

# LockedMe.com

## (Sprint work and Project Specification)

### Version History:

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Purpose	Scrum details and specifications of the application
Date	20 <sup>th</sup> June 2022
Version	1.0

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## 1. Modules in the project

2. Display all the files.
3. Add a new file.
4. Delete a file.
5. Search a file.

## 2. Sprint wise work

Sprint number	Modules
1	Display all the files Add a new file
2	Delete a file Search a file
3	Close application Testing Deployment(Creating a jar file)

**Display all the files:** This module will return all the file names present in the directory.

**Add a new file:** This module will create and append content to the file.

**Delete a file:** This module will delete the file name specified if exists.

**Search a file:** This module will search the file from the folder.

### 3. Project GitHub Link

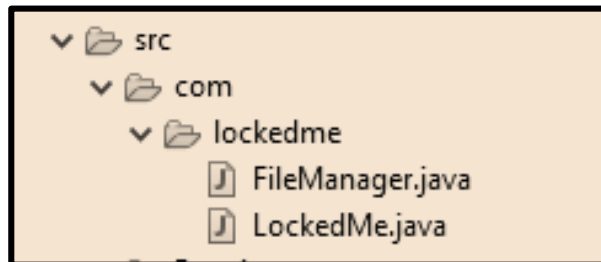
Repository Name	LockedMe
GitHub Link	<a href="https://github.com/Jaydeep-K-Mandal/LockedMe">https://github.com/Jaydeep-K-Mandal/LockedMe</a>

### 4. Cored Java Concepts Used

- Working with files
- Naming Standards
- Modularity
- Object Oriented Programming
- Collections
- Control structures
- Data Structures

## 5. Project Code

### Folder Structure



### FileManager.java

```
package com.lockedme;

import java.io.File;
import java.io.FileWriter;
import java.util.ArrayList;
import java.util.List;

public class FileManager
{
    /**
     * This method will return the file names from the folder
     * @param folderpath
     * @return ArrayList
     */
    public static List<String> getAllFiles(String folderpath)
    {
        //Creating file object
        File folder = new File(folderpath);

        //Getting all the files into file array
        File[] listOffiles = folder.listFiles();

        //Declare a list to store file names
        List<String> fileNames = new ArrayList<String>();

        //Getting file names from array of files
        for(File f : listOffiles)
            fileNames.add(f.getName());

        //return the list of file names
        return fileNames;
    }

    /**
     * This method will create and append content to the file specified
     * @param folderpath
     * @param fileName
     * @param content
     * @return boolean
     */
    public static boolean createAndWriteToFile(String folderpath, String
fileName, List<String> content)
    {
        try
        {
```

```

        //Creating file and file writer object
        File file = new File(folderpath, fileName);
        FileWriter fwrite = new FileWriter(file);

        //Writing to file
        for(String s : content)
            fwrite.write(s+"\n");

        fwrite.close();
        return true;
    }
    catch(Exception ex)
    {
        return false;
    }
}

/**
 * This method will delete the file name specified if exists
 * @param folderpath
 * @param fileName
 * @return boolean
 */
public static boolean deleteFile(String folderpath, String fileName)
{
    //Creating file object
    File file = new File(folderpath+"\\ "+fileName);
    try
    {
        //Deleting file
        if(file.delete())
            return true;
        else
            return false;
    }
    catch(Exception ex)
    {
        return false;
    }
}

/**
 * This method will search the file from the folder
 * @param folderpath
 * @param fileName
 * @return boolean
 */
public static boolean searchFile(String folderpath, String fileName)
{
    //Creating file object
    File file = new File(folderpath+"\\ "+fileName);

    //Search condition
    if(file.exists())
        return true;
    else
        return false;
}

```

```
}
```

## LockedMe.java

```
package com.lockedme;
```

```
import java.util.ArrayList;
```

```
import java.util.Collections;
```

```
import java.util.List;
```

```
import java.util.Scanner;
```

```
public class LockedMe
```

```
{
```

```
    private static Scanner scan = new Scanner(System.in);
```

```
    private static final String FOLDERPATH = "C:\\Users\\Jay  
Deep\\Desktop\\Cohort2\\Eclipse\\src\\com\\lockedme";
```

```
    public static void main(String[] args)
```

```
    {
```

```
        //Variable declaration
```

```
        int proceed = 1;
```

```
        int choice = 0;
```

```
        do
```

```
        {
```

```
            welcomeScreen();
```

```
            try
```

```
            {
```

```
                //Read choice from user
```

```
                System.out.println("Please enter your choice:");
```

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

```
            }
```

```
            catch(Exception e)
```

```
            {
```

```
                System.out.println("Please enter valid choice between  
integer 1 to 5.\n");
```

```
                continue;
```

```
            }
```

```
            switch(choice)
```

```
            {
```

```
                case 1 : getAllFileNames();
```

```
                        break;
```

```
                case 2 : addFile();
```

```
                        break;
```

```
                case 3 : deleteFile();
```

```
                        break;
```

```
                case 4 : searchFile();
```

```
                        break;
```

```
                case 5 : System.out.println("Thank you for using the  
application.");
```

```
                        System.exit(0);
```

```
                        break;
```

```
                default : System.out.println("Invalid Option. Please  
enter correct choice between 1 to 5.");
```

```
            }
```

```
        }while(proceed != 0);
```

```
    }
```

```

public static void welcomeScreen()
{
    System.out.println("*****");
    System.out.println("\t\t LockedMe.com");
    System.out.println("\t\t Jaydeep Kumar Mandal");

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

    System.out.println("1. Display all the files");
    System.out.println("2. Add new file");
    System.out.println("3. Delete a file");
    System.out.println("4. Search a file");
    System.out.println("5. Exit\n");

    System.out.println("*****");
}

public static void getAllFileNames()
{
    //Variable declaration
    List<String> fileNames = FileManager.getAllFiles(FOLDERPATH);

    //Edge condition
    if(fileNames.size() == 0)
        System.out.println("No files in the directory.\n");
    else
        System.out.println("Below is the file list:\n");

    //Sorting file names in ascending order
    Collections.sort(fileNames);

    //Print output to console
    for(String fileName : fileNames)
        System.out.println(fileName);
    System.out.println();
}

public static void addFile()
{
    //Variable declaration
    String fileName;
    int linesCount=0;
    boolean isAdded;
    List<String> content = new ArrayList<String>();

    //Read file name from user
    System.out.println("Enter file name: ");
    fileName = scan.nextLine();

    try
    {
        //Read number of lines from user
        System.out.println("Enter number of lines:");
        linesCount = Integer.parseInt(scan.nextLine());
    }
    catch(Exception ex)

```



```

        {
            System.out.println("Please enter only integer values. To add
content to the file.\n");
            isAdded=false;
        }

        //Read lines from user
        for(int i = 1; i <= linesCount; i++)
        {
            System.out.println("Enter line "+i);
            content.add(scan.nextLine());
        }

        //Save content to file
        isAdded = FileManager.createAndWriteToFile(FOLDERPATH, fileName,
content);

        //Print output to console
        if(isAdded)
            System.out.println("File added successfully.\n");
        else
            System.out.println("Error ocured. Please try again.\n");
    }

    public static void deleteFile()
    {
        //Variable declaration
        String fileName;
        boolean isDeleted;

        //Read file name from user
        System.out.println("Enter file name to be deleted: ");
        fileName = scan.nextLine();

        //Check for deletion
        isDeleted = FileManager.deleteFile(FOLDERPATH, fileName);

        //Print output to console
        if(isDeleted)
            System.out.println("File deleted successfully.\n");
        else
            System.out.println("File not found or some access
issue.\n");
    }

    public static void searchFile()
    {
        //Variable declaration
        String fileName;
        boolean isFound;

        //Read file name from user
        System.out.println("Enter file name to be searched: ");
        fileName = scan.nextLine();

        //Check for search result
        isFound = FileManager.searchFile(FOLDERPATH, fileName);

        //Print output to console
    }

```

```
        if(isFound)
            System.out.println("File is present in the directory.\n");
        else
            System.out.println("File is not present in the
directory.\n");
    }
}
```