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package com.LockedMe;

import java.io.File;
import java.io.IOException;
import java.util.Arrays;
import java.util.Scanner;
import java.util.Set;
import java.util.TreeSet;

public class LockedMe {

    public static String currentDir;
    public File folderName;

    // Welcome display
    void startDisplay() {
        System.out.println("***** LockedMe.com --
Sunil kala *****");
        System.out.println("");
    }

    // Exit display
    void exitDisplay() {
        System.out.println("*****THANK YOU
*****");
        System.out.println("");
    }

    // Creating main menu with various lists
    public void mainMenuDisplay() {
        System.out.println();
        System.out.println("Select any one of the following:
");
        System.out.println("1.List ALL Files \n2.Business
level Operation \n3.Exit");
    }

    // creating submenus with adding ,deleting ,searching
features
    public void subMenuDisplay() {
        System.out.println("Select Operation:          ");
        System.out.println("a.Add a file \nb.Delete a file
\nc.Search a file\nd.Go Back To Main Menu\ne.Exit");
    }

    // main menu method
    void mainMenu() {
        do {
            mainMenuDisplay();

            try {
                Scanner sc = new Scanner(System.in);
                int option =
Integer.parseInt(sc.nextLine());

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        switch (option) {
        case 1: {
            // displaying all files.
            ListAllFiles();
            mainMenu();

        }
        case 2: {
            subMenu();

        }
        case 3: {
            System.out.println("Thank You");
            System.exit(0);
        }
        default:
            System.out.println("\n Invalid
input \n please enter from 1 2 3");
            mainMenu();
        }

        sc.close();
    } catch (Exception e) {
        System.out.println("\n Invalid input \n
please enter from 1 2 3");
        mainMenu();
    }
} while (true);
}

// creating submenus method
public void subMenu() {
    subMenuDisplay();
    try {
        Scanner sc = new Scanner(System.in);
        char option =
sc.nextLine().toLowerCase().charAt(0);
        switch (option) {
        case 'a': {
            System.out.print("Enter a file name to
add: ");

            String fileName =
sc.next().trim().toLowerCase();
            addFile(fileName);
            break;
        }
        case 'b': {
            System.out.print("Enter a file name to
delete: ");

            String filename = sc.next().trim();
            deleteFile(filename);
            break;
        }
        case 'c': {
            System.out.print("Enter file name to

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search: ");
        String filename = sc.next().trim();
        searchFile(filename);
        break;
    }
    case 'd': {
        System.out.println("Back to Main Menu");
        mainMenu();
        break;
    }
    case 'e': {
        System.out.println("Thank You");
        System.exit(0);
    }
    default:
        System.out.println("\n Invalid input \n
Please enter from  a, b, c, d");
    }
    subMenu();
} catch (Exception e) {
    System.out.println("\n Invalid input \n Please
enter a, b, c, d");
    subMenu();
}

}

//main menu listing files
public void ListAllFiles() {
    if (folderName.exists()) { //
        String[] files = folderName.list();
        if (files != null && files.length > 0) {
            Set<String> file = new TreeSet<>
(Arrays.asList(files));
            for (String i : file) {
                System.out.println(i);
            }
        } else {
            System.out.println("Folder is empty");
        }
    } else {
        throw new NullPointerException("Directory
doesnt exist");
    }
}

}

//adding files to folder
void addFile(String fileName) throws IOException {
    if (fileName == null || fileName.isEmpty()) {
        throw new NullPointerException("Invalid file
name");
    }
    File filepath = new File(folderName + File.separator
+ fileName);

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        if (filepath.createNewFile()) {
            System.out.println(fileName + " is created at:
" + folderName);
        } else {
            System.out.println(fileName + " already exists
at " + folderName);
        }

    }

    //deleting files
    void deleteFile(String fileName) throws IOException {
        if (fileName == null || fileName.isEmpty()) {
            throw new NullPointerException("Invalid file
name");
        }
        File filepath = new File(folderName + File.separator
+ fileName);

        if (filepath.delete()) {
            System.out.println(fileName + " is deleted
from:" + folderName);
        } else {
            System.out.println(fileName + " files not
found" + "\n" + "operation unsuccessful.");
        }

    }

    //searching files
    void searchFile(String fileName) {
        String[] files = folderName.list();
        for (String i : files) {
            if (i.equals(fileName)) {
                System.out.println(fileName + " found at
" + folderName);
                return;
            }
        }
        System.out.println("File Not found");
    }

    static String dir;

    public LockedMe() {
        currentDir = System.getProperty("user.dir");
        folderName = new File(currentDir + File.separator +
"lockedMeFolder");
        if (folderName.exists()) {
            dir = folderName.getAbsolutePath();
        } else {
            folderName.mkdirs();
        }
    }
}

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