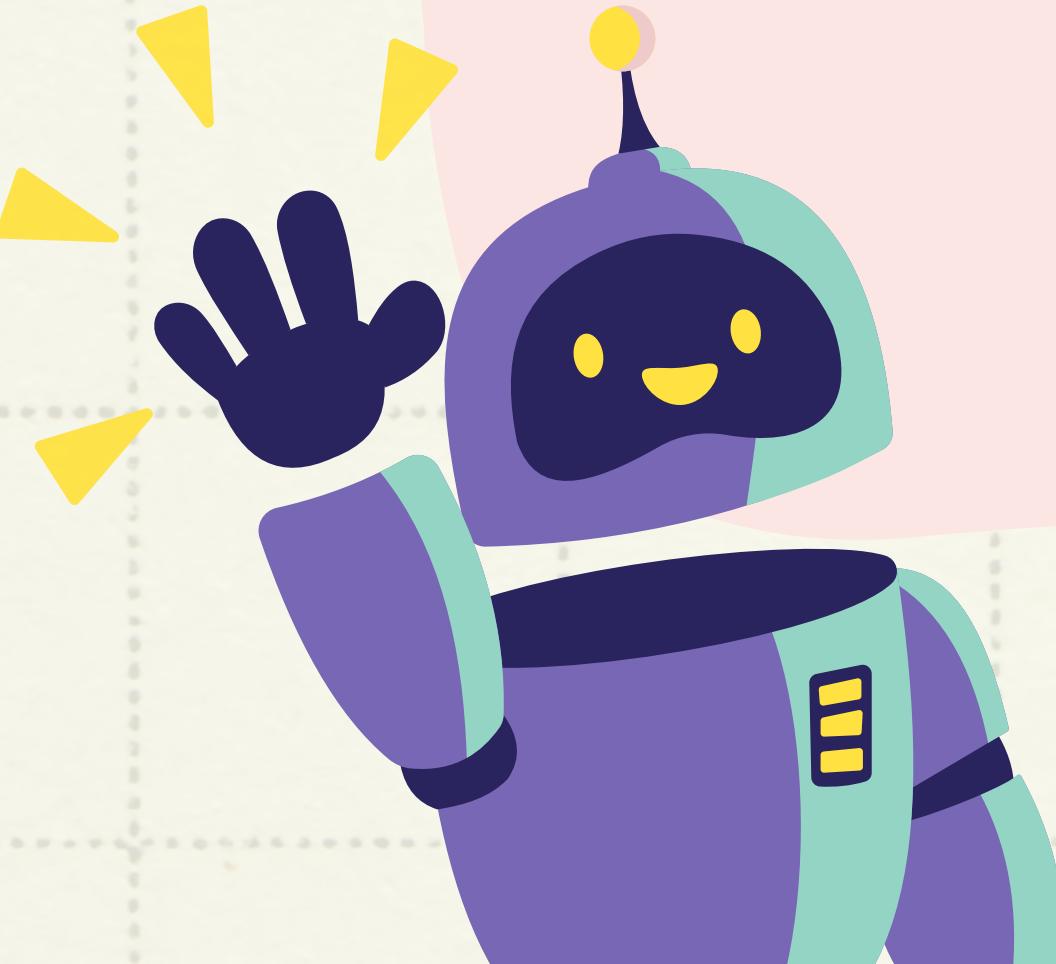




# RUNNING CODE

ERY UTAMI (21120122130054)



RPLBK - C

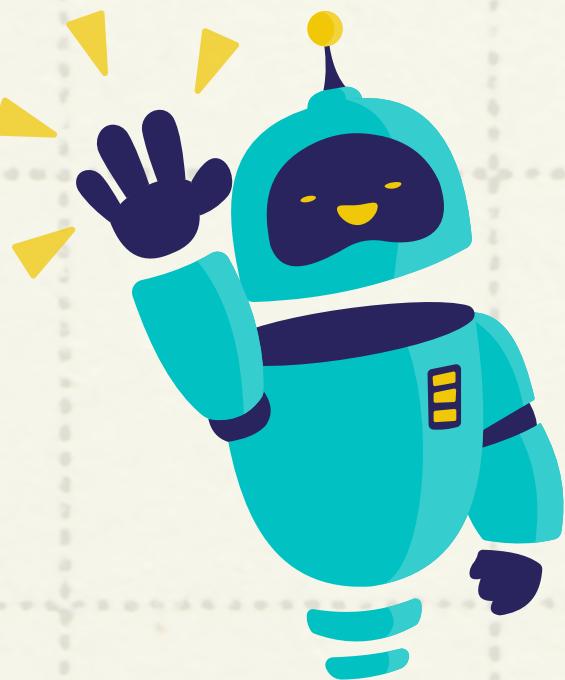
**FOR CLEAN CODE TEAM, CHOOSE  
ONE PRINCIPLES FROM SOLID**

## **OPEN/CLOSED PRINCIPLE**



# Sebelum OCP

```
class NotificationManager:  
    def send_notification(self, notification_type, message):  
        if notification_type == "email":  
            print(f"Mengirim Notifikasi Email: {message}")  
        elif notification_type == "sms":  
            print(f"Mengirim Notifikasi SMS: {message}")  
  
manager = NotificationManager()  
manager.send_notification("email", "Halo")  
manager.send_notification("sms", "Haloo")
```



Jika ingin menambahkan jenis notifikasi baru, misalnya notifikasi browser, kita harus memodifikasi metode `send_notification`, di mana hal ini melanggar prinsip Open/Closed.

# Setelah OCP

```
from abc import ABC, abstractmethod

# Abstraksi Notifikasi
class Notification(ABC):
    @abstractmethod
    def send(self, message):
        pass

    class EmailNotification(Notification):
        def send(self, message):
            print(f"Mengirim Notifikasi Email: {message}")

    class SMSNotification(Notification):
        def send(self, message):
            print(f"Mengirim Notifikasi SMS: {message}")

    class BrowserNotification(Notification):
        def send(self, message):
            print(f"Mengirim Notifikasi Browser: {message}")
```

```
# Kelas untuk Mengelola Notifikasi
class NotificationManager:
    def __init__(self, notification: Notification):
        self.notification = notification

    def send_notification(self, message):
        self.notification.send(message)

email_notification = EmailNotification()
sms_notification = SMSNotification()
broswer_notification = BrowserNotification()

manager = NotificationManager(email_notification)
manager.send_notification("Halo")

manager = NotificationManager(sms_notification)
manager.send_notification("Haloo")

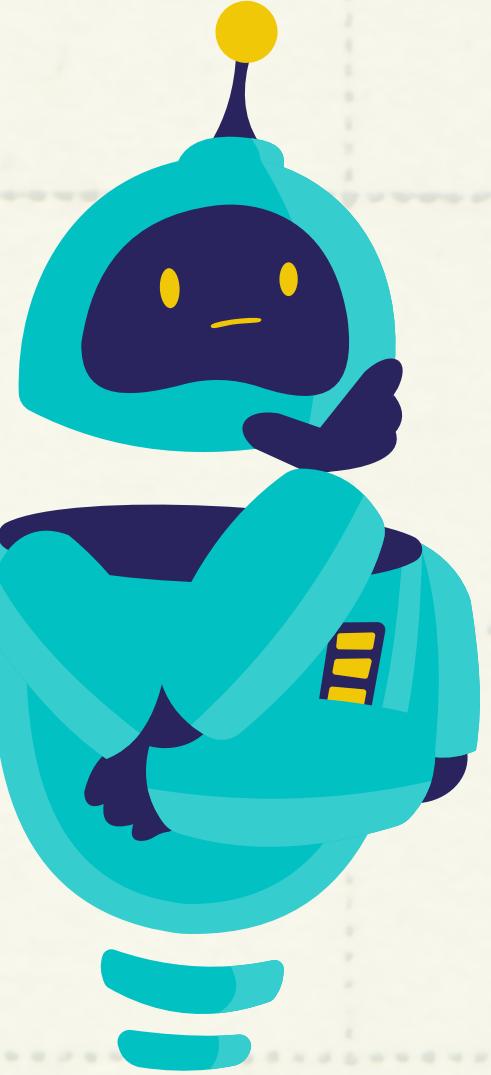
manager = NotificationManager(broswer_notification)
manager.send_notification("Halooo")
```



Kode di atas sudah diperbaiki mengikuti prinsip Open/Closed dengan memisahkan setiap jenis notifikasi ke dalam kelasnya masing-masing. Jika kita ingin menambahkan notifikasi baru seperti Browser Notification, kita tidak perlu mengubah NotificationManager, tetapi cukup menambahkan kelas baru yang mengimplementasikan Notification.

# Output

```
PS C:\Users\HP> & C:/Users/HP/AppData/Local/Programs/Python/Python310/  
Mengirim Notifikasi Email: Halo  
Mengirim Notifikasi SMS: Haloo  
Mengirim Notifikasi Browser: Halooo  
PS C:\Users\HP>
```



# THANK YOU

