



# Object Oriented Programming

Rawlabs Academy

“ Programming paradigm which provides a means of structuring program so that **properties** and **behaviour** are bundled into individual **objects**. ”

# Propeties

- Color
- Length
- Width

# Behavior

- Accelerate
- Break

# Properties

- Fur
- Leg
- Tail

# Behavior

- Make Sound
- Eat
- Jump

“ **Properties** determined by the values of its attributes ”

“ **Behavior** determined by how the objects acts or reacts to requests ”

# **OOP Fundamental Concept**

# Encapsulation

*Basic encapsulation analogy:*

- Class
- Attributes
- Method

# Encapsulation - Class

**Class** is a *"template"* or *"blueprint"* that is used to create object.

**"Special code"** template in Java to make object:

- Contain of:
  - Properties
  - Method
- Has an init method to initiate object

```
public class Cat {  
    private String name;  
    private String color;  
}
```



# Make instance of Object

<div class="grid grid-cols-2 gap-4"> <div>

```
public class Cat {  
    private String name;  
    private String color;  
  
    // Constructor block  
    public Cat(String name, String color) {  
        this.name = name;  
        this.color = color;  
    }  
  
    // Setter getter method  
}
```

```
public static void main(String[] args) {  
    Cat cat = new Cat("Peter", "White");  
    cat.getName(); // Peter  
    cat.getColor(); // White  
}
```