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SCREENSHOT TUGAS POSTTEST II PBO

➢ **jual.java**

```java
package pboposttest2;

public class jual {
    private String nama;
    private String pembeli;
    private int harga;

    //setter
    public void setNama(String nama) {
        this.nama = nama;
    }

    public void setPembeli(String pembeli) {
        this.pembeli = pembeli;
    }

    public void setHarga(int harga) {
        this.harga = harga;
    }

    //getter
    public String getNama() {
        return nama;
    }

    public String getPembeli() {
        return pembeli;
    }
```

```java
    public void setHarga(int harga) {
        this.harga = harga;
    }

    //getter
    public String getNama() {
        return nama;
    }

    public String getPembeli() {
        return pembeli;
    }

    public int getHarga() {
        return harga;
    }
}
```

➢ **Pboposttest2.java**

```java
//package : cara untuk mengelompokkan class
package pboposttest2;

import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileWriter;
import java.io.IOException;
import java.util.ArrayList;
import java.util.Scanner;

//public : pengaksesan suatu variabel instan diluar class
public class Pboposttest2 {

    static String fileName;
    static ArrayList<String> todoLists;
    static boolean isEditing = false;
    static Scanner input;

    //static : sebuah property atau method diakses langsung tanpa object
    public static void main(String[] args) {
```

```java
        //ToDo Code
        // inisialisasi
        do {
            todoLists = new ArrayList<>();
            input = new Scanner(System.in);
        } while (isEditing);
        String filePath = System.console() == null ? "/src/crud.txt" : "/crud.txt";
        fileName = System.getProperty("user.dir") + filePath;

        System.out.println("FILE: " + fileName);

        // run the program (main loop)
        while (true) {
            showMenu();
        }
    }
```

```java
    static void clearScreen(){
        try {
            final String os = System.getProperty("os.name");
            if (os.contains("Windows")) {
                // clear screen untuk windows
                new ProcessBuilder("cmd", "/c", "cls")
                        .inheritIO()
                        .start()
                        .waitFor();
            } else {
                // clear screen untuk Linux, Unix, Mac
                Runtime.getRuntime().exec("clear");
                System.out.print("\033[H\033[2J");
                System.out.flush();
            }
        } catch (final IOException | InterruptedException e) {
            System.out.println("Error karena: " + e.getMessage());
        }
    }
```

```java
    static void showMenu() {
        //showMenu()
        System.out.println("");
        System.out.println(" +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+");
        System.out.println("        Sistem Penjualan Boneka Lucu Toko Kawaii' Doll House        ");
        System.out.println(" +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+");
        System.out.println("");
        System.out.println("(1) Tambah Boneka   ");
        System.out.println("(2) Lihat Boneka    ");
        System.out.println("(3) Edit Boneka     ");
        System.out.println("(4) Hapus Boneka    ");
        System.out.println("(5) Exit     ");
        System.out.println("");

        System.out.print("Pilih Menu : ");

        String selectedMenu = input.nextLine();
```

```java
            switch (selectedMenu) {
                case "1":
                    //Create
                    System.out.println("Selamat Datang di Toko Boneka Lucu Ini!");
                    addTodoList();
                    break;
                case "2":
                    //Read
                    System.out.println("Selamat Datang di Toko Boneka Lucu Ini!");
                    showTodoList();
                    break;
                case "3":
                    //Update
                    System.out.println("Selamat Datang di Toko Boneka Lucu Ini!");
                    System.out.println("Indeks diUpdate : ");
                    editTodoList();
                    break;
                case "4":
                    //Delete
                    System.out.println("Selamat Datang di Toko Boneka Lucu Ini!");
                    System.out.println("Indeks diHapus : ");
                    deleteTodoList();
                    break;
                case "5":
                    //Exit
                    System.out.println("Terima Kasih! Silahkan Datang Lagi!");
                    System.exit(5);
```

```java
                default:
                    System.out.println("Oops! Salah Pilih Menu!");
                    backToMenu();
                    break;
            }
        }

    static void backToMenu() {
        System.out.println("");
        System.out.print("Silahkan Tekan 'Enter' untuk Kembali!");
        input.nextLine();
        clearScreen();
    }
```

```java
        static void readTodoList() {
            try {
                File file = new File(fileName);
                Scanner fileReader = new Scanner(file);
```

```java
        static void readTodoList() {
            try {
                File file = new File(fileName);
                Scanner fileReader = new Scanner(file);

                // load isi file ke dalam array todoLists
                todoLists.clear();
                    while (fileReader.hasNextLine()) {
                    String data = fileReader.nextLine();
                    todoLists.add(data);
                }
            } catch (FileNotFoundException e) {
                System.out.println("Error karena: " + e.getMessage());
            }
        }
```

```java
static void showTodoList() {
    clearScreen();
    readTodoList();
    if (todoLists.size() > 0) {
        System.out.println("");
        System.out.println("Boneka yang Ditambahkan : ");
        int index = 0;
        for (String data : todoLists) {
            System.out.println(String.format("(%d) %s", index, data));
            index++;
        }
    } else {
        System.out.println("Sorry! No Data Here");
    }

    if (!isEditing) {
        backToMenu();
    }
}
```

```java
static void addTodoList() {
    clearScreen();
    System.out.println(" ");
    System.out.println("Nama Boneka Impian Apa?");
    System.out.print("Jawab : ");
    String newTodoList = input.nextLine();

    try {
        try ( // tulis file
            FileWriter fileWriter = new FileWriter(fileName, true)) {
            fileWriter.append(String.format("%s%n", newTodoList));
        }
        System.out.println(" ");
        System.out.println(" -------------------------------- ");
        System.out.println("          Berhasil Ditambahkan!         ");
        System.out.println(" -------------------------------- ");
    } catch (IOException e) {
        System.out.println("Oops! Kenali Error : " + e.getMessage());
    }
    backToMenu();
}
```

```java
static void editTodoList() {
    isEditing = true;
    showTodoList();

    try {
        System.out.println(" ");
        System.out.print("Pilih Indeks : ");
        int index = Integer.parseInt(input.nextLine());

        if (index > todoLists.size()) {
            throw new IndexOutOfBoundsException("Data Kamu Salah!");
        } else {
            System.out.println("Nama Boneka Baru : ");
            String newData = input.nextLine();

            // update data
            String set = todoLists.set(index, newData);
            System.out.println(todoLists.toString());

            try {
                // write new data
                try (FileWriter fileWriter = new FileWriter(fileName, false)) {
                    // write new data
                    for (String data : todoLists) {
                        fileWriter.append(String.format("%s%n", data));
                    }
                }
```

```java
                    System.out.println("");
                    System.out.println(" ---------------------------------- ");
                    System.out.println("          Berhasil Diubahkan!       ");
                    System.out.println(" ---------------------------------- ");
                } catch (IOException e) {
                    System.out.println("Oops! Know the Error : " + e.getMessage());
                }
            }
        } catch (IndexOutOfBoundsException | NumberFormatException e) {
            System.out.println(e.getMessage());
        }

        isEditing = false;
        backToMenu();
    }
```

```java
static void deleteTodoList() {
    isEditing = true;
    showTodoList();

    System.out.println(" ");
    System.out.println("Pilih Indeks : ");
    int index = Integer.parseInt(input.nextLine());

    try {
        if (index > todoLists.size()) {
            throw new IndexOutOfBoundsException("Kamu memasukan data yang salah!");
        } else {
            System.out.println("");
            System.out.println("Indeks yang Kamu Hapus Adalah Indeks : ");
            System.out.println(String.format("(%d) %s", index, todoLists.get(index)));
            System.out.println("");
            System.out.println("Adakah Kamu Yakin Hapus?");
            System.out.print("Jawab (Y/T) : ");
            String jawab = input.nextLine();

            if (jawab.equalsIgnoreCase("Y")) {
                // hapus data
                String remove = todoLists.remove(index);
```

```java
                // tulis ulang file
                try {
                    // write new data
                    try (FileWriter fileWriter = new FileWriter(fileName, false)) {
                        // write new data
                        for (String data : todoLists) {
                            fileWriter.append(String.format("%s%n", data));
                        }
                    }
```

```java
                    System.out.println("");
                    System.out.println(" ---------------------------------- ");
                    System.out.println("          Berhasil Dihapus!         ");
                    System.out.println(" ---------------------------------- ");
                } catch (IOException e) {
                    System.out.println("Oops! Know the Error : " + e.getMessage());
                }
            }

        } catch (IndexOutOfBoundsException e) {
            System.out.println(e.getMessage());
        }

        //back
        isEditing = false;
        backToMenu();
    }
}
```