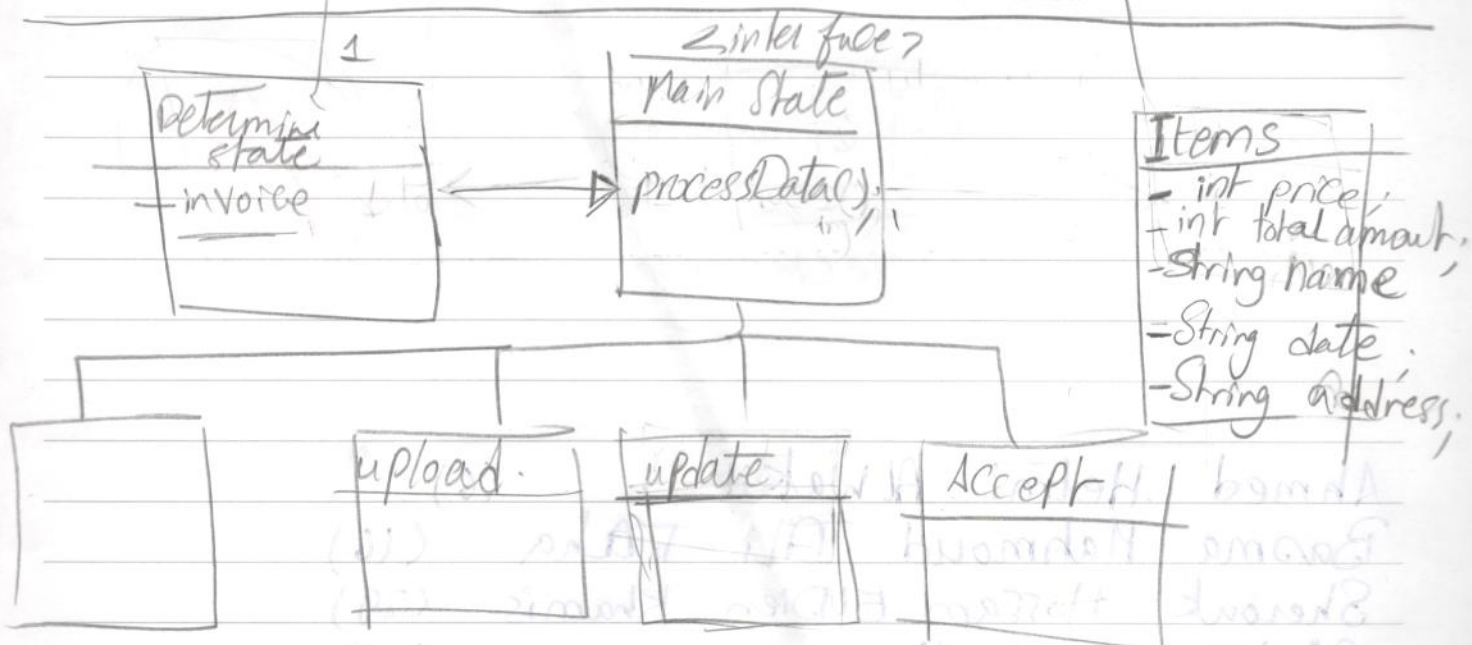
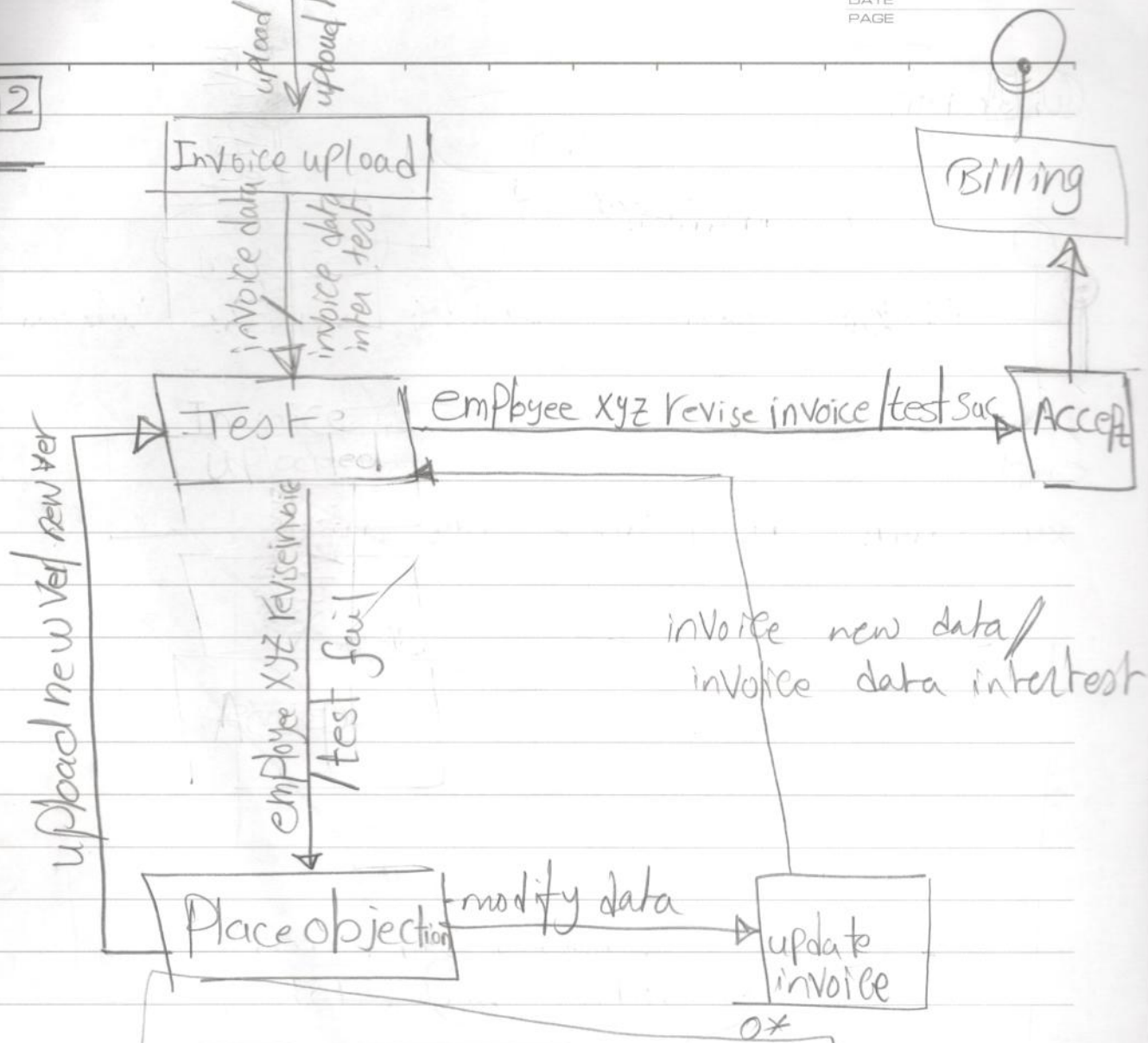


A

Ahmed Helmi Alwakil (6)  
Basma Mahmoud Ali Taha (16)  
Sherouk Hossam ElDien Khamis (29)  
Abd Elrahman Hany (36)

Q12

upload by shipper  
upload to site



# Skeleton

```
public interface MainState {  
    public boolean processData (ArrayList<items> invoice)  
}
```

```
public class DetermineState {  
    private MainState CurrentState;  
    private MainState Update;  
    private MainState Accept;  
    private MainState Upload;  
    // ArrayList<Item> Items;
```

```
    public DetermineState() {  
        items = new ArrayList();  
        update = new Update(this);  
        Accept = new Accept(this);  
        Upload = new Upload(this);  
        CurrentState = Upload;
```

```
    }  
    Setters —————> CurrentState  
    getters —————> All the field.
```

```
    public boolean processData (ArrayList(items) invoice) {  
        return CurrentState.processData(invoice);  
    }
```



Accept  
upload

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

Public class <sup>Accept  
upload</sup> UpDate implements MainState {

private DetermineState determineState ;

public <sup>Accept  
upload</sup> Update (DetermineState state) {  
determineState = state ;

}  
public boolean processData (List <items> items) {

Process data

}

---

public class Items {

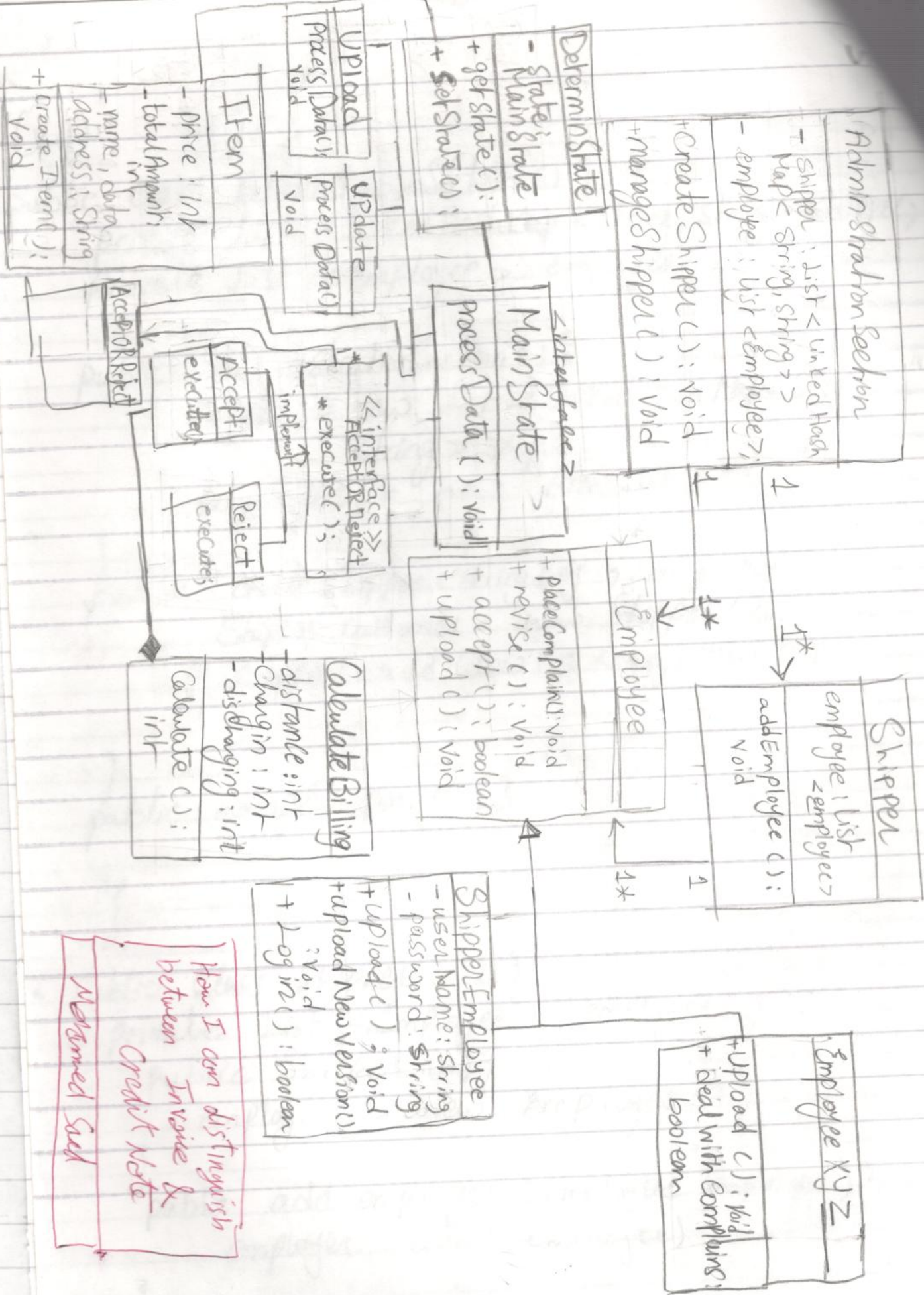
private int price, total amount;

private String date, name, address of Company;

Getters and Setters for all fields of the class

}

---



How I can distinguish between Invoice & Credit Note

Mahamed Said



(Q4)

```
• public class AdministrationSection () {  
    private List <LinkedHashMap <String, String> Shipper;  
    private List <Employee> employer;  
}
```

```
    public AdministrationSection () {  
        shipper = new List <LinkedHashMap <String,  
            String> > ();  
        employer = new ArrayList ();  
    }
```

```
    public createShipper (String Key, String Value) {  
        Shipper customer = new Shipper ();  
        shipper.add (new Map <Key, Value> )  
    }
```

```
    public manageShipper () {  
    }
```

```
}
```

```
• public class Shipper () {  
    private List <Employee> employer;  
    public Shipper () {  
        employer = new Employee ();  
    }
```

```
    public add employer (Employee employer) {  
        employer.add (employee);  
    }
```

```
}
```

(50)

```
public abstract class Employee {  
    public void placeComplain () {  
        // give the employer the ability to make  
        Complain  
    }  
}
```

```
    public void revise () {  
        // revise shipper data;  
    }  
}
```

```
    public boolean accept () {  
        // accept shipper data  
    }  
}
```

```
    abstract public void upload () { }  
}
```

```
public class ShipperEmployee extends Employee {  
    private String userName;  
    private String password;  
    public ShipperEmployee (String password, String  
        userName) {
```

```
        this.userName = userName;
```

```
        this.password = password;  
    }  
}
```

```
    public void upload () {  
        // upload shipper's data.  
    }  
}
```

```
    public boolean login (String name, String pass) {  
        // Make sure of the password and user  
        name  
    }  
}
```



```
public void uploadNewVersion () {  
    // upload new version of Data.  
}
```

```
public class EmployeeXYZ extends Employee {  
    public void upload () {  
        // upload new data  
    }  
}
```

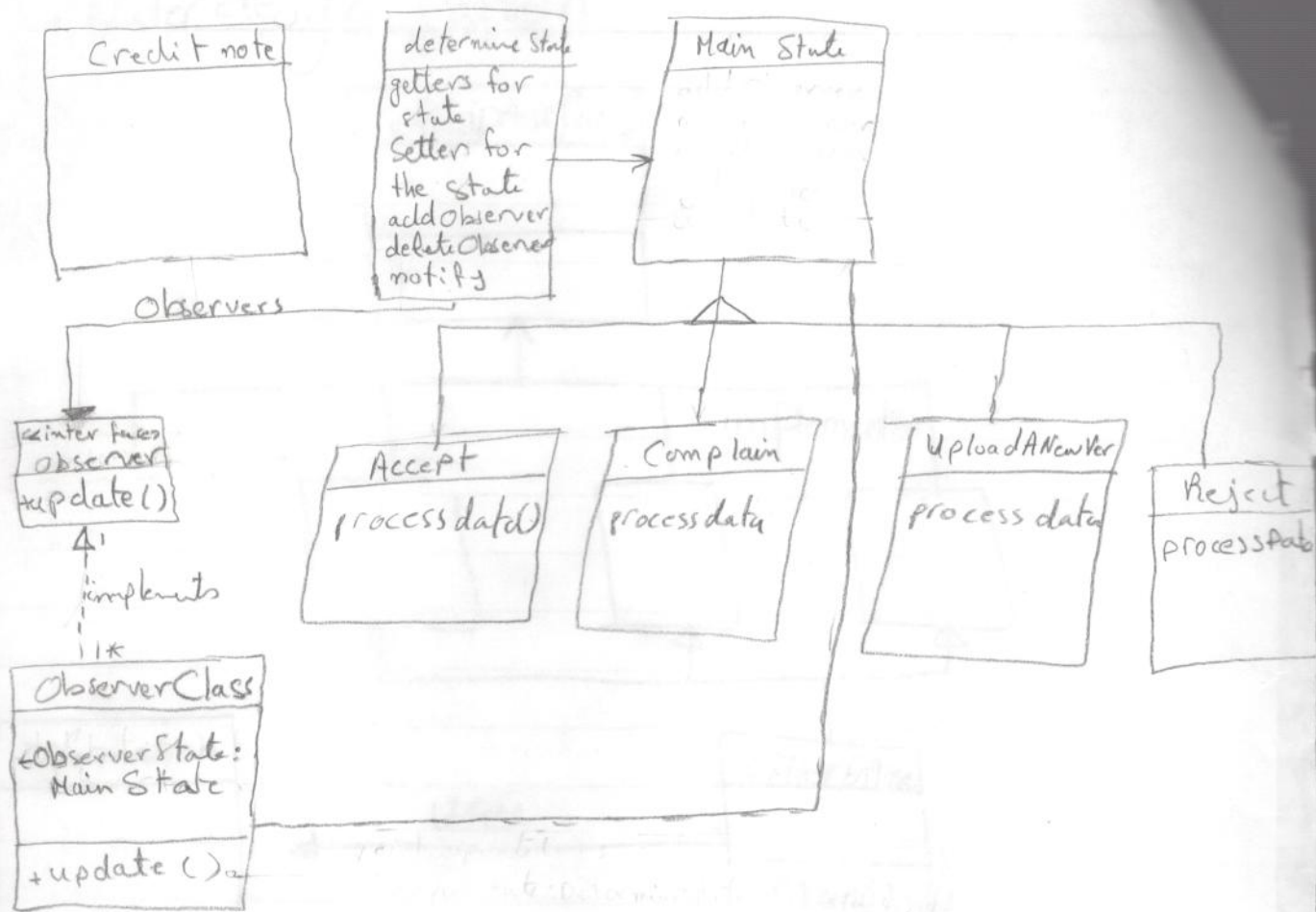
```
public boolean dealWithComplains {  
    // Some strategy to deal with objections.  
}
```

```
public class CalculateBilling {  
    private int distance;  
    private int charge;  
    private int discharge;  
    public int calculate (int distance, int charge) {  
        // Calculate the Bill with some equations.  
    }  
}
```

```
public class Item {  
    private int price, totalAmount;  
    private String address, name, data;  
    public void createItem () {  
        // Create item  
    }  
}
```



Q5) Observer, Observable and State design pattern



```
public interface Observer {
```

```
    public void update (Observable o, Object obj);
```

```
public class ObserverClass implements Observer {
    private MainState observerState;
```

```
    public void update (Observable o, Object obj) {
        observerState = o.getState();
        processing data according to state
```

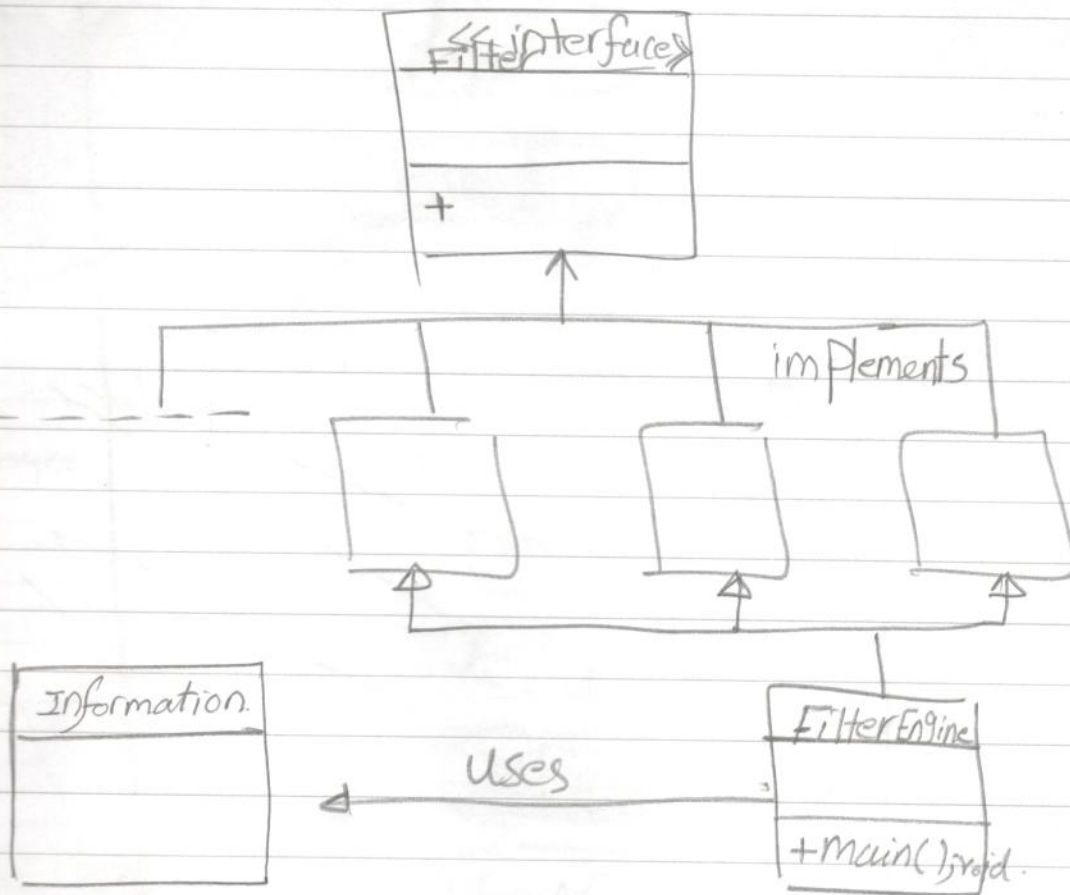
```
}
```

state classes same as question 2

Q6

## b) Filter design Pattern.

DATE  
PAGE



## a) object pool design pattern

