LOCKEDME.COM

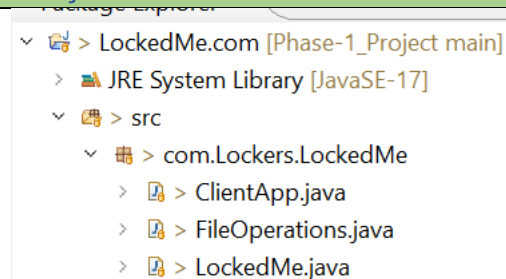Submitted by Manvendra Pratap Singh

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Technology

- Core Java and Data Structure

Java Concept Used

- File handling
- Exception Handling
- Java Object Oriented Programming
- Java Collection
- Access Modifiers
- Control Structure
- Naming Standard
- Re-usability

Project Folder Structure

Package Explorer

- LockedMe.com [Phase-1_Project main]
  - JRE System Library [JavaSE-17]
  - src
    - com.Lockers.LockedMe
      - ClientApp.java
      - FileOperations.java
      - LockedMe.java

Source Code

- ClientApp.java

```java
package com.Lockers.LockedMe;

import java.util.Scanner;
/**
 * Class Name: ClientApp
 * This contain main of application
 * Inside class
 * Method Name: main
 * Inside method:
 * 1. Display welcome screen and main menu
 * 2. Take input from user form menu options
 * 3. Perform action according to user input
 *    a.retrive all file
 *    b.file operations
 *    c.exit
```

```java
 * @author manvendra
 *
 */
public class ClientApp {

        public static void main(String[] args) {

                try {
                        // Variable declaration
                        int choice;
                    try (Scanner scan = new Scanner(System.in)) {
                                do {
                                        // Displaying main welcome screen and main menu
                                        LockedMe.displayMainMenu();

                                        // Asking for user choice
                                        System.out.println("Please enter your choice");

                                        // Storing user input
                                        choice = Integer.parseInt(scan.nextLine());

                                        // Checking user input and perform action accordingly
                                        switch(choice) {
                                        case 1  -> LockedMe.retrieveAllFiles();
                                        case 2  -> LockedMe.fileOperations(scan);
                                        case 3  -> LockedMe.exit();
                                        default -> System.out.println("Invalid input");
                                        }
                                }while(true);
                        }
                }

                catch (Exception e) {
                        System.out.println(e.getMessage());
                }

        }

}
```

> FileOperations.java

```java
package com.Lockers.LockedMe;

import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import java.util.Arrays;
import java.util.List;
import java.util.Scanner;

/**
 * Class Name: FileOperations
 * This class contain all methods related to file operation
 * Inside Class:
 *  1. method addFile() -> to add file
 *  2. method deleteFile() -> to delete file
 *  3. method searchFile() -> to search file
 * @author Manvendra
 *
 */
public class FileOperations {

        // variable declaration
```

```java
    static Scanner scan = new Scanner(System.in);
    public final static String path = "D:\\Phase-1_Project\\Files";


    /**
     * Method Name: addFile()
     * This function is used to add user defined file in directory
     * Inside method:
     *  1.Take file name from user
     *  2.Check if file not exit create file
     *  3.Ask user for number for line needed to write
     *  4.write user provide lines in file
     */
    public static void addFile(){
            File file = new File(path);
            List<String> list = Arrays.asList(file.list());
            System.out.println("Enter name for file");
            String fileName = scan.nextLine();
            if(!(list.contains(fileName+".txt"))) {
                    System.out.println("How may line want to write?");
                    int lineCount = Integer.parseInt(scan.nextLine());
                    System.out.println("Enter file content here");
                    try {
                            FileWriter fr = new FileWriter(path+"\\"+fileName+".txt");
                            for(int i =0; i< lineCount;i++) {
                                    fr.write(scan.nextLine());
                                    fr.write('\n');
                            }
                            fr.close();
                    }
                    catch (IOException e) {
                            e.printStackTrace();
                    }
                    System.out.println("File added successfully.\n");
            }
            else
                    System.out.println("file name already exits in directory.");

    }

    /**
     * Method Name: deleteFile()
     * this method is used to delete file exist in main directory
     * Inside method:
     *  1. Asked user for file name to delete
     *  2. Check for file is it exist in directory
     *  3. If file exist delete file otherwise show message "file not found"
     */
    public static void deleteFile(){
            File file = new File(path);
            List<String> list = Arrays.asList(file.list());
            System.out.println("Enter name of file need to delete");
            String fileName = scan.nextLine()+".txt";
            if((list.contains(fileName))) {
                    File filedelete = new File(path+"\\"+fileName);
                    filedelete.delete();
                    System.out.println(filedelete.getName()+" is deleted successfully\n");
            }
            else
            {
                    System.out.println("File not found");
            }
            }
```

```java
        /**
         * Method Name: searchFile()
         * This method is used to search file from main directory
         * Inside method:
         *  1. Asked user for file name to search in main directory
         *  2. Check if file exist show file path otherwise show message 'file not found'
         */
        public static void searchFile(){
                    File file = new File(path);
                    List<String> list = Arrays.asList(file.list());
                    System.out.println("Enter name of file need to search");
                    String fileName = scan.nextLine();
                    if(list.contains(fileName+".txt")) {
                            System.out.println("File exit at "+file.getAbsolutePath()+"\\"+fileName+".txt");
                    }
                    else
                    {
                            System.out.println("file not found");
                    }

        }
}
```

> LockedMe.java

```java
package com.Lockers.LockedMe;

import java.io.File;
import java.util.Arrays;
import java.util.Collections;
import java.util.List;
import java.util.Scanner;

public class LockedMe {

        public final static String path = "D:\\Phase-1_Project\\Files";


        /**
         * Method Name: displayMainMenu()
         * This method print welcome screen and main menu of LockedMe.com
         * Menu as below:
         *  1. Retrieving the file names in an ascending order
         *  2. Business-level operations - add, delete, search files
         *  3. Option to close application
         *
         */
        public static void displayMainMenu() {
                    System.out.println(":::*********************************:::");
                    System.out.println("    Welcome to LockedMe.com   ");
                    System.out.println("                developed by Manvendra   ");
                    System.out.println(":::*********************************:::");
    System.out.println("1. Retrieve all files");
    System.out.println("2. File operation - delete, add or search files");
    System.out.println("3. Exit application");
        }

        /**
         * Method Name: retrieveAllFiles()
         * This function retrieve all files in main directory in ascending order
         * {@value #path} : it contain main directory path
         */

        public static void retrieveAllFiles() {
```

```java
                File file = new File(path);
                if(file.exists()) {
                        List<String> list = Arrays.asList(file.list());
                        Collections.sort(list);
                        for(String v : list) {
                                System.out.println(v);
                        }
                }
                else {
                        System.out.println("No file exit.");
                }

        }

        public static void fileOperations(Scanner scan) {
                //Scanner scan = new Scanner(System.in);
                boolean run = true ;
                do {
                        try {
                                System.out.println("Choose operation need to perform from below options");

System.out.println("=================================================");
                                System.out.println("1. Add file");
                                System.out.println("2. Delete file");
                                System.out.println("3. Search file");
                                System.out.println("4. Return to main menu");

System.out.println("=================================================");
                                int choice = Integer.parseInt(scan.nextLine());
                                switch(choice) {
                                case 1 -> FileOperations.addFile();
                                case 2 -> FileOperations.deleteFile();
                                case 3 -> FileOperations.searchFile();
                                case 4 -> run = false;
                                default -> System.out.println("Invalid input");
                                }
                        } catch (NumberFormatException e) {
                                e.printStackTrace();
                        }
                }while(run == true);
        }

        /**
         * Method Name : exit()
         * This method is used to exit from application.
         */
        public static void exit() {
                System.exit(0);
        }

}
```

Project Screen Shot

➢ **Welcome Screen and main menu**

```
::::***********************************::::
     Welcome to LockedMe.com
                    developed by Manvendra
::::***********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
C:\Users\manve\Desktop
1
```

➢ **Option-1 : Retrieve all files**

```
::::***********************************::::
     Welcome to LockedMe.com
                    developed by Manvendra
::::***********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
1
abc.txt
filea.txt
fileb.txt
filec.txt
filed.txt
```

> ➤ **Option-2.1: File Operations – Add File**

```
::::********************************::::
     Welcome to LockedMe.com
                    developed by Manvendra
::::********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
2
Choose operation need to perform from below options
==================================================
1. Add file
2. Delete file
3. Search file
4. Return to main menu
==================================================
1
Enter name for file
myFile
How may line want to write?
2
Enter file content here
I am Manvendra
Learning from Simplilearn
File added successfully.
```

> ➤ **Option-2.2: File Operations – Delete File**

```
::::********************************::::
     Welcome to LockedMe.com
                    developed by Manvendra
::::********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
2
Choose operation need to perform from below options
==================================================
1. Add file
2. Delete file
3. Search file
4. Return to main menu
==================================================
2
Enter name of file need to delete
myFile
myFile.txt is deleted successfully
```

➢ **Option-2.3: File Operations – Search File**

```
::::*********************************::::
    Welcome to LockedMe.com
                    developed by Manvendra
::::*********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
2
Choose operation need to perform from below options
==================================================
1. Add file
2. Delete file
3. Search file
4. Return to main menu
==================================================
3
Enter name of file need to search
abc
File exit at D:\Phase-1_Project\Files\abc.txt
```

➢ **Option-2.4: Return to main menu**

```
::::*********************************::::
    Welcome to LockedMe.com
                    developed by Manvendra
::::*********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
2
Choose operation need to perform from below options
==================================================
1. Add file
2. Delete file
3. Search file
4. Return to main menu
==================================================
4
::::*********************************::::
    Welcome to LockedMe.com
                    developed by Manvendra
::::*********************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
```

➢ **Option-3: Exit application**

```
::::*****************************::::
    Welcome to LockedMe.com
                    developed by Manvendra
::::*****************************::::
1. Retrieve all files
2. File operation - delete, add or search files
3. Exit application
Please enter your choice
3
```

➢ https://github.com/Manvendra1097-eng/Phase-1_Project-LockedMe.com.git