

LEC 3

(Code in IntelliJ)

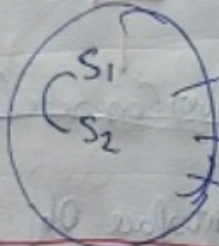
(Observer Design Pattern.)

they cannot have body

Observable → one which is being observed

Observer → which is observing the observable.

Observable



observer 1



observer 2



observer 3



(Behavioural)

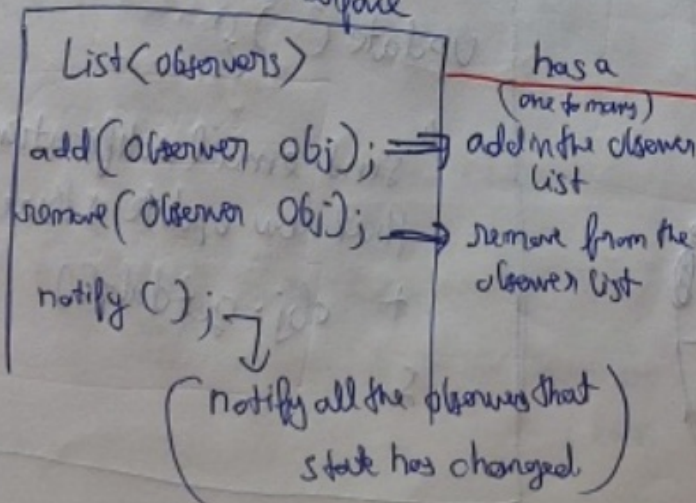
How classes

are

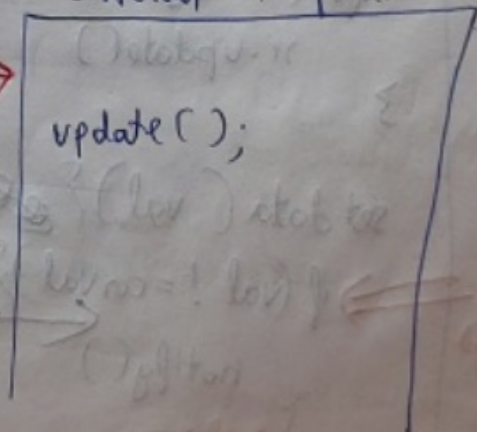
communicating

Whenever the state of the observable is changing. Each of the observer has to be notified.

Observable Interface



Observer Interface.



Full explanation

Observable Interface

```
List<ObserverIntf>  
add(ObserverIntf obj);  
remove(ObserverIntf obj);  
notify();  
setdata();
```

Observer Interface

~~update~~
update

(has a)
relationship

to update
Stock

↑

Constructor
Injection

↑

Observable Concrete Class

```
List<ObserverIntf> objlist;  
add(ObserverIntf obj){  
    objlist.add(obj);  
}  
remove(ObserverIntf obj){  
    objlist.remove(obj);  
}  
notify(){  
    for(x: objlist)  
        x.update()  
}  
setdata(val){  
    if(val != curval){  
        notify()  
    }  
    curval = val;  
}
```

State
has
changed

Observer Concrete Class

```
ObservableInterface Obj;  
  
(ObservableInterface Obj){  
    this.obj = obj;  
}  
  
update(){  
    "Send email notification  
    that new update is there"  
    + obj.getdata();  
}
```