

# FUNCTIONAL SPECIFICATION DOCUMENT

Project: Prototype of Application - LockedMe.Com

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## PROJECT DETAIL:

The Application; LockedMe.Com is a prototype file landler with specific user definitions. It provides all products specification about the company Lockers Pvt. Ltd

## SPRINTS

### Sprint I

1. Systematically plan out the entire application flow.
2. Analyze critically all the business logics defined.
  - a. Option to add a user
  - b. Option to delete a user
  - c. Option to search a user
  - d. Nav option to close or return operational context
3. Design an extra business operation to close the application.

### Sprint II

1. Plan and define the application's framework, data structures and concepts such as exceptions, collection, and sorting.
2. Implement the business level operation.

### Sprint III

1. Test and deploy the application

## BUSINESS OPERATIONS

Business level operations defined in this application are detailed below

1. Show files (in ascending order)
2. Add, delete, search a file.
3. Close the application.

Defined classes of the application

### 1. Loc\_Main Class

This is the main method of the application:

It contains the options to display the user interaction information.

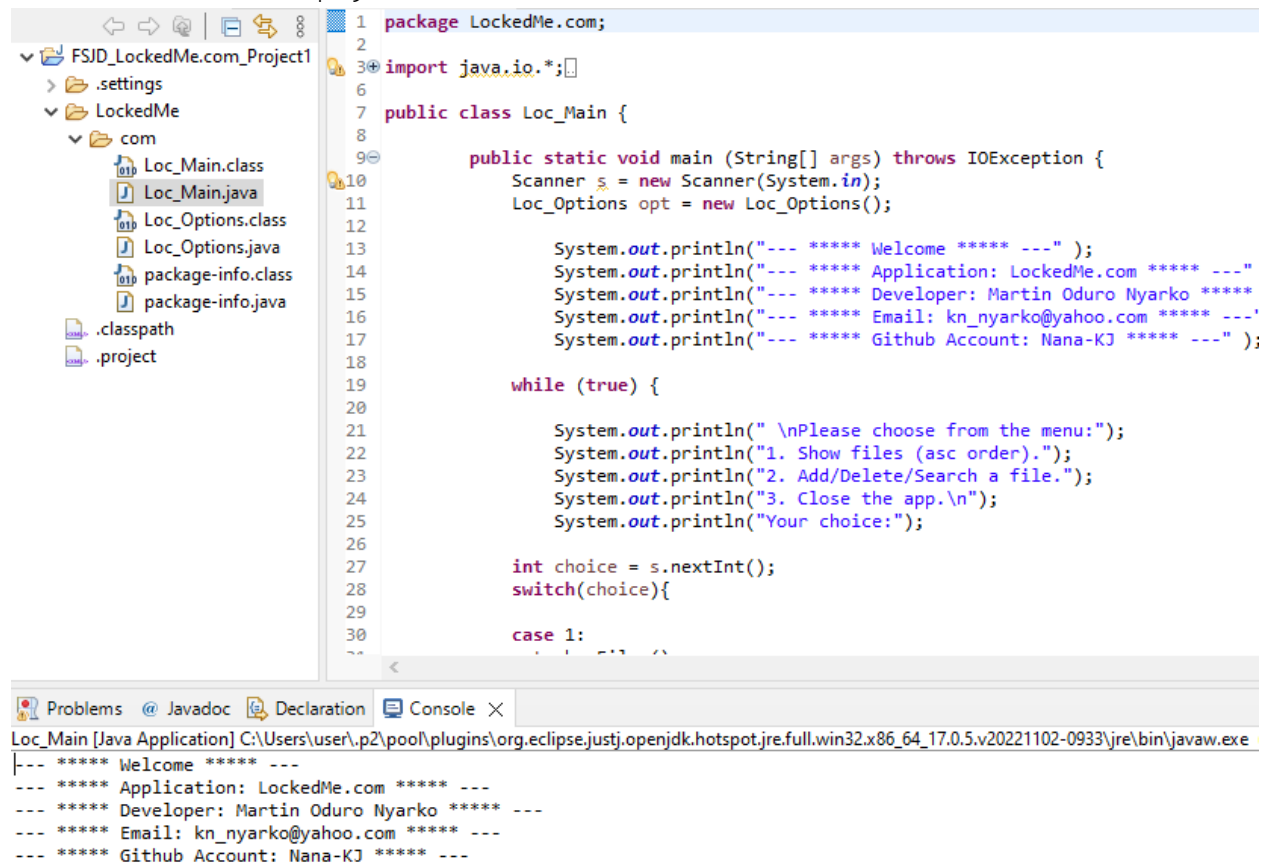
### 2. Loc\_Options Class

This contain the five methods to be called in the Loc\_Main class.

These are sortFile, showFile, addFile, deleteFile and searchFile.

## SCREENSHOTS OF SOME OPERATIONS

**Welcome Screen:** This displays the welcome screen and introduce users to the available features



```
1 package LockedMe.com;
2
3 import java.io.*;
4
5
6
7 public class Loc_Main {
8
9
10
11     public static void main (String[] args) throws IOException {
12         Scanner s = new Scanner(System.in);
13         Loc_Options opt = new Loc_Options();
14
15         System.out.println("--- ***** Welcome ***** ---");
16         System.out.println("--- ***** Application: LockedMe.com ***** ---");
17         System.out.println("--- ***** Developer: Martin Oduro Nyarko ***** ---");
18         System.out.println("--- ***** Email: kn_nyarko@yahoo.com ***** ---");
19         System.out.println("--- ***** Github Account: Nana-KJ ***** ---");
20
21         while (true) {
22
23             System.out.println("\nPlease choose from the menu:");
24             System.out.println("1. Show files (asc order).");
25             System.out.println("2. Add/Delete/Search a file.");
26             System.out.println("3. Close the app.\n");
27             System.out.println("Your choice:");
28
29             int choice = s.nextInt();
30             switch(choice){
31
32                 case 1:
33                     // Show files (asc order)
34
35                 case 2:
36                     // Add/Delete/Search a file
37
38                 case 3:
39                     // Close the app
40
41             }
42         }
43     }
44 }
```

Loc\_Main [Java Application] C:\Users\user\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.5.v20221102-0933\jre\bin\javaw.exe

```
--- ***** Welcome ***** ---
--- ***** Application: LockedMe.com ***** ---
--- ***** Developer: Martin Oduro Nyarko ***** ---
--- ***** Email: kn_nyarko@yahoo.com ***** ---
--- ***** Github Account: Nana-KJ ***** ---
```

**Business Operation (Options):** This displays the options for the user to perform the preferred activity.

The screenshot displays the Eclipse IDE interface. The left-hand side shows the Project Explorer with the following structure:

- FSJD\_LockedMe.com\_Project1
  - .settings
  - LockedMe
    - com
      - Loc\_Main.class
      - Loc\_Main.java
      - Loc\_Options.class
      - Loc\_Options.java
      - package-info.class
      - package-info.java
  - .classpath
  - .project

The right-hand side shows the Editor with the 'Loc\_Main.java' file open. The code is as follows:

```
27     int choice = s.nextInt();
28     switch(choice){
29
30     case 1:
31         opt.showFiles();
32
33         break;
34
35     case 2:
36         System.out.println("Please choose an option:");
37         System.out.println("\t 1) Add a file");
38         System.out.println("\t 2) Delete a file");
39         System.out.println("\t 3) Search a file ");
40         System.out.println("\t 4) Return to menu");
41         System.out.println("Your choice:");
42
43     int option = s.nextInt();
44     if(option==1)
45         opt.addFile();
46
47     if(option==2)
48         opt.deleteFile();
49
50     if(option==3)
51         opt.searchFile();
52
53     if(option==4)
54         System.out.println("Returning to main menu..");
55     --
```

The bottom of the IDE shows the Console tab with the following output:

```
Loc_Main [Java Application] C:\Users\user\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.5.v20221102-0933\jre\bin
1. Show files (asc order).
2. Add/Delete/Search a file.
3. Close the app.

Your choice:
1|
```

**Business Operations (1. Show files):** This displays all the files in ascending order when user selects the “Show file” option.

```
40  
41  
42  
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60  
61  
62  
63  
64  
65  
66  
67  
System.out.println("\t 3) Search a file");  
System.out.println("\t 4) Return to menu");  
System.out.println("Your choice:");  
  
int option = s.nextInt();  
if(option==1)  
    opt.addFile();  
  
if(option==2)  
    opt.deleteFile();  
  
if(option==3)  
    opt.searchFile();  
  
if(option==4)  
    System.out.println("Returning to main menu..");  
  
break;  
  
case 3:  
    System.out.println("Exiting Program...");  
    System.exit(0);  
  
break;  
  
default :  
    System.out.println("This is an invalid Menu Input! Please Select fr  
break;
```

Problems @ Javadoc Declaration Console X

Loc\_Main [Java Application] C:\Users\user\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.5.v20221102-0933\jre\bin\javaw.exe (

```
1  
File names in an ascending order:  
My Music  
My Pictures  
My Videos  
Test.txt  
Test1.txt
```

**Business Operation (Return Operation):** This option allows the user to return to the main menu for further operations.

The screenshot shows the Eclipse IDE with the following components:

- Navigator (Left):** Displays the project structure for 'FSJD\_LockedMe.com\_Project1'. The file 'Loc\_Options.java' is selected under the 'com' package.
- Editor (Center):** Shows the code for 'Loc\_Options.java'. The code includes a menu loop that handles options 1 through 4, including file search, adding/deleting files, and exiting the program.
- Console (Bottom):** Shows the output of the Java application. It displays the menu prompt, the user's choice of '4', and the message 'Returning to main menu..'. Below this, it shows the prompt 'Please choose from the menu:' followed by the menu options: '1. Show files (asc order).', '2. Add/Delete/Search a file.', and '3. Exit the program.'