



# SNS College of Technology

(An Autonomous Institutions)



Department of Computer Science and Engineering

23CSB201-Object Oriented Programming

Topic: Super & Sub Class

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# Class



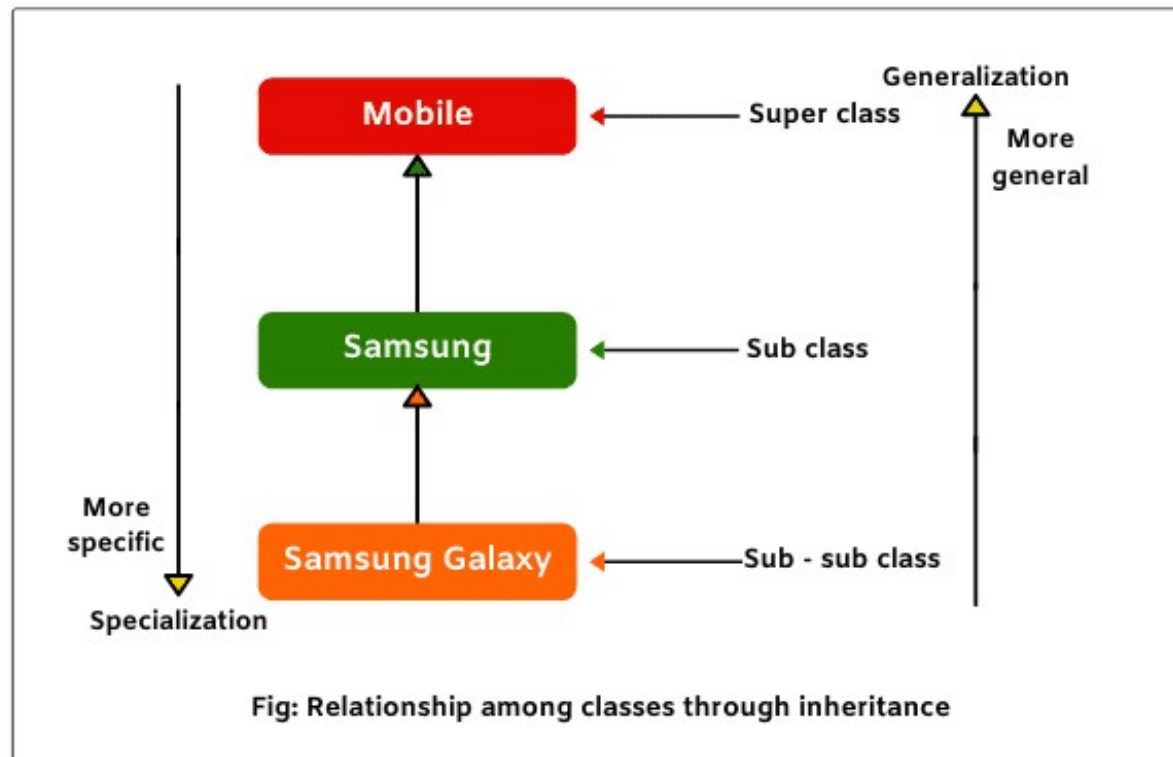
- A **class in Java** is a **blueprint** or **template** used to create objects.
- It defines the common attributes (data or fields) and behaviors (methods or functions) that all objects of that class will share.

## Syntax:

```
class ClassName {  
    // fields  
    // methods  
}
```

- fields are used to store data
- methods are used to perform some operations

# Types of Class



# Super Class



- The class whose properties are inherited is called the **Super Class (Parent/Base class)**
- The class that is inherited by another class.
- Contains common properties and methods.
- Promotes code reusability.

# Sub Class



- The class whose properties are inherited is called the **Super Class (Parent/Base class)**, and the class that inherits those properties is called the **Sub Class (Child/Derived class)**.
- The class that inherits from the super class.
- Can use all public and protected members of the super class.
- Can also define its own additional features.

# Super Class Example



```
// Super Class
class Vehicle {
    int speed;

    void start() {
        System.out.println("Vehicle starts");
    }
}
```

# Sub Class Example



```
// Sub Class
class Car extends Vehicle {
    void drive() {
        System.out.println("Car is running");
    }
}

public class Main {
    public static void main(String[] args) {
        Car c = new Car();
        c.start(); // inherited method
        c.drive(); // own method
    }
}
```