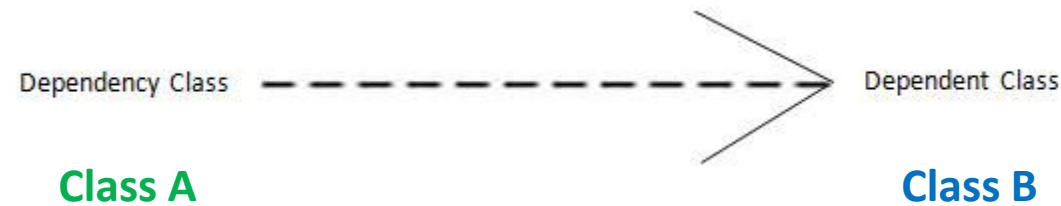


Lecture – 8

Dependency

Dependency

- **Dependency** is defined as a **relation** between **two classes**.
- Where **one class depends on another class**, but **another class may or not may depend on the first class**.
- So **any change in one** of the classes **may affect** the **functionality** of the **other class**, that **depends** on the **first one**.



Here, **Class B depend on Class A**

Dependency

Imagine a **scenario**, we have a **Customer class** and an **Order class**. When we need to save a **new order**, we need to save it **corresponding to a customer**. To do so, **Order class** will need a **reference** to the **Customer class** and save its data. So in this case, **Order class** is **dependent** on the **Customer class**. In future, if any **change** are made to the **Customer class**, it may result in **changes** to the **Order class** as well.

Let's see the **coding example** in next page

Example 1: Dependency

In this code, we have **Id** and **name** as String. The **Order** class uses this **customer instances**. If we change the **data type** of the **Id** or **name** from String to integer, it will affect the **Order** class. This kind of relation is known as a **Dependency**.

```
public class Customer{
    private String id;
    private String name;

    public String getInfo(String id, String name){
        this.id = id;
        this.name = name;
        System.out.println("Customer Id: "+id+" Name: "+name);
        return null;
    }
}

//-----
class Order{
    public String orderNo;
    private Customer customer1;

    public void placeOrder(){
        customer1 = new Customer(); //instance of OrderList class
        String info = customer1.getInfo("C101", "Sakib");
    }

    public static void main(String[] args) {
        Order o1 = new Order();
        o1.placeOrder();
    }
}
```

Thank You