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package com.ontraining;

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

public class Assignment1 {
    static String DIRECTORY;
    File folder_name;

    public Assignment1() {
        DIRECTORY = System.getProperty("user.dir");
        folder_name = new File(DIRECTORY+"/files");
        if (!folder_name.exists())
            folder_name.mkdirs();
        System.out.println("DIRECTORY : "+ folder_name.getAbsolutePath());
    }

    private static final String WELCOME_PROMPT =
        "\n** Assignment1_Project**";
    private static final String MAIN_MENU_PROMPT =
        "\nMAIN MENU - Select any of the following: \n"+
        "1 -> List files in directory\n"+
        "2 -> Add, Delete or Search\n"+
        "3 -> Exit Program";

    private static final String SECONDARY_MENU_PROMPT =
        "\nSelect any of the following: \n"+
        "a -> Add a data\n"+
        "b -> Delete a data\n"+
        "c -> Search a data\n"+
        "d -> Back";

    void showPrimaryMenu() {
        System.out.println(MAIN_MENU_PROMPT);
        try(Scanner scanner = new Scanner(System.in)){

            int option = scanner.nextInt();
            switch (option){
                case 1 : {
                    showFiles();
                    showPrimaryMenu();
                }
                case 2 : {
                    showSecondaryMenu();
                }
                case 3 : {
                    System.out.println("Thank you , Visit again");
                    System.exit(0);
                }
                default: showPrimaryMenu();
            }
        }
    }
}

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        catch (Exception e){
            System.out.println("Please enter 1, 2 or 3");
            showPrimaryMenu();
        }
    }

    void showSecondaryMenu() {
        System.out.println(SECONDARY_MENU_PROMPT);
        try(Scanner scanner = new Scanner(System.in))
        {
            char[] input =
scanner.nextLine().toLowerCase().trim().toCharArray();
            char option = input[0];

            switch (option){
                case 'a' : {
                    System.out.print("\u2193 Adding a data...Please Enter  data
Name : ");

                    String filename = scanner.next().trim().toLowerCase();
                    addFile(filename);
                    break;
                }
                case 'b' : {
                    System.out.print("\u2193 Deleting a data...Please Enter  data
Name : ");

                    String filename = scanner.next().trim();
                    deleteFile(filename);
                    break;
                }
                case 'c' : {
                    System.out.print("\u2193 Searching a data...Please Enter  data
Name : ");

                    String filename = scanner.next().trim();
                    searchFile(filename);
                    break;
                }
                case 'd' : {
                    System.out.println("Going Back to MAIN menu");
                    showPrimaryMenu();
                    break;
                }
                default : System.out.println("Please enter a, b, c or d");
            }
            showSecondaryMenu();
        }
        catch (Exception e){
            System.out.println("Please enter a, b, c or d");
            showSecondaryMenu();
        }
    }

    void showFiles() {
        if (folder_name.list().length==0)
            System.out.println("No files found");
        else {

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        String[] list = folder_name.list();
        System.out.println("The datas in " + folder_name + " are :");
        Arrays.sort(list);
        for (String str:list) {
            System.out.println(str);
        }
    }

    void addFile(String filename) throws IOException {
        File filepath = new File(folder_name + "/" + filename);
        String[] list = folder_name.list();
        for (String file: list) {
            if (filename.equalsIgnoreCase(file)) {
                System.out.println("data " + filename + " already exists at "
+ folder_name);
                return;
            }
        }
        filepath.createNewFile();
        System.out.println("data " + filename + " added to " + folder_name);
    }

    void deleteFile(String filename) {
        File filepath = new File(folder_name + "/" + filename);
        String[] list = folder_name.list();
        for (String file: list) {
            if (filename.equals(file) && filepath.delete()) {
                System.out.println("data " + filename + " deleted from " +
folder_name);
                return;
            }
        }
        System.out.println("Delete Operation failed. FILE NOT FOUND");
    }

    void searchFile(String filename) {
        String[] list = folder_name.list();
        for (String file: list) {
            if (filename.equals(file)) {
                System.out.println("FOUND : data " + filename + " exists at "
+ folder_name);
                return;
            }
        }
        System.out.println("Data NOT Found (DNF)");
    }

    public static void main(String[] args) {
        System.out.println(WELCOME_PROMPT);
        Assignment1 menu = new Assignment1();
        menu.showPrimaryMenu();
    }
}

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