

Source CODE- written in JAVA

Class -1→

GenricAndMenu class-

```
public class GenricAndMenu {

    private String applicationName ="Locker File";
    private String developerName="Rahul Rana";
    private FileOutputStreamDemo file=new FileOutputStreamDemo();

    public void nameDispaly() {
        System.out.println("|-----|");
        System.out.println("| Application Name:
"+applicationName+"|");
        System.out.println("| Developer Name:
"+developerName+"|");
        System.out.println("|Note-- The output & input will be shown/taken in the
Console in form of NUMBER |");
        System.out.println("|-----|");
    }

    public void GenricDisplay()
    {
        System.out.println();
        System.out.println("+-----+");
        System.out.println("Menu ----");
        System.out.println("1. Sort files in Ascending order");
        System.out.println("2. Business Level Operation");
        System.out.println("0. Exit from the console");
        System.out.println("-----");
        System.out.println();
    }

    public void MenuBusinessLogic()
```

```

{
    System.out.println();
    System.out.println("/-----");
-----/");
    System.out.println("Business level logic menu----");
    System.out.println("1.Add the File");
    System.out.println("2.Delete the File");
    System.out.println("3.Search for specified File");
    System.out.println("4.Show Content of file");
    System.out.println("5.Back to previous Menu");
    System.out.println("/-----");
-----/");
    System.out.println();

}

public void addFile(String fname)
{
    file.createFile(fname);
}

public void deleteFile(String fname)
{
    file.deleteF(fname);
}

public void searchFile(String fname)
{
    file.searchFound(fname);
}

public void showContent(String fname)
{
    file.displayFile(fname);
}
}

```

Class 2→

FileOutputStreamDemo class-

```
import java.io.File;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.util.Scanner;

import javax.swing.filechooser.FileSystemView;

public class FileOutputStreamDemo {

    private FileOutputStream file=null;
    private FileInputStream fis=null;

    public void createFile(String fname)
    {
        try {
            File home = FileSystemView.getFileSystemView().getHomeDirectory();
            String desktop=home.getAbsolutePath();
            String desktop1=desktop+"//"+fname;
            file=new FileOutputStream(desktop1);
            String data="";
            Scanner sc=new Scanner(System.in);
            System.out.println("Enter text to write in File:");

            data=sc.nextLine();
            byte [] b=data.getBytes();
            file.write(b);
        }

        catch(IOException e)
        {
            System.out.println("Input output error");
        }
        finally{
            if(file!=null)
            {
                try{
                    file.close();
                }
                catch(IOException e)
            }
        }
    }
}
```

```

        {
            System.out.println("File close error.");
        }
    }
}

public void displayFile(String fname)
{
    try {File home = FileSystemView.getFileSystemView().getHomeDirectory();
        String desktop=home.getAbsolutePath();
        String desktop1=desktop+"//"+fname;
        fis=new FileInputStream(desktop1);
        int data;
        System.out.println("");
        System.out.println("CONTENT OF THE FILE:");
        System.out.println();
        while((data=fis.read())!=-1)//until file empty
            System.out.print((char)data);

    }
    catch(IOException e)
    {
        System.out.println("No such file exist.");
    }

    finally {
        if(fis!=null)
            try {
                fis.close();
            }
            catch(IOException e)
            {
                System.out.println("Input Output error occured.");
            }
    }
}

public void deleteF(String fname)
{
    File home = FileSystemView.getFileSystemView().getHomeDirectory();
    String desktop=home.getAbsolutePath();
    String desktop1=desktop+"//"+fname;
    File f=new File(desktop1);

```

```

        if(f.delete())
            System.out.println("FILE DELETED SUCCESFULLY!!");
        else
            System.out.println("NO FILE with name: "+fname+" found on Desktop."
);
    }

    public void searchFound(String fname)
    {
        File home = FileSystemView.getFileSystemView().getHomeDirectory();
        String desktop=home.getAbsolutePath();
        String desktop1=desktop+"//"+fname;
        File f=new File(desktop1);
        if(f.exists())
            System.out.println("The FILE : " +fname+" is FOUND!!");
        else
            System.out.println("There is NO FILE with SUCH NAME FOUND.");
    }
}

```

Class 3→

MainFunction - main class – from where code will execute

```

import java.io.File;
import java.util.InputMismatchException;
import java.util.Scanner;
import java.util.TreeSet;

import javax.swing.filechooser.FileSystemView;

public class MainFunction {
    public static void main(String[] args) {

        int response=0,res;
        String fileName;
        //To get desktop Path
        File home = FileSystemView.getFileSystemView().getHomeDirectory();
        String desktop=home.getAbsolutePath();
        TreeSet<String> treeSet=new TreeSet<>();
    }
}

```

```

GenricAndMenu genric=new GenricAndMenu();
genric.nameDispaly();
genric.GenricDisplay();

File[] files=new File(desktop).listFiles();//path of directory
for(File file:files)
{
    if(file.isFile())
        treeSet.add(file.getName());
}
System.out.println("Files already present in DESKTOP");
System.out.println("Total Files:" +treeSet.size());
System.out.println();
System.out.println("Desktop File Names : "+ treeSet);
System.out.println();

    System.out.println();
    System.out.println("Your selection(Number between 0 & 2): ");
Scanner input=new Scanner(System.in);
while(!input.hasNextInt())
{
    System.out.println("Enter number between 0 & 2!!!");
    input.next();
}
response=input.nextInt();
while(response!=0)
{
    if(response<1 || response>3)
    {
        System.out.println("NOTE: please enter between 0 & 2");
    }
    else
        switch(response)
        {
            case 1: //Sort the List of file
            {
                System.out.println(" Sorted List is : ");
                System.out.println();
                for(String tree:treeSet)
                System.out.println(tree);
                System.out.println();
                System.out.println("-----");
                System.out.println("-----");
                genric.GenricDisplay();
            }

```

```

        break;
    case 2://Business Level logic
    {
        System.out.println();
        System.out.println("Going in Business Level logic");
        //calling class method

        genric.MenuBusinessLogic();
        System.out.println("Enter your choice (NUMBER
between 1 & 5):");

        while(!input.hasNextInt())
        {
            System.out.println("Enter number between 1 &
5!!!");

            input.next();
        }
        res=input.nextInt();

        while(res!=5)
        {
            if(res<1 || res >5)
                System.out.println("NOTE: Please enter
between 1 & 5");

            else
                switch(res)
                {
                    case 1://Add the file
                        System.out.println("File Name:");
                        fileName=input.nextLine();
                        fileName+=input.nextLine();
                        treeSet.add(fileName);
                        genric.addFile(fileName);
                        System.out.println();
                        System.out.println("SUCESSFULLY
ADDED THE FILE :"+fileName);

                        System.out.println();
                        System.out.println("Total files
now :"+treeSet.size());

                        System.out.println();
                        System.out.println("Files in
directory(DESKTOP): "+treeSet);

                        genric.MenuBusinessLogic();
                        break;
                    case 2: //delete the file
                        System.out.println("Delete file:
");

                        fileName=input.nextLine();

```

```

        fileName+=input.nextLine();
        System.out.println();
        treeSet.remove(fileName);
        genric.deleteFile(fileName);
        System.out.println();
        System.out.println("Total files
Remaining :"+treeSet.size());

        System.out.println();
        System.out.println("Remanining
Files(DESKTOP) :"+treeSet);

        genric.MenuBusinessLogic();
        break;
    case 3://search for the file
        System.out.println("Search file:
");

        fileName=input.nextLine();
        fileName+=input.nextLine();
        System.out.println();
        genric.searchFile(fileName);
        genric.MenuBusinessLogic();
        break;
    case 4://Display file content
        System.out.println("All files
are shown: ");

        System.out.println(treeSet);
        System.out.println();
        System.out.println("Display file:
");

        fileName=input.nextLine();
        fileName+=input.nextLine();
        genric.showContent(fileName);
        System.out.println();
        genric.MenuBusinessLogic();
        break;
    default:System.out.println("Enter number
please");

        break;
    }

    System.out.println("Select Option (NUMBER between 1 &
5):");

    while(!input.hasNextInt())
    {
        System.out.println("Enter number between 1 &
5!!!");

```



```

        input.next();
    }
    res=input.nextInt();

    }
    genric.GenricDisplay();//returning to previous menu
//
    }
    break;

    default: System.out.println("enter number please 0 & 2");
        break;

    }
    System.out.println("Select Option(NUMBER between 0 & 2): ");
    while(!input.hasNextInt())
    {
        System.out.println("Enter number between 0 & 2!!!");
        input.next();
    }
    response=input.nextInt();

}

if(response==0)
{
    System.out.println();
    System.out.println("Thank you for using this application. You have
been suceesfully EXITED.");
}

}

}

```