**DecoratorPattern Example**

**EmailNotifier.java**

package com.decorator;

public class EmailNotifier implements Notifier {

    @Override

    public void send(String message) {

        System.out.println("Sending Email: " + message);

    }

}

**Main.java**

package com.decorator;

public class Main {

    public static void main(String[] args) {

        Notifier emailNotifier = new EmailNotifier(); // Line 11

        Notifier smsNotifier = new SMSNotifierDecorator(emailNotifier); // Line 12

        Notifier multiChannelNotifier = new SlackNotifierDecorator(smsNotifier);// Line 13

        multiChannelNotifier.send("Your account has been accessed."); // Line 14

    }

}

**Notifier.java**

package com.decorator;

public interface Notifier {

    void send(String message);

}

**NotifierDecorator.java**

package com.decorator;

public abstract class NotifierDecorator implements Notifier {

    protected Notifier notifier;

    public NotifierDecorator(Notifier notifier) {

        this.notifier = notifier;

    }

    @Override

    public void send(String message) {

        notifier.send(message); // delegate

    }

}

**SlackNotifier.java**

package com.decorator;

public class SlackNotifierDecorator extends NotifierDecorator {

    public SlackNotifierDecorator(Notifier notifier) {

        super(notifier);

    }

    @Override

    public void send(String message) {

        super.send(message);

        sendSlackMessage(message);

    }

    private void sendSlackMessage(String message) {

        System.out.println("Sending Slack message: " + message);

    }

}

**SMSNotifierDecorator.java**

package com.decorator;

public class SMSNotifierDecorator extends NotifierDecorator {

    public SMSNotifierDecorator(Notifier notifier) {

        super(notifier);

    }

    @Override

    public void send(String message) {

        super.send(message);

        sendSMS(message);

    }

    private void sendSMS(String message) {

        System.out.println("Sending SMS: " + message);

    }

}

