

Code for LockedMe.com

Main.java

```
public class Main {  
  
    /*Enter your desired Directory path */  
    public static final String path = "D:\\projects\\files";  
  
    public static void main(String[] args) {  
        Menu menu = new Menu();  
        menu.mainMenu();  
    }  
  
}
```

Operation.java

```
import java.io.File;  
  
import java.io.IOException;  
  
import java.util.Arrays;  
  
import java.util.Set;  
  
import java.util.TreeSet;  
  
import java.util.regex.Matcher;  
  
import java.util.regex.Pattern;  
  
  
public class Operation {  
  
    public void listAllFiles(String path) {  
  
        if (path == null || path.isEmpty() || path.isBlank())  
  
            throw new NullPointerException("Path cannot be Empty or null");  
  
    }  
  
}
```

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```
File dir = new File(path);

if(!dir.exists())

    throw new IllegalArgumentException("Path does not exist");

if(dir.isFile())

    throw new IllegalArgumentException("The given path is a file. A directory is
expected.");

String [] files = dir.list();

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

if(files != null && files.length > 0) {

    Set<String>filesList = new TreeSet<String>(Arrays.asList(files));

    System.out.println("The Files in "+ dir.getAbsolutePath() + " are: \n");

    for(String file1:filesList) {

        System.out.println(file1);

    }

    System.out.println("\nTotal Number of files: "+ filesList.size());

}else {

    System.out.println("Directory is Empty");
```

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```
}

}

public void createNewFile(String path , String fileName) throws IOException {

    if (path == null || path.isEmpty() || path.isBlank())

        throw new NullPointerException("Path cannot be Empty or null");

    if (fileName == null || fileName.isEmpty() || fileName.isBlank())

        throw new NullPointerException("File Name cannot be Empty or null");

    File newFile = new File(path + File.separator + fileName);

    boolean createFile = newFile.createNewFile();

    if (createFile) {

        System.out.println("\nFile Successfully Created: " + newFile.getAbsolutePath());

    }else if(!createFile) {

        System.out.println("\nFile Already Exist.. Please try again." );

    }

}
```

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```
    }  
  
}  
  
public void deleteFile(String path , String fileName) throws IOException {  
  
    if (path == null || path.isEmpty() || path.isBlank())  
        throw new NullPointerException("Path cannot be Empty or null");  
  
    if (fileName == null || fileName.isEmpty() || fileName.isBlank())  
        throw new NullPointerException("File Name cannot be Empty or null");  
  
    File newFile = new File(path + File.separator + fileName);  
  
    boolean deleteFile = newFile.delete();  
  
    if (deleteFile) {  
  
        System.out.println("\nFile deleted Successfully");  
  
    }else {
```

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```
System.out.println("\nFile Not Found.. Please try again." );
```

```
}
```

```
}
```

```
public void searchFile(String path , String fileName){
```

```
    if (path == null || path.isEmpty() || path.isBlank())
```

```
        throw new NullPointerException("Path cannot be Empty or null");
```

```
    if (fileName == null || fileName.isEmpty() || fileName.isBlank())
```

```
        throw new NullPointerException("File Name cannot be Empty or null");
```

```
    File dir = new File(path);
```

```
    if(!dir.exists())
```

```
        throw new IllegalArgumentException("Path does not exist");
```

```
    if(dir.isFile())
```

```
        throw new IllegalArgumentException("The given path is a file. A directory is  
expected.");
```

Code for LockedMe.com

```
String [] fileList = dir.list();

boolean flag = false;

Pattern pat = Pattern.compile(fileName);

if(fileList != null && fileList.length > 0) {

    for(String file:fileList) {

        Matcher mat = pat.matcher(file);

        if(mat.matches()) {

            System.out.println("File Found at location: " +
dir.getAbsolutePath());

            flag = true;

            break;

        }

    }

}

if(flag == false)

    System.out.println("File Not Found.. Please try again.");

}

}
```

Code for LockedMe.com

Menus . java

```
import java.io.IOException;

import java.util.Scanner;

public class Menus {

    Scanner scan = new Scanner(System.in);

    Operation dao = new Operation();

    public void exitScreen() {

        System.out.println("-----");
        System.out.println("  THANK YOU FOR VISITING LockedMe.com  *");
        System.out.println("-----");
        System.out.println("\n\n");

    }

    public void mainMenuOptions() {

        System.out.println("=====");
        System.out.println("          MAIN MENU          ");

    }

}
```

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```
        System.out.println("=====");

        System.out.println(" Select any one of the following: ");

        System.out.println(" 1 - List All Files      ");

        System.out.println(" 2 - More Options      ");

        System.out.println(" 3 - Exit              ");

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

        System.out.println("Enter your choice : ");

    }
```

```
public void subMenuOptions() {
```

```
        System.out.println("=====");

        System.out.println("      SUB MENU      ");

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

        System.out.println(" Select any one of the following: ");

        System.out.println(" 1 - Add a file      ");

        System.out.println(" 2 - Delete a file   ");

        System.out.println(" 3 - Search a file   ");

        System.out.println(" 4 - Go Back         ");

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

        System.out.println("Enter your choice : ");

    }
```

```
public void mainMenu() {
```


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```
int choice = 0;

char decision = 0;

do {

    mainMenuOptions();

    try {

        choice = Integer.parseInt(scan.nextLine());

    } catch (NumberFormatException e) {

        System.out.println("\nInvalid Input \nValid Input Integers:(1-3)\n");

        mainMenu();

    }

    switch (choice) {

    case 1:

        System.out.println();

        try {

            dao.listAllFiles(Main.path);

        } catch (NullPointerException e) {

            System.out.println(e.getMessage());

        } catch (IllegalArgumentException e) {

            System.out.println(e.getMessage());

        }

    }
```

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```
        }catch(Exception e) {

            System.out.println(e.getMessage());

        }

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

        break;

case 2:

    System.out.println();

    subMenu();

    break;

case 3:

    System.out.println("\n Are you sure you want to exit ? ");

    System.out.println(" (Y) ==> Yes   (N) ==> No   ");

    decision = scan.nextLine().toUpperCase().charAt(0);

    if(decision == 'Y') {

        System.out.println("\n");

        exitScreen();

        System.exit(1);

    }else if(decision == 'N') {

        System.out.println("\n");

        mainMenu();

    }else {

        System.out.println("\nInvalid Input \nValid Inputs

:(Y/N)\n");
```

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```
        mainMenu();
    }

    default:
        System.out.println("\nInvalid Input \nValid Input Integers:(1-
3)\n");

        mainMenu();

    }

}while(true);

}

public void subMenu() {
    String file = null;
    String fileName = null;
    int choice = 0;

    do {

        subMenuOptions();
```

Code for LockedMe.com

```
try {

    choice = Integer.parseInt(scan.nextLine());

} catch (NumberFormatException e) {

    System.out.println("Invalid Input \nValid Input Integers:(1-4)");

    subMenu();

}


switch (choice) {

case 1:

    System.out.println("\n==> Adding a File...");

    System.out.println("Please enter a file name : ");

    file = scan.nextLine();

    fileName = file.trim();

    try {

        dao.createNewFile(Main.path, fileName);

    } catch (NullPointerException e) {

        System.out.println(e.getMessage());

    } catch (IOException e) {

        System.out.println("Error occurred while adding file..");

        System.out.println("Please try again...");

    } catch (Exception e) {

        System.out.println("Error occurred while adding file..");

        System.out.println("Please try again...");

    }

}
```

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```
System.out.println("\n*****\n");

        break;

    case 2:

        System.out.println("\n==> Deleting a File...");

        System.out.println("Please enter a file name to Delete : ");

        file = scan.nextLine();

        fileName = file.trim();

        try {

            dao.deleteFile(Main.path, fileName);

        } catch (NullPointerException e) {

            System.out.println(e.getMessage());

        } catch (IOException e) {

            System.out.println("Error occurred while Deleting
File..");

            System.out.println("Please try again...");

        } catch (Exception e) {

            System.out.println("Error occurred while Deleting
File..");

            System.out.println("Please try again...");

        }

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

        break;

    case 3:
```

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```
        System.out.println("\n==> Searching a File...");

        System.out.println("Please enter a file name to Search : ");

        file = scan.nextLine();

        fileName = file.trim();

        try {

            dao.searchFile(Main.path, fileName);

        } catch (NullPointerException e) {

            System.out.println(e.getMessage());

        } catch (IllegalArgumentException e) {

            System.out.println(e.getMessage());

        } catch (Exception e) {

            System.out.println(e.getMessage());

        }

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

        break;

        case 4: mainMenu();

        break;

        default:

            System.out.println("Invalid Input \nValid Input Integers:(1-4)");

            subMenu();

    }

    file = null;
```

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```
fileName = null;
```

```
}while(true);
```

```
}
```

```
}
```