

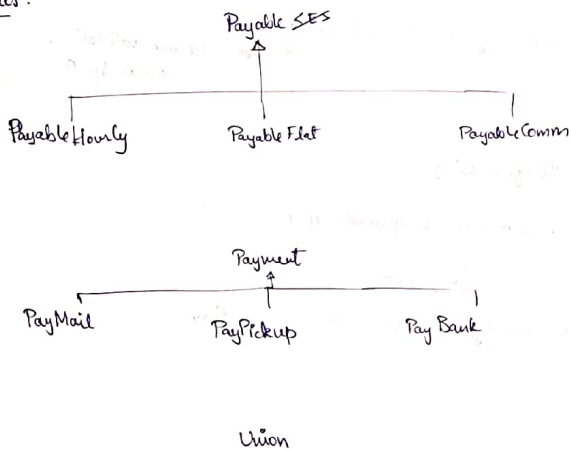
- Single Responsibility
- Open Close

→ Type design:
→ Which type is fundamental?

- Only one emp union.....

DESIGN-1

Interfaces:



Implementation class : Employee < ? extend Payable, ? extend Payment, Union >
 Time Card
 Sales Receipt
 Service Charge
 Membership

Payable Hourly :

post Time Card ()

Payable Flat :

set Salary ()
get Salary ()

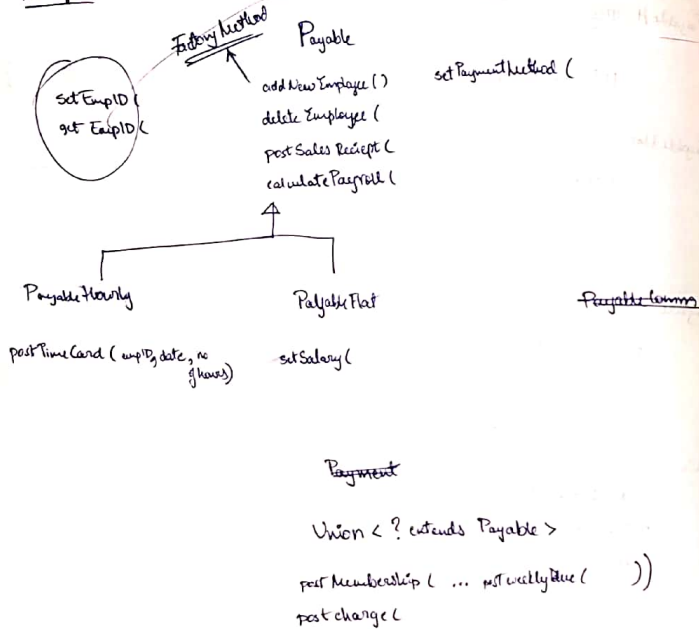
Payable Comm :

post Sales Receipt ()

Union :

post Membership ()
post Due Rate ()
cross Service Charge ()

Interface



Concrete classes

Employees Main

```

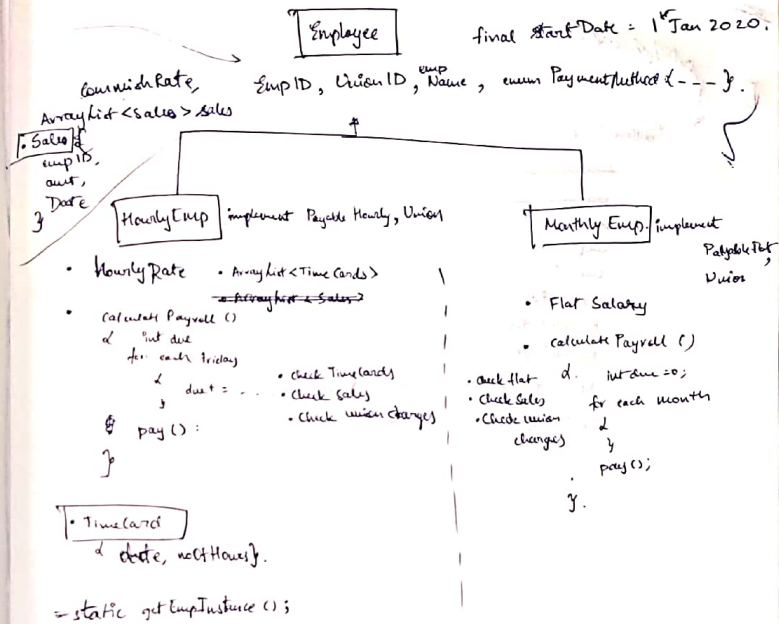
    + put Arraylist < HourlyEmp >
    + put Arraylist < Flat MonthlyEmp >
    + add HourlyEmp (...)
    + add MonthlyEmp (...)
    + deleteEmp (...)
  
```

Main

Display menu:

- Add Emp
- Display Emps
- Delete Emps
- Post Time Card
- Post Union membership
- post union charges
- Change Emp details
- Run Payroll (default from Jan 1 2020)

DESIGN 2



Employee implements Union

enum payableType : 0 Hourly 1 Monthly

EmpID
UnionID
EmpName
emp PaymentMethod (...)

Static methods:
getUnionID();
getUnionID();
UnionRate

in can be used to count

HourlyEmp

```

    + getEmpID()
    + hourlyRate
    + TimeCard (...)
  
```

MonthlyEmp

```

    + flatSalary
  
```

UnionCharge

```

    + String serviceCharge;
    + Local Date dates;
    + Long amount;
  
```

RealDate date
Sale { ... }

getEmpInstance();

DESIGN 3