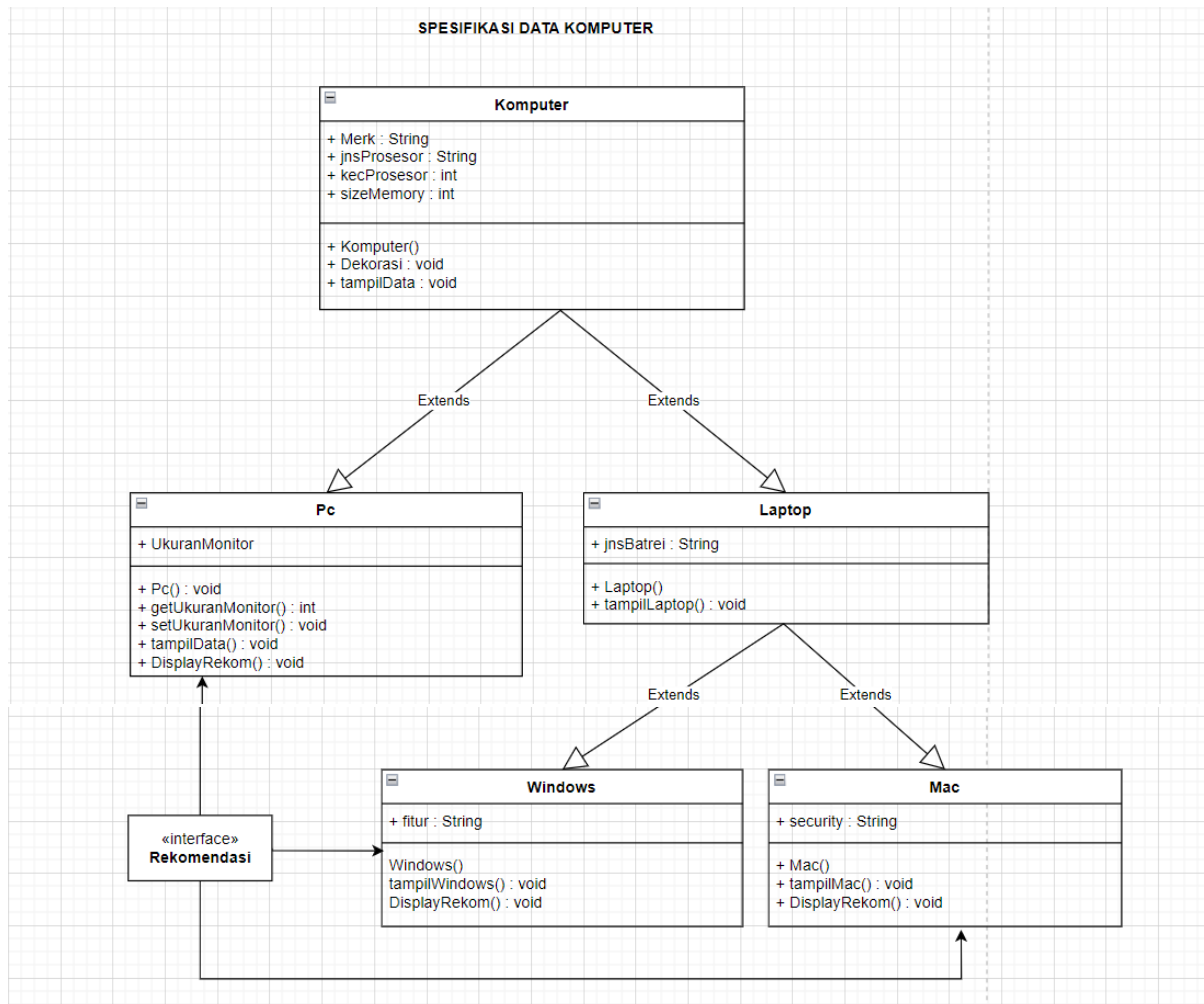


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Link Github : <https://github.com/hanifa000/Tugas-PBO>

Class Diagram



Daftar Objek, Property, Method

No	Objek	Property	Method
1	Komputer	Merk : String jnsProsesor : String kecProsesor : int sizeMemory : int	Komputer() Dekorasi : void tampilData : void
2	Rekomendasi	Aplikasi : String	DisplayRekom() : void
3	Pc	ukuranMonitor : int	Pc() : void getUkuranMonitor() : int setUkuranMonitor() : void tampilData() : void

			DisplayRekom() : void
4	Laptop	jnsBatrei : String	Laptop() tampilLaptop() : void
5	Mac	Security: String	Mac() tampilMac() : void DisplayRekom() : void
6	Windows	Fitur : String	Windows() tampilWindows() : void DisplayRekom() : void

Abstract Class

```

package Komputer.java;

public abstract class Komputer { //class abstract
    2 usages
    public String merk, jnsProsesor; //property
    2 usages
    private int kecProsesor, sizeMemory; //property

    //opsi dekor program
    3 usages
    static void dekorasi() {
        System.out.println("=====");
    }

    2 usages
    public Komputer(String merk, int kecProsesor, int sizeMemory, String jnsProsesor) {
        this.merk=merk;
        this.kecProsesor=kecProsesor;
        this.sizeMemory=sizeMemory;
        this.jnsProsesor=jnsProsesor;
    }

    3 usages
    public void tampilData() {
        // dekorasi();
        System.out.println("Merk : "+merk);
        System.out.println("Kecepatan Prosesor : "+kecProsesor+" Ghz");
        System.out.println("Ukuran Memory : "+sizeMemory+" GB");
        System.out.println("Jenis prosesor : "+jnsProsesor);
    }
}

// Main.java
package Main.java;

import Komputer.java.Komputer;

public class Main {
    public static void main(String[] args) {
        Komputer komputer = new Komputer("Mac", 4, 16, "Mac");
        komputer.tampilData();
        komputer.DisplayRekom();
    }
}

```

The screenshot shows the IDE with the 'Komputer.java' file open. The code defines an abstract class 'Komputer' with properties 'merk', 'jnsProsesor', 'kecProsesor', and 'sizeMemory'. It includes a static method 'dekorasi()' and a 'tampilData()' method. The 'Main.java' file uses the 'Komputer' class to create an instance and call its methods. The output window shows the execution results, including the display of computer specifications and the recommendation list.

```

package Komputer.java;

public class Pc extends Komputer implements Rekomendasi {
    2 usages
    private int ukuranMonitor; //property

    1 usage
    public Pc(String merk, int kecProsesor, int sizeMemory, String jnsProsesor, int ukuranMonitor) {
        super(merk, kecProsesor, sizeMemory, jnsProsesor);
    }

    1 usage
    public int getUkuranMonitor() { //getter
        return ukuranMonitor;
    }

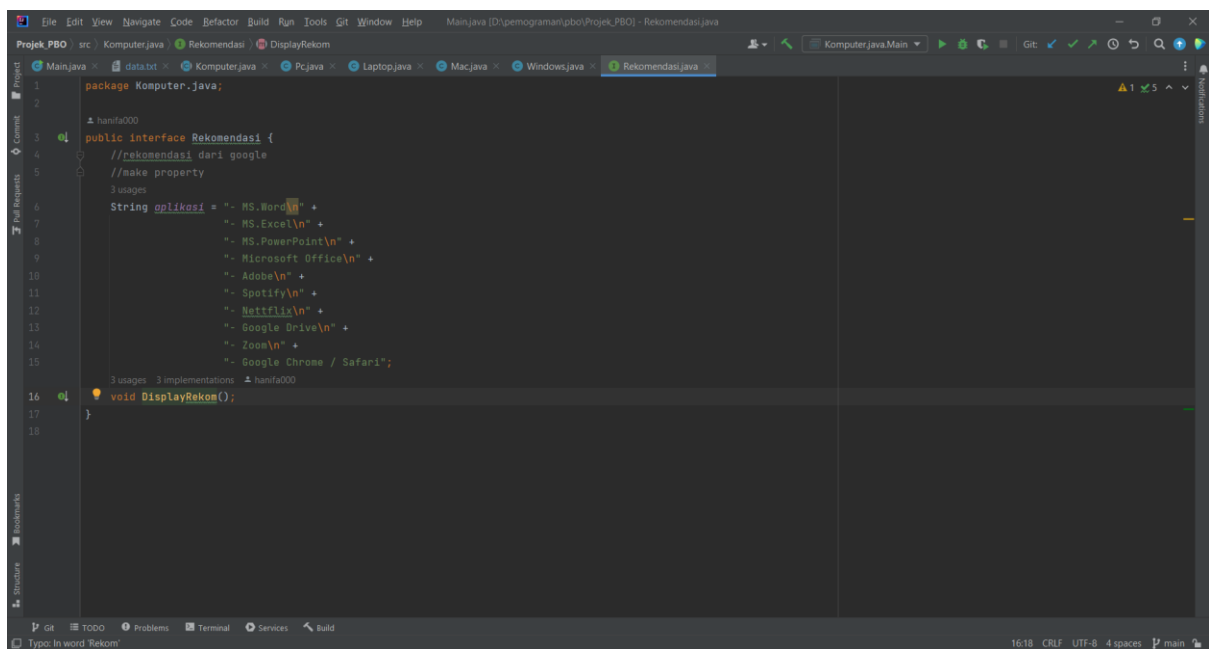
    1 usage
    public void setUkuranMonitor(int ukuranMonitor) { //setter
        this.ukuranMonitor = ukuranMonitor;
    }

    3 usages
    @Override
    public void tampilData() { //override dr class abstract
        System.out.println("=====PC=====");
        super.tampilData();
    }
}

```

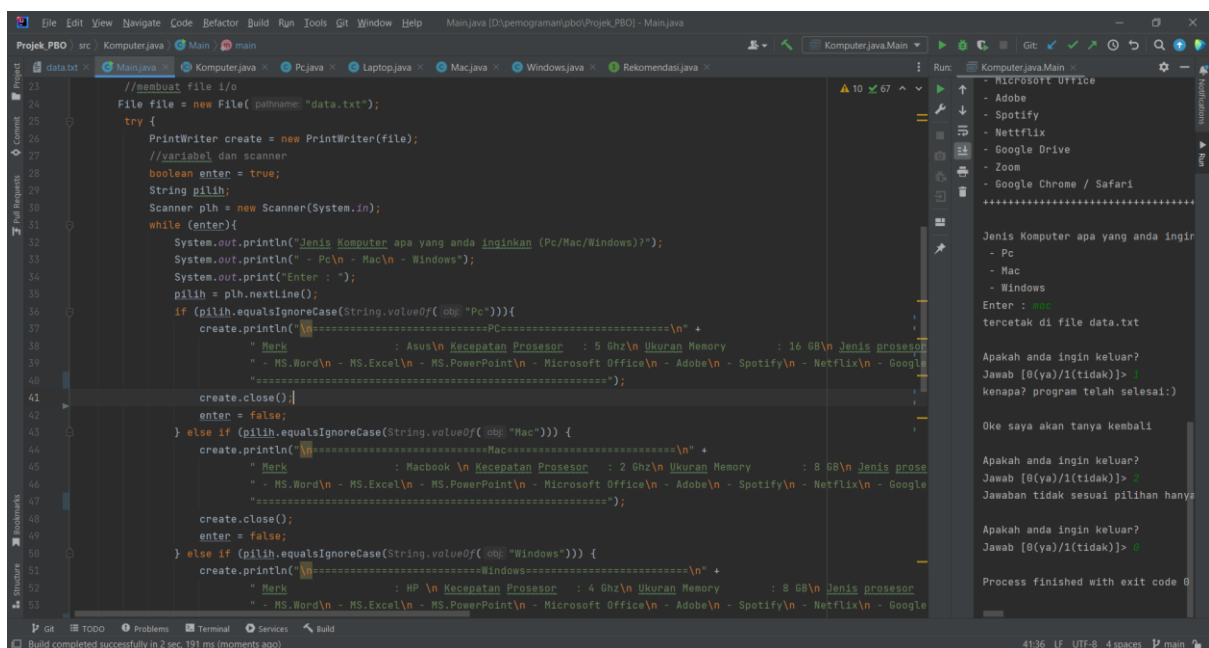
The screenshot shows the IDE with the 'Pc.java' file open. The code defines a concrete class 'Pc' that extends the 'Komputer' abstract class and implements the 'Rekomendasi' interface. It adds a 'ukuranMonitor' property and implements the 'tampilData()' method. The 'Main.java' file is also visible, showing the usage of the 'Pc' class. The output window shows the execution results, including the display of computer specifications and the recommendation list.

Interface



```
1 package Komputer.java;
2
3 import java.util.Scanner;
4
5 //rekendasi dari google
6 //make property
7 //3 usages
8
9 String aplikasi = "- MS.Word\n" +
10                  "- MS.Excel\n" +
11                  "- MS.PowerPoint\n" +
12                  "- Microsoft Office\n" +
13                  "- Adobe\n" +
14                  "- Spotify\n" +
15                  "- Netflix\n" +
16                  "- Google Drive\n" +
17                  "- Zoom\n" +
18                  "- Google Chrome / Safari";
19
20 void DisplayRekom();
21 }
```

File I/O



```
23 //membuat file i/o
24 File file = new File("data.txt");
25 try {
26     PrintWriter create = new PrintWriter(file);
27     //variabel dan scanner
28     boolean enter = true;
29     String pilih;
30     Scanner plh = new Scanner(System.in);
31     while (enter){
32         System.out.println("Jenis Komputer apa yang anda inginkan (Pc/Mac/Windows)?");
33         System.out.println("- Pc\n- Mac\n- Windows");
34         System.out.print("Enter : ");
35         pilih = plh.nextLine();
36         if (pilih.equalsIgnoreCase(String.valueOf("Pc"))){
37             create.println("=====PC=====");
38             " Mark : Asus\n Kecepatan Prosesor : 5 Ghz\n Ukuran Memory : 16 GB\n Jenis prosesor\n" +
39             "- MS.Word\n - MS.Excel\n - MS.PowerPoint\n - Microsoft Office\n - Adobe\n - Spotify\n - Netflix\n - Google\n" +
40             "=====");
41             create.close();
42             enter = false;
43         } else if (pilih.equalsIgnoreCase(String.valueOf("Mac"))){
44             create.println("=====Mac=====");
45             " Mark : MacBook\n Kecepatan Prosesor : 2 Ghz\n Ukuran Memory : 8 GB\n Jenis prosesor\n" +
46             "- MS.Word\n - MS.Excel\n - MS.PowerPoint\n - Microsoft Office\n - Adobe\n - Spotify\n - Netflix\n - Google\n" +
47             "=====");
48             create.close();
49             enter = false;
50         } else if (pilih.equalsIgnoreCase(String.valueOf("Windows"))){
51             create.println("=====Windows=====");
52             " Mark : HP\n Kecepatan Prosesor : 4 Ghz\n Ukuran Memory : 8 GB\n Jenis prosesor\n" +
53             "- MS.Word\n - MS.Excel\n - MS.PowerPoint\n - Microsoft Office\n - Adobe\n - Spotify\n - Netflix\n - Google\n" +
54             "=====");
55             create.close();
56             enter = false;
57         }
58     }
59 }
```

The screenshot shows an IDE with a project named 'Projek PBO'. The left sidebar shows the project structure with 'data.txt' selected. The main editor displays the content of 'data.txt', which lists specifications for a Macbook and recommended software. The right sidebar shows the 'Run' console, which displays the output of the Java program. The program prompts the user for a computer type (Pc/Mac/Windows) and whether they want to exit. The user input 'Mac' is shown, and the program prints the contents of 'data.txt' to the console. The status bar at the bottom indicates that the build was completed successfully in 2 seconds and 191 milliseconds.

```
File Edit View Navigate Code Refactor Build Run Tools Git Window Help Main.java [D:\pemrograman\pbo\Projek PBO] - data.txt
Projek PBO
data.txt
Main.java Komputer.java Pc.java Laptop.java Mac.java
1 =====Mac=====
2 Merk : Macbook
3 Kecepatan Prosesor : 2 Ghz
4 Ukuran Memory : 8 GB
5 Jenis prosesor : Intel i9
6 Jenis baterai : Lithium-Polymer
7 Security : Chip
8
9 Rekomendasi Software :
10 - MS.Word
11 - MS.Excel
12 - MS.PowerPoint
13 - Microsoft Office
14 - Adobe
15 - Spotify
16 - Netflix
17 - Google Drive
18 - Zoom
19 - Google Chrome / Safari
20 =====
21
Run Komputer.java.Main
- Microsoft Office
- Adobe
- Spotify
- Netflix
- Google Drive
- Zoom
- Google Chrome / Safari
Jenis Komputer apa yang anda inginkan (Pc/Mac/Windows)?
- Pc
- Mac
- Windows
Enter : Mac
tercetak di file data.txt
Apakah anda ingin keluar?
Jawab [0(ya)/1(tidak)]> 1
Kenapa? program telah selesai:)
Oke saya akan tanya kembali
Apakah anda ingin keluar?
Jawab [0(ya)/1(tidak)]> 1
Jawaban tidak sesuai pilihan hanya 0 = tidak & 1 = ya!
Apakah anda ingin keluar?
Jawab [0(ya)/1(tidak)]> 1
Process finished with exit code 0
Build completed successfully in 2 sec, 191 ms (a minute ago) 21 1f UTF-8 4 spaces main
```