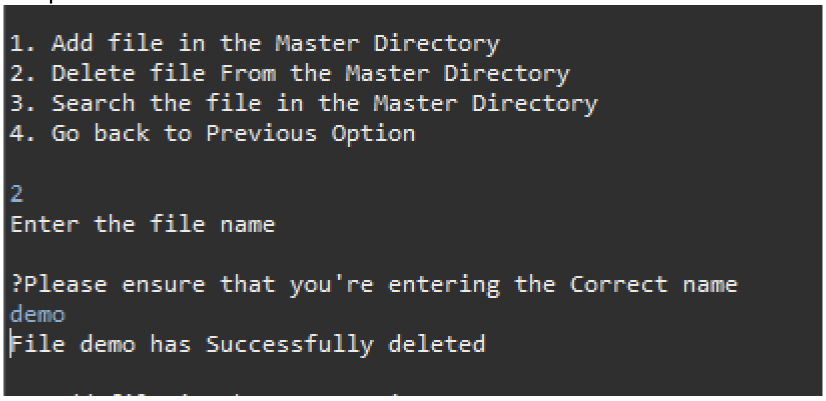


```
********** Select your option and press the ENTER key ********

---->1. Retrieving the file names in an ascending order
---->2. Manage Operations
---->3. Close the application
2
1. Add file in the Master Directory
2. Delete file From the Master Directory
3. Search the file in the Master Directory
4. Go back to Previous Option

1
Enter the file name
demo
File Created.
Want to write something in the file(Yes/No)?
yes

Input content and press enter

This is from eclipse ide

Content written to file demo
Content can be read using Notepad or Notepad++
```

private static void deleteFile() throws IOException:

```
private static void deleteFile() throws IOException {
            System.out
                        .println("Enter the file name \r\n" + "\r\n" + "?Please
ensure that you're entering the Correct name ");
            Scanner sc = new Scanner(System.in);
            String delFile = sc.nextLine();
            File file = new File(fileName + "/" + delFile);
            String[] list = fileName.list();
            for (String files : list) {
                  if (delFile.equals(files) && file.delete()) {

                        System.out.println("File " + delFile + " has 
Successfully deleted");
                        System.out.println();
                        manageOperation();
                  }
            }
            System.out.println("No file exist in the name ");
            System.out.println();
            manageOperation();
```

Output:



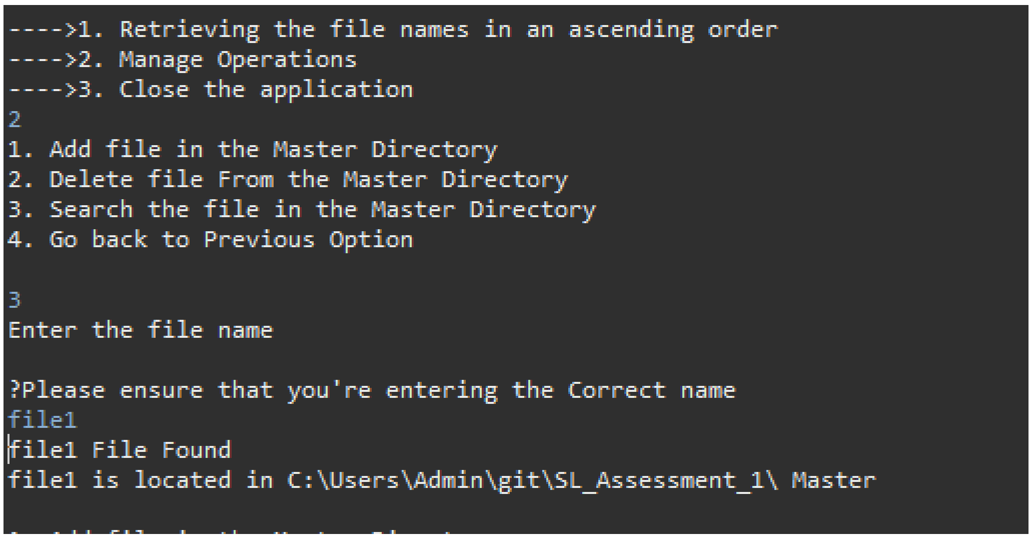
```
1. Add file in the Master Directory
2. Delete file From the Master Directory
3. Search the file in the Master Directory
4. Go back to Previous Option

2
Enter the file name

?Please ensure that you're entering the Correct name
demo
File demo has Successfully deleted
```

```
      }
```

private static void searchFile() throws IOException:

```
private static void searchFile() throws IOException {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter the file name that to be removed/deleted 
from the directory\r\n" + "\r\n"
                        + "?Please ensure that you're entering the Correct name 
");
            String fileSearch = sc.nextLine();
            String[] list = fileName.list();
            for (String file : list) {
                  if (fileSearch.equals(file)) {
                        System.out.println(fileSearch + " File Found");
                        System.out.println(fileSearch + " is located in " + 
fileName.getAbsolutePath());
                        System.out.println();
                        manageOperation();
                  }

            }
            System.out.println("File Not Found");
            System.out.println();
            manageOperation();
```

Output:

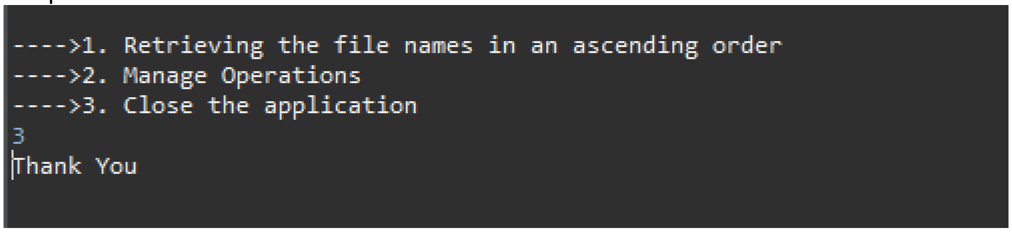


```
---->1. Retrieving the file names in an ascending order
---->2. Manage Operations
---->3. Close the application
2
1. Add file in the Master Directory
2. Delete file From the Master Directory
3. Search the file in the Master Directory
4. Go back to Previous Option

3
Enter the file name

?Please ensure that you're entering the Correct name
file1
file1 File Found
file1 is located in C:\Users\Admin\git\SL_Assessment_1\ Master
```

<u>private static void programEnds():</u>

```
// To end the program
        private static void programEnds() {
                System.out.println("Thank You");
                System.exit(0);
```

Output:



```
---->1. Retrieving the file names in an ascending order
---->2. Manage Operations
---->3. Close the application
3
Thank You
```

Step 5: Upload files to GitHub Repository

- Open your command prompt and navigate to the folder where you have created your files.
- cd <folder path>
- Initialize repository using the following command:
- git init
- Add all the files to your git repository using the following command:
- git add .
- Commit the changes using the following command:
- git commit . -m <commit message>
- Push the files to the folder you initially created using the following command:
- git push -u origin master

Unique Selling Points:

1. This application is use to create file, add data’s to file, delete file & search for file.
2. This application will keep on running until user close the program.
3. It allows the user to write content on the file created by the user.

Conclusion:

Further enhancements to the application can be made which may include

- Accessibility of changing the path of the file and folder
- User should able to delete the repository also
- User should able to create a file inside the file