UAS Pemrograman Berorientasi Objek
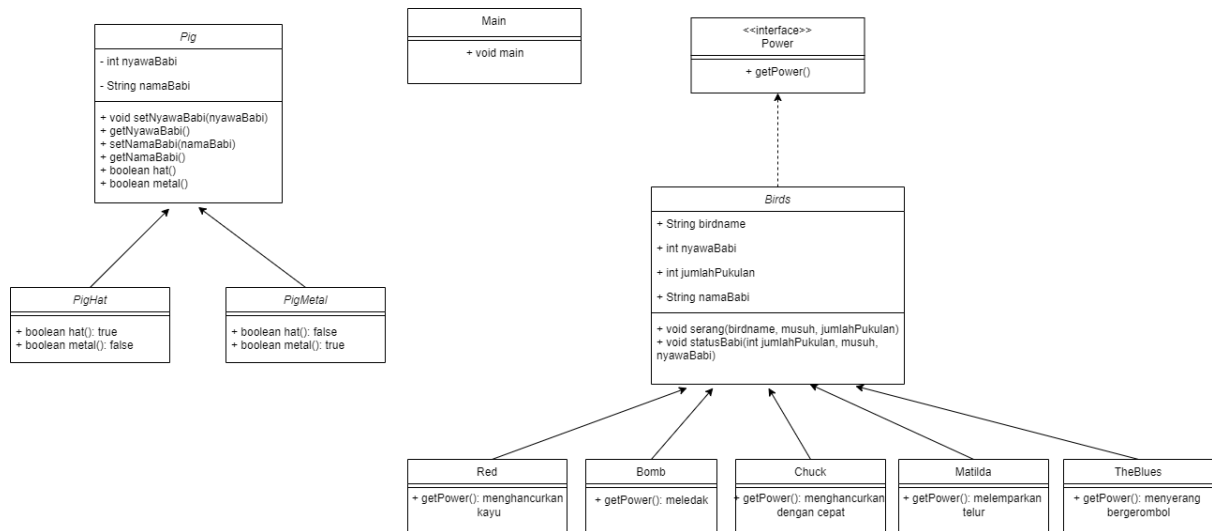
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Diagram Class :

Main.java

```java
public class Main {
    public static void main(String[] args) {
        Birds red1 = new Red();
        Pig pig1 = new Pighat();
        pig1.setNyawaBabi(10);
        pig1.setNamaBabi("Piggie");

        Pig pig2 = new PigMetal();
        pig2.setNamaBabi("Piggie Kedua");
        pig2.setNyawaBabi(5);

        Birds matilda1 = new Matilda();

        //KASUS PERTAMA
        red1.serang("Red", pig1, 20);
```

```java
        //KASUS KEDUA
        System.out.println();
        red1.serang("Red", pig2, 10);
        System.out.println();

        //KASUS KETIGA
        matilda1.serang("Matilda", pig2, 10);


    }
}
```

Pig.java

```java
class Pig {
    private int nyawaBabi;
    private String namaBabi;

    public void setNyawaBabi(int nyawaBabi){
        this.nyawaBabi = nyawaBabi;
    }

    public int getNyawaBabi(){
        return this.nyawaBabi;
    }

    public void setNamaBabi (String namaBabi){
        this.namaBabi = namaBabi;
    }

    public String getNamaBabi(){
        return this.namaBabi;
    }

    public boolean hat(){
        return true;
    };
    public boolean metal(){
        return true;
    }

}

class Pighat extends Pig{
    public boolean hat(){
        return true;
```

```java
    };
    public boolean metal(){
        return false;
    }
}

class PigMetal extends Pig{
    public boolean hat(){
        return false;
    };
    public boolean metal(){
        return true;
    }
}
```

Birds.java

```java
/**
 * Birds
 */
public abstract class Birds implements Power{
    String birdname;
    int nyawaBabi;
    int jumlahPukulan;
    String namaBabi;

    public void serang(String birdname, Pig musuh, int jumlahPukulan) {
        this.birdname = birdname;
        this.jumlahPukulan = jumlahPukulan;
        this.nyawaBabi = musuh.getNyawaBabi();
        System.out.println(this.birdname + " menyerang babi dengan " +
getPower() + " ke babi " + musuh.getNamaBabi());
        statusBabi(jumlahPukulan, musuh, nyawaBabi);
    }

    public void statusBabi(int jumlahPukulan, Pig musuh, int nyawaBabi) {
        this.jumlahPukulan = jumlahPukulan;
        nyawaBabi = musuh.getNyawaBabi();
        if(musuh.hat() == true) {
            nyawaBabi -= (jumlahPukulan/2);

        }
        else if(musuh.metal() == true) {
            nyawaBabi -= (jumlahPukulan/3);
        }


        if(nyawaBabi>0) {
```

```java
            System.out.println("Babi " + musuh.getNamaBabi() +" belum mati,
nyawa babi = " + nyawaBabi);
        }
        else {
            System.out.println("Babi sudah mati");
        }
    }
}
```

Power.java

```java
public interface Power {
    public String getPower();
}
```

Red.java

```java
public class Red extends Birds{
    @Override
    public String getPower() {
        // TODO Auto-generated method stub
        return "Menghancurkan kayu";

    }


}
```

Bomb.java

```java
public class Bomb extends Birds {

    @Override
    public String getPower() {
        // TODO Auto-generated method stub
        return "meledak";
    }

}
```

Chuck.java

```java
public class Chuck extends Birds {

    @Override
    public String getPower() {
        // TODO Auto-generated method stub
```

```
        return "menghancurkan dengan cepat";
    }

}
```

Matilda.java

```java
public class Matilda extends Birds {

    @Override
    public String getPower() {
        // TODO Auto-generated method stub
        return "melemparkan telur-telur";
    }

}
```

TheBlues.java

```java
public class TheBlues extends Birds {

    @Override
    public String getPower() {
        // TODO Auto-generated method stub
        return "menyerang bergerombol";
    }

}
```