**package** lockedMe;

**import** java.io.File;

**import** java.io.IOException;

**import** java.nio.file.Files;

**import** java.nio.file.Path;

**import** java.nio.file.Paths;

**import** java.util.Locale;

**import** java.util.Scanner;

**import** java.util.Set;

**import** java.util.TreeSet;

**public** **class** Main {

**static** Scanner *scanner* = **new** Scanner(System.***in***);

**final** **static** String ***FOLDER*** = "/tmp/";

**public** **static** **void** main(String[] args) {

*welcomeScreen*();

*mainMenu*();

}

**public** **static** **void** welcomeScreen() {

System.***out***.println("Welcome to LockedMe");

System.***out***.println("Developer: Vipul Chinnawar");

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

}

**public** **static** **void** mainMenu() {

System.***out***.println("What would you like to do?");

System.***out***.printf("1. See all files"+ "%n" + "2. Manipulate files" + "%n" + "3. Exit Application" + "%n");

String mainMenuSelection = *scanner*.nextLine();

**switch** (mainMenuSelection) {

**case** "1":

*showFiles*();

**break**;

**case** "2":

*operationsMenu*();

**break**;

**case** "3":

System.***out***.println("Thanks for using LockedMe");

System.*exit*(0);

**default**:

System.***out***.println("Invalid selection, please try again");

*mainMenu*();

**break**;

}

}

**public** **static** **void** operationsMenu() {

System.***out***.printf("1. Add a file"+ "%n" + "2. Delete a file" + "%n" + "3. Search for a file" + "%n" + "4. Return to main menu" + "%n");

String operationsSelection = *scanner*.nextLine();

**switch** (operationsSelection) {

**case** "1":

System.***out***.println("Please provide a file path");

String addFilePath = *scanner*.nextLine();

*addFile*(addFilePath);

**break**;

**case** "2":

System.***out***.println("Please enter file name");

String deleteFileName = *scanner*.nextLine();

*deleteFile*(deleteFileName);

**break**;

**case** "3":

System.***out***.println("Please enter file name");

String searchFileName = *scanner*.nextLine();

*searchFiles*(searchFileName);

**break**;

**case** "4":

*mainMenu*();

**break**;

**default**:

System.***out***.println("Invalid selection, please try again");

*operationsMenu*();

**break**;

}

}

**public** **static** Set<String> getFiles() {

File[] files = **new** File(***FOLDER***).listFiles();

Set<String> sorted = **new** TreeSet<>();

**for** (File file: files) {

sorted.add(file.getName());

}

**return** (sorted);

}

**public** **static** **void** showFiles() {

System.***out***.println("Showing files in ascending order:");

*getFiles*().forEach(System.***out***::println);

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

*mainMenu*();

}

**public** **static** **void** addFile(String filePath) {

Path path = Paths.*get*(filePath);

**if** (!Files.*exists*(path)) {

System.***out***.println("File does not exist");

}

String newFilePath = ***FOLDER*** + "/" + path.getFileName();

**int** inc = 0;

**while** (Files.*exists*(Paths.*get*(newFilePath))) {

inc++;

newFilePath = ***FOLDER*** + "/" + inc + "\_" + path.getFileName();

} **try** {

Files.*copy*(path, Paths.*get*(newFilePath));

System.***out***.println("Copied to: " + newFilePath);

} **catch**(IOException e) {

System.***out***.println("Unable to copy file to " + newFilePath);

}

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

*operationsMenu*();

}

**public** **static** **boolean**[] searchLogic(String fileName) {

**final** **boolean**[] exists = {**false**};

*getFiles*().forEach((x) -> {

**if** (x.toLowerCase(Locale.***ROOT***).equals(fileName.toLowerCase(Locale.***ROOT***))) {

exists[0] = **true**;

}

});

**return** (exists);

}

**public** **static** **void** deleteFile(String fileName) {

**final** **boolean**[] exists = *searchLogic*(fileName);

File file = **new** File(***FOLDER*** + fileName );

**if** (exists[0]) {

file.delete();

System.***out***.println("File Deleted " +fileName);

} **else** {

System.***out***.println(fileName + " doesn't exist");

}

*operationsMenu*();

}

**public** **static** **void** searchFiles(String fileName) {

**final** **boolean**[] exists = *searchLogic*(fileName);

**if** (exists[0]) {

System.***out***.println(fileName + " exists");

} **else** {

System.***out***.println(fileName + " doesn't exist");

}

*operationsMenu*();

}

}