

# **LockedMe.com**

## **Project Specification and Sprint Work**

### **Version History:**

|          |                                       |
|----------|---------------------------------------|
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## Modules:

1. List all the files from the directory
2. Add a file to a directory
3. Delete a file from directory
4. Search a file in a directory
5. Exit

## Java Technologies Used:

|                             |
|-----------------------------|
| Object Oriented Programming |
| Naming Standard             |
| Collections                 |
| Control Structures          |
| Data Structures             |
| Working with Files          |
| Modularity                  |
| Exception Handling          |

## Sprints Planning:

| Sprint Number | Modules  |
|---------------|--|
| 1             | List all the files from the directory<br>Add a file to a directory<br>Delete a file from directory           |
| 2             | Search a file in a directory<br>Exit<br>Main Menu<br>Testing Deployment (Creating Jar File)<br>Documentation |

## Project GITHUB Link:

|                  |   |
|------------------|---|
| Repository Name: | MyJavaProject   |
| Github Link:     | <a href="https://github.com/AdeelAnsariProjects">https://github.com/AdeelAnsariProjects</a> |

## Project Code:

| Folder Structure  |
|---|
|    |
| FolderExplorer.java   |
| <pre>package com.folderexplorer;  import java.util.ArrayList; import java.util.List; import java.util.Scanner;  public class FolderExplorer {     static final String folderPath="E:\\FullStackJavaDeveloper\\MyJavaProject\\LockersFolder";     public static void main(String[] args)     {         int proceed = 1;          do         {             int ch;              //Application Main Menu             ch=displayMenu();              switch(ch)             {                 case 1 : getAllFiles();                 break;                  case 2 : createFiles();                 break;                  case 3 : deleteFile();                 break;                  case 4 : searchFile();</pre> |

```

break;

case 5 : System.exit(0);
break;

default : System.out.println("Invalid option selected.");
break;
}
}
while(proceed>0);
}
public static int displayMenu()
{
//Variable Declaration
Scanner obj = new Scanner(System.in);
int ch;

//Application Main Menu
System.out.println("=====");
System.out.println(" | Company Lockers Pvt. Ltd. (LockedMe.com) |");
System.out.println("=====");
System.out.println(" | 1. List all the files from a directory |");
System.out.println(" | 2. Add a file to a directory |");
System.out.println(" | 3. Delete a file from a directory |");
System.out.println(" | 4. Search a file in a directory |");
System.out.println(" | 5. Exit |");
System.out.println("=====");
System.out.println("Enter Your Choice:");
ch = Integer.parseInt(obj.nextLine());
return ch;
}

public static void getAllFiles()
{
//Variable Declaration
List<String> fileNames = RetrieveFiles.getAllFiles(folderPath);

//Listing all the files exist in the specified folder
for(String f:fileNames)
System.out.println(f);
}

public static void createFiles()
{
//Declaring variables
Scanner obj = new Scanner(System.in);
String fileName;
int linesCount;

```

```

List<String> content = new ArrayList<String>();

//Prompting user to enter file name
System.out.println("Enter File Name:");

//Taking file name from the user and storing in fileName variable
fileName=obj.nextLine();

//Prompting user to enter number of line he would like to add
System.out.println("How many lines you would like to add in the file:");

//Taking user input for number of lines into linesCount variable
//linesCount=obj.nextInt();
linesCount=Integer.parseInt(obj.nextLine());

//running for loop for the number lines he want to add to prompt user and take user input
for(int i=1;i<=linesCount;i++)
{
//Prompting user to add line
System.out.println("Enter line "+i+":");

//Taking user input for each line and storing into content array
content.add(obj.nextLine());
}

//saving content into the file
boolean isSaved = AddFile.createFiles(folderPath, fileName, content);

//Notifying user if the file saved successfully or not
if(isSaved)
{
System.out.println("File and lines saved successfully.");
}
else
{
System.out.println("Some error occurred. Please contact system admin.");
}
}

public static void deleteFile()
{
//Variable Declaration
String fileName;
Scanner obj = new Scanner(System.in);

//Showing user a list files that currently exists in the given folder
List<String> fileNames = RetrieveFiles.getAllFiles(folderPath);

```

```
System.out.println("LIST OF FILES:");

for(String f:fileNames)
System.out.println(f);

//Prompting user to give file name to be deleted
System.out.println("Enter the file name you want to delete:");

//Taking file name from user input
fileName=obj.nextLine();

//Deleting file from the given folder
boolean isDeleted = DeleteFile.deleteFile(folderPath, fileName);

//Notifying user if the file deleted successfully or not
if(isDeleted)
{
System.out.println("File deleted successfully.");
}
else
{
System.out.println("Either the given file is not exist or some access issue.");
}
}

public static void searchFile()
{
//Variable Declaration
String fileName;
Scanner obj = new Scanner(System.in);

//Prompting user to give file name to search
System.out.println("Enter the name of the file you want to search:");

//Taking file name from user input
fileName=obj.nextLine();

//Search file from in the given folder
boolean isExist = SearchFile.searchFile(folderPath, fileName);

//Notifying user if the file exist or not
if(isExist)
{
System.out.println("The specified file exist in the folder.");
}
else
{
System.out.println("Either the specified file is not exist or some access issue.");
}
```

```
}  
}  
}
```

### **RetrieveFiles.java**

```
package com.folderexplorer;  
  
import java.io.File;  
import java.util.ArrayList;  
import java.util.List;  
  
public class RetrieveFiles  
{  
    /**  
     * This method will return the name of all the files exist in the given folder path  
     * @param folderpath  
     * @return List<String>  
     */  
    public static List<String> getAllFiles(String folderPath)  
    {  
        //Creating file objects  
        File folderName = new File(folderPath);  
  
        //Getting all the files into FileArray  
        File[] listOfFiles = folderName.listFiles();  
  
        //Declared a list to store file names  
        List<String> fileName = new ArrayList<String>();  
  
        //Getting file name one by one and adding into fileName  
        for(File f: listOfFiles)  
            fileName.add(f.getName());  
  
        //return the list  
        return fileName;  
    }  
}
```

### **AddFile.java**

```
package com.folderexplorer;  
  
import java.io.File;  
import java.io.FileWriter;  
import java.util.List;  
  
public class AddFile  
{  
    /**  
     * This method will create file in the given folder path
```



```

* @param folderPath
* @param fileName
* @param content
* @return boolean
*/
public static boolean createFiles(String folderPath, String fileName, List<String> content)
{
try
{
//Creating file objects
File fl = new File(folderPath, fileName);
FileWriter fw = new FileWriter(fl);

//Adding content to file object line by line
for(String s:content)
{
fw.write(s+"\n");
}

//closing object
fw.close();

//returning true if succeed
return true;

}
catch(Exception Ex)
{
//return false if failed
return false;
}
}
}

```

### DeleteFile.java

```

package com.folderexplorer;

import java.io.File;

public class DeleteFile
{
/**
* This method will delete user specified file from the given folder
* @param folderPath
* @param fileName
* @return boolean
*/
public static boolean deleteFile(String folderPath, String fileName)
{

```

```

//Creating file objects
File fl = new File(folderPath+"\""+fileName);

try
{
if(fl.delete())
{
//if file successfully deleted return true
return true;
}
else
{
//if file id not deleted return false
return false;
}
}
catch(Exception Ex)
{
//if deletion is failed return false
return false;
}
}
}

```

### **SearchFile.java**

```

package com.folderexplorer;

import java.io.File;

public class SearchFile
{
/**
 * This method will search a file name in the specified folder
 * @param folderPath
 * @param fileName
 * @return boolean
 */
public static boolean searchFile(String folderPath, String fileName)
{
//Creating file object
File fl = new File(folderPath+"\""+fileName);

//check if file exist in the specified folder, return true if exist else false
if(fl.exists())
{
return true;
}
else
{

```

```
return false;
```

```
}
```

```
}
```

```
}
```