



## Today's agenda

↳ Adapter design Pattern

↳ Facade design Pattern



# AlgoPrep



## \* Structural design Pattern

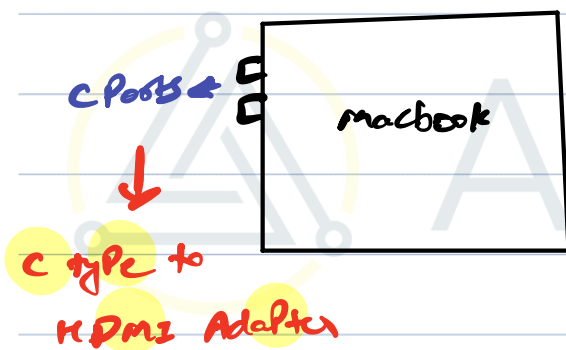
↳ How to Structure our Codebase.

↳ classes/interface decisions.

↳ attributes within a class.

### ① Adapter design Pattern

↳ Power Adapter → Convert one form to another



→

- 1 C type
- ↓ USB type
- ↓ HDMI type Slots?

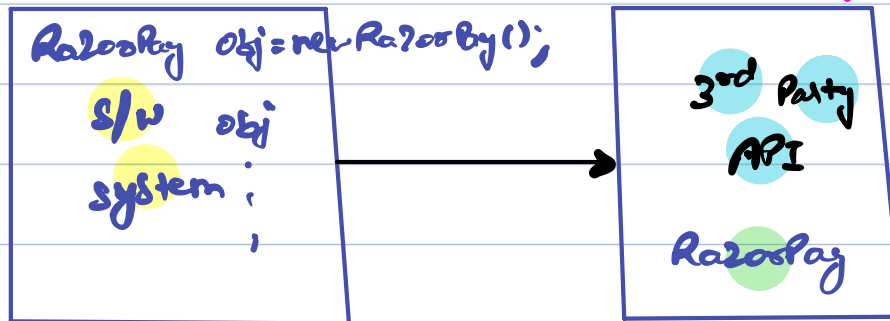
↓

Having only C type makes the design relatively easy.

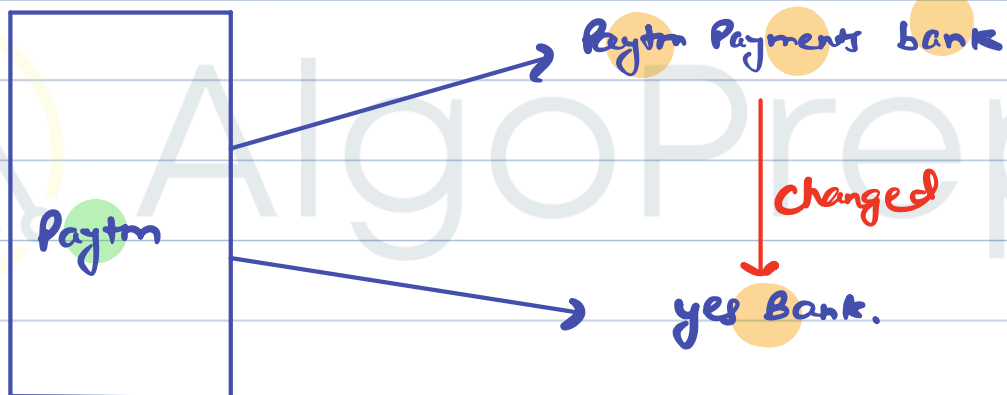


## ↳ Adapter design Pattern

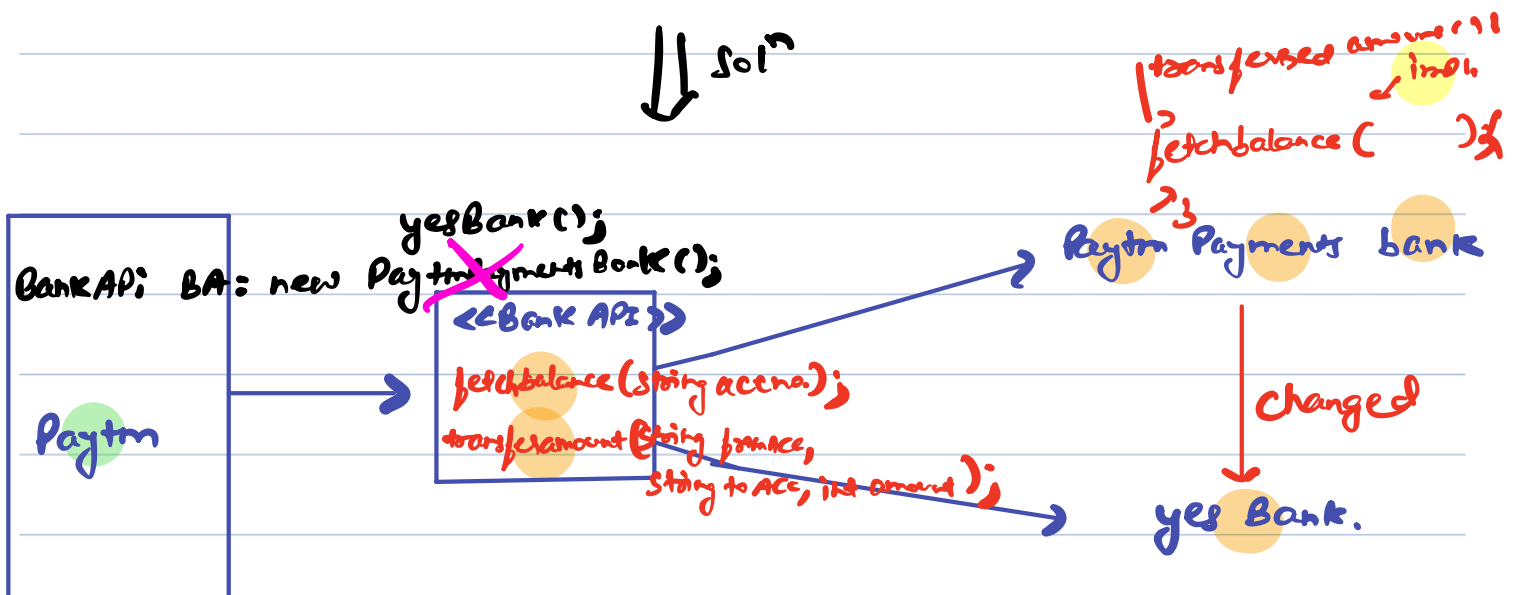
violation of dependency inversion.  
(tight coupling)

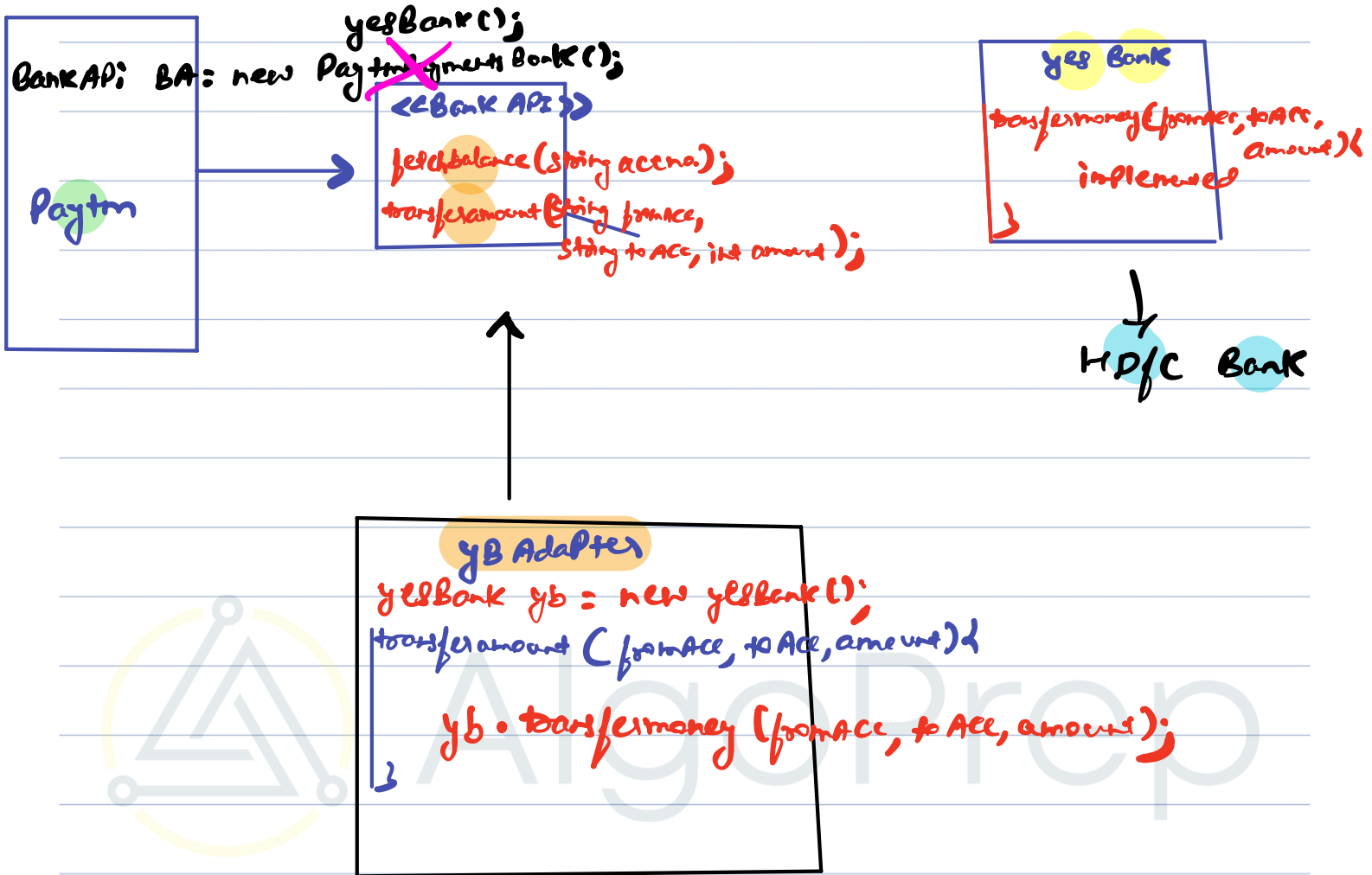


## → Paytm Problem Statement.



↓ sol<sup>n</sup>







## → How to use Adapters

↳ Whenever we are connecting to a 3<sup>rd</sup> Party APIs, create an interface with all the required methods.

2. Create an adapter class which is going to act as a bridge between yours and 3<sup>rd</sup> Party service providers.

### → Calendly?

↳                      3:00pm                      4:00pm  
                              ↳ 3:15                      3:30                      3:45                      4:00

↳ name  
↳ email

### 3<sup>rd</sup> Party APIs.

↳ google meet / zoom  
↳ calendar  
⋮

→ Cal.com → A competitor of Calendly with open sourced codebase.



# \* Facade design Pattern

↳ outer face

→

```
class Blinkit {  
    Inventory Ims;  
    DeliveryPartner DP;  
    notifyService NS;  
    orderPlaced() {  
        Ims.update();  
        DP.assignPartner();  
        NS.sendOrderConfirmation();  
    }  
    orderCanceled() {  
    }  
}
```

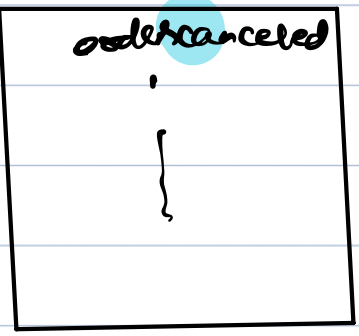
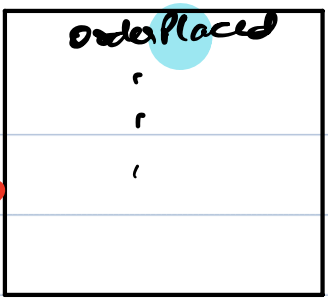
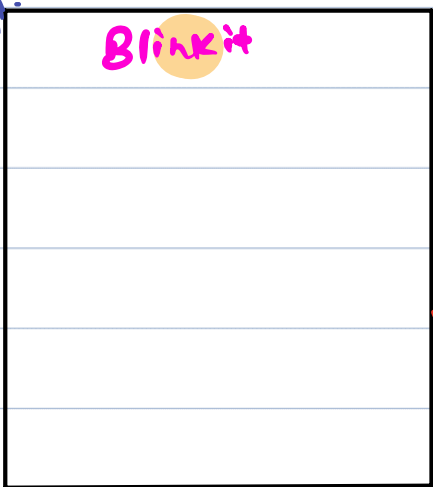
→ SRP violation.

→ long code.

```
    Pending order () {  
    }  
}
```

}

Facade entity



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