LAPORAN KUIS 2 PRAKTIKUM PBO

“KUIS 2”

Disusun oleh:

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D4 TEKNIK INFORMATIKA

POLITEKNIK NEGERI MALANG

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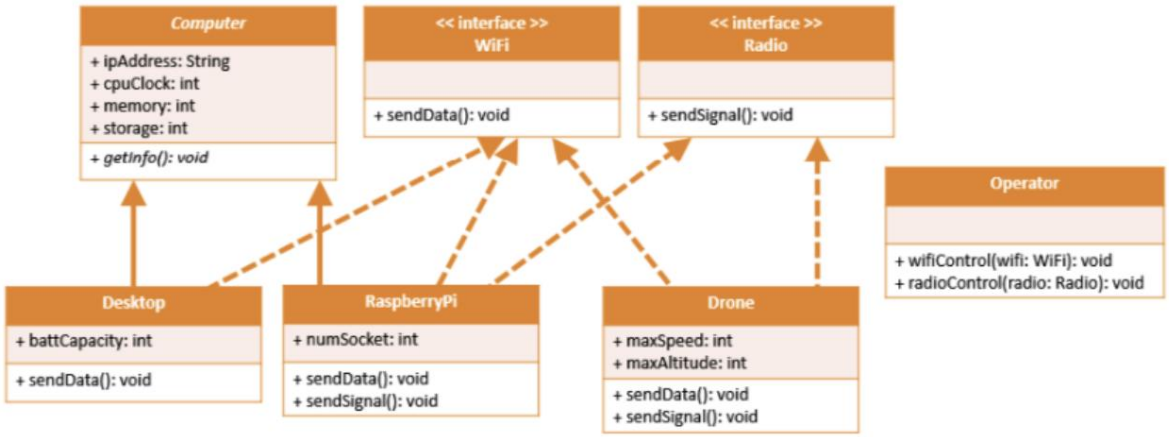

SOAL!

Buatlah kode program dari class diagram di bawah ini. Terdapat class computer yang berupa abstract class, berikut class turunannya dan class lain yang mengimplementasikan interface WiFi dan Radio. Seperti biasa, kode program dikumpulkan di github, lakukan pullreq di repo berikut https://github.com/PBO2122-TI2B/kuis2.git

JAWAB!

Kode Program Class Computer:

```
public abstract class Computer{
    protected String ipAddress;
    protected int cpuClock;
    protected int memory;
    protected int storage;

    public Computer(String ipAddress, int cpuClock, int memory, int storage){
        this.ipAddress = ipAddress;
        this.cpuClock = cpuClock;
        this.memory = memory;
        this.storage = storage;
    }

    public void setIpAddress(String ipAddress){
        this.ipAddress = ipAddress;
    }
    public String getIpAddress(){
        return ipAddress;
    }
    public void setCpuClock(int cpuClock){
```

```
        this.cpuClock = cpuClock;
    }
    public int getCpuClock(){
        return cpuClock;
    }
    public void setMemory(int memory){
        this.memory = memory;
    }
    public int getMemory(){
        return memory;
    }
    public void setStorage(int storage){
        this.storage = storage;
    }
    public int getStorage(){
        return storage;
    }
    public abstract void getInfo();
}
```

Kode Program Class Dekstop:

```
public class Dekstop extends Computer implements Wifi{
    private int battCapacity;

    public Dekstop(String ipAddress, int cpuClock, int memory, int storage, int
battCapacity){
        super(ipAddress, cpuClock, memory, storage);
        this.battCapacity = battCapacity;
    }

    @Override
    public void getInfo(){
        System.out.println("ipAddress: "+ ipAddress);
        System.out.println("cpuClock: "+ cpuClock +" MHz");
        System.out.println("Memory: "+ memory +" GB");
        System.out.println("Storage: "+ storage +" GB");
        System.out.println("Battery Capicity: "+ battCapacity);
    }

    @Override
    public void sendData(){
        System.out.println("Data Dekstop Telah Terkontrol Melalui WIFI");
    }
```

```
}
```

Kode Program Class Drone:

```
public class Drone extends Computer implements Radio, Wifi{
    private int maxSpeed;
    private int maxAltitude;

    public Drone(String ipAddress, int cpuClock, int memory, int storage, int
maxSpeed, int maxAltitude){
        super(ipAddress, cpuClock, memory, storage);
        this.maxSpeed = maxSpeed;
        this.maxAltitude = maxAltitude;
    }

    @Override
    public void getInfo(){
        System.out.println("ipAddress: "+ ipAddress);
        System.out.println("cpuClock: "+ cpuClock +" MHz");
        System.out.println("Memory: "+ memory +" GB");
        System.out.println("Storage: "+ storage +" GB");
        System.out.println("Max Speed: "+ maxSpeed +" fps");
        System.out.println("Max Altitude: "+ maxAltitude +" meter");
    }
    @Override
    public void sendSignal(){
        System.out.println("Signal Drone Telah terkontrol Melalui Radio");
    }
    @Override
    public void sendData(){
        System.out.println("Data Drone Telah Terkontrol Melalui WIFI");
    }
}
```

Kode Program Class RasberryPi:

```
public class RaspberryPi extends Computer implements Radio, Wifi{
    private int numSocket;

    public RaspberryPi(String ipAddress, int cpuClock, int memory, int storage,
int numSocket){
        super(ipAddress, cpuClock, memory, storage);
        this.numSocket = numSocket;
    }
```

```
    @Override
    public void getInfo(){
        System.out.println("ipAddress: "+ ipAddress);
        System.out.println("cpuClock: "+ cpuClock +" MHz");
        System.out.println("Memory: "+ memory +" GB");
        System.out.println("Storage: "+ storage +" GB");
        System.out.println("Number Socket: "+ numSocket +" A");
    }
    @Override
    public void sendSignal(){
        System.out.println("Signal Raspberry PI Telah terkontrol Melalui Radio");
    }
    @Override
    public void sendData(){
        System.out.println("Data Raspberry PI Telah Terkontrol Melalui WIFI");
    }
}
```

Kode Program Class Wifi:

```
public interface Wifi {
    public abstract void sendData();
}
```

Kode Program Class Radio:

```
public interface Radio {
    public abstract void sendSignal();
}
```

Kode Program Class Operator:

```
public class Operator {
    public void wifiControl(Wifi wifi){
        wifi.sendData();
    }
    public void radioControl(Radio radio){
        radio.sendSignal();
    }
}
```

Kode Program Main Class:

```
public class Main {
    public static void main(String[] args){
        Dekstop dk = new Dekstop("74.110.208.65", 1, 4, 8, 60);
        RaspberryPi ra = new RaspberryPi("10.8.0.12", 700, 1, 32, 3);
        Drone dr = new Drone("192.168. 1.1", 5, 2, 64, 60, 150);
        Operator op = new Operator();

        //Dekstop
        System.out.println("=================================================")
;
        System.out.println("----------------SPESIFIKASI DEKSTOP---------------
");
        dk.getInfo();
        op.wifiControl(dk);

        //Raspberry PI
        System.out.println("");
        System.out.println("-------------SPESIFIKASI RASPBERRY PI-------------
");
        ra.getInfo();
        op.wifiControl(ra);
        op.radioControl(ra);

        //Drone
        System.out.println("");
        System.out.println("-----------------SPESIFIKASI DRONE----------------
");
        dr.getInfo();
        op.wifiControl(dr);
        op.radioControl(dr);
        System.out.println("=================================================")
;
    }
}
```

Output:

```
==================================================
----------------SPESIFIKASI DEKSTOP----------------
ipAddress: 74.110.208.65
cpuClock: 1 MHz
Memory: 4 GB
Storage: 8 GB
Battery Capicity: 60
Data Dekstop Telah Terkontrol Melalui WIFI

-------------SPESIFIKASI RASPBERRY PI--------------
ipAddress: 10.8.0.12
cpuClock: 700 MHz
Memory: 1 GB
Storage: 32 GB
Number Socket: 3 A
Data Raspberry PI Telah Terkontrol Melalui WIFI
Signal Raspberry PI Telah terkontrol Melalui Radio

-----------------SPESIFIKASI DRONE-----------------
ipAddress: 192.168. 1.1
cpuClock: 5 MHz
Memory: 2 GB
Storage: 64 GB
Max Speed: 60 fps
Max Altitude: 150 meter
Data Drone Telah Terkontrol Melalui WIFI
Signal Drone Telah terkontrol Melalui Radio
==================================================
PS C:\Users\LENOVO IP3\OneDrive\Documents\Kuliah\PBO\Kuis2\KuisPrakPBO2>
```