Simplilearn FSD Phase 1 Final Project (LockedMe.com)

UserFilesRunner class: -

```java
package  UserFiles;

import java.util.Scanner;

public class UserFilesRunner {
      UserFiles Userfiles;

      public static void main(String[] args) {
            UserFilesRunner userfilesrunner =new UserFilesRunner();
            userfilesrunner.MainMenu();


      }

      public void MainMenu() {
            System.out.println("Main Menu");
            Userfiles = new UserFiles();
            this.Userfiles.createDirectory();

            Scanner input = new Scanner(System.in);
            int mainSelection;


      System.out.println("*********************************SIMPLILEARN******
***********************************");
            System.out.println("*******************************FSD PHASE1
PROJECT*******************************************");
            System.out.println("******************************TEJUS
M************************************************************");
            System.out.println();

            do {
                  System.out.println("Choose from the below options");
                  System.out.println("1.Display the File Names in Ascending
Order");
                  System.out.println("2.Display User Interface Menu");
                  System.out.println("3.Exit");

                  mainSelection = input.nextInt();

                  switch(mainSelection) {
                  case 1:
                      Userfiles.listFilesinAscendingOrder();
                  break;

                  case 2:
                      System.out.println("Option 2 selected");
                      userInterfaceMenu();
                      break;
                  case 3:
                      System.out.println("Thank You for using our
Application");

                      System.exit(0);
```

```java
                        break;

                    default:
                            System.out.println("Wrong option");
                    }
            }while(mainSelection!=3);
                    }
        public void userInterfaceMenu() {
                Scanner input = new Scanner(System.in);
                int selection;
                do {
                    System.out.println("***************USER INTERFACE
MENU*************");
                    System.out.println("Choose from the below options");
                    System.out.println("1.Add a user specified file to the
application");
                    System.out.println("2.Delete a user specified file from the
application");
                    System.out.println("3.Search for a user specified file from
the application");
                    System.out.println("4.Back to Main Menu");


                    selection = input.nextInt();
                    switch(selection) {
                    case 1:
                            this.Userfiles.createuserFile();
                            break;

                    case 2:
                            System.out.println("Option 2 Selected");
                            this.Userfiles.deleteuserFile();
                            break;

                    case 3:
                            System.out.println("Option 3 Selected");
                            this.Userfiles.searchFile();
                            break;

                    case 4:
                            MainMenu();

                    default:
                            System.out.println("Wrong Option Selected");

                    }
            }while(selection!=4);
        }
}
```

UserFiles class:-

```java
package UserFiles;

import java.io.File;
import java.io.IOException;
import java.nio.file.FileAlreadyExistsException;
import java.nio.file.Files;
import java.nio.file.NoSuchFileException;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.Arrays;
import java.util.Collections;
import java.util.Iterator;
import  java.util.List;
import java.util.Scanner;

public class UserFiles {
        Path path;


//To get the file Directory
        public void createDirectory() {
                this.path = Paths.get("./Files/UserFiles");
                try {
                        Files.createDirectories(path);
                        System.out.println("Directory created successfully");
                } catch (IOException e) {
                        System.out.println("Failed to create the directory"
+e.getMessage());
                        e.printStackTrace();
                }
        }

        public Path getDirectoryPath() {
                return this.path;
        }

//Add a user specified file to the application
        public void createuserFile() {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter the File Name you want to create");

                String filename= sc.next();

                Path newfilepath =Paths.get(this.path + "/" + filename);

                try {
                Files.createFile(newfilepath);
                System.out.println("File Created Successfully");
                }
                catch(FileAlreadyExistsException e) {
                        System.out.println("The file you want to create already
exists");

                        this.createuserFile();
                }
                catch(IOException e) {
                        System.out.println("Failed to create File" +e.getMessage());
```

```java
            }

                    }
//To list all the files added to the directory
        public void listofFiles() {
                String dir = this.path.toString();
                File[] listOfFiles = new File(dir).listFiles();

                for(File file: listOfFiles) {
                        if(file.isDirectory()) {
                                System.out.println(file.getName());
                        }
                        else if(file.isFile()) {
                                System.out.println(file.getName());
                        }
                }


        }
// To search a user specified file from the application
        public void searchFile() {
                Scanner sc = new Scanner(System.in);

                System.out.println("Enter the File Name you want to search");
                String FiletoSearch = sc.next();

                Path path = Paths.get(this.path + "/" + FiletoSearch);

                if(Files.exists(path)) {
                if(Files.isRegularFile(path)) {
                        System.out.println("Files Exists");
                }
                if(Files.isDirectory(path)) {
                        System.out.println("File Exists but it is a Directory");
                }
                }
                else {
                        System.out.println("File doesnot Exists");
                }
        }
//To delete User specified File from the application
        public void deleteuserFile() {
                Scanner sc = new Scanner(System.in);

                System.out.println("Enter the File Name you want to delete");
                String FileToDelete = sc.next();

                try {
                Files.delete(Paths.get(this.path + "/" + FileToDelete));
                System.out.println("File Deleted Successfully");
        }

                catch(NoSuchFileException e) {
                        System.out.println("File doesnot exists!!!Enter new File Name
to delete");
                }
                catch(IOException e) {
                 e.printStackTrace();
                }
                }
```

```java
//To List all the Files in Ascending Order
    public void listFilesinAscendingOrder() {
        String dir = this.path.toString();
        File[] listOfFiles = new File(dir).listFiles();

        List<File> listofFile = Arrays.asList(listOfFiles);

        Collections.sort(listofFile);

        Iterator<File> it = listofFile.iterator();
        while(it.hasNext()) {
            System.out.println(it.next().getName());
        }

    }
}
```