CASE STUDY 1:

Courier Management System

DCD:

Customer

name
address
contact

1 places ▷ 1..*

Order

ID
destination
Weight

1...∞ process ▷ 1

Attendee

Allocate ID
Calculate amount()

1

* 1.. has △ 1

Courier Record

Order ID
destination
delivery status
receiver signature

generates ▽

* 1...

Bill

amount
copy for customer()
copy for records()
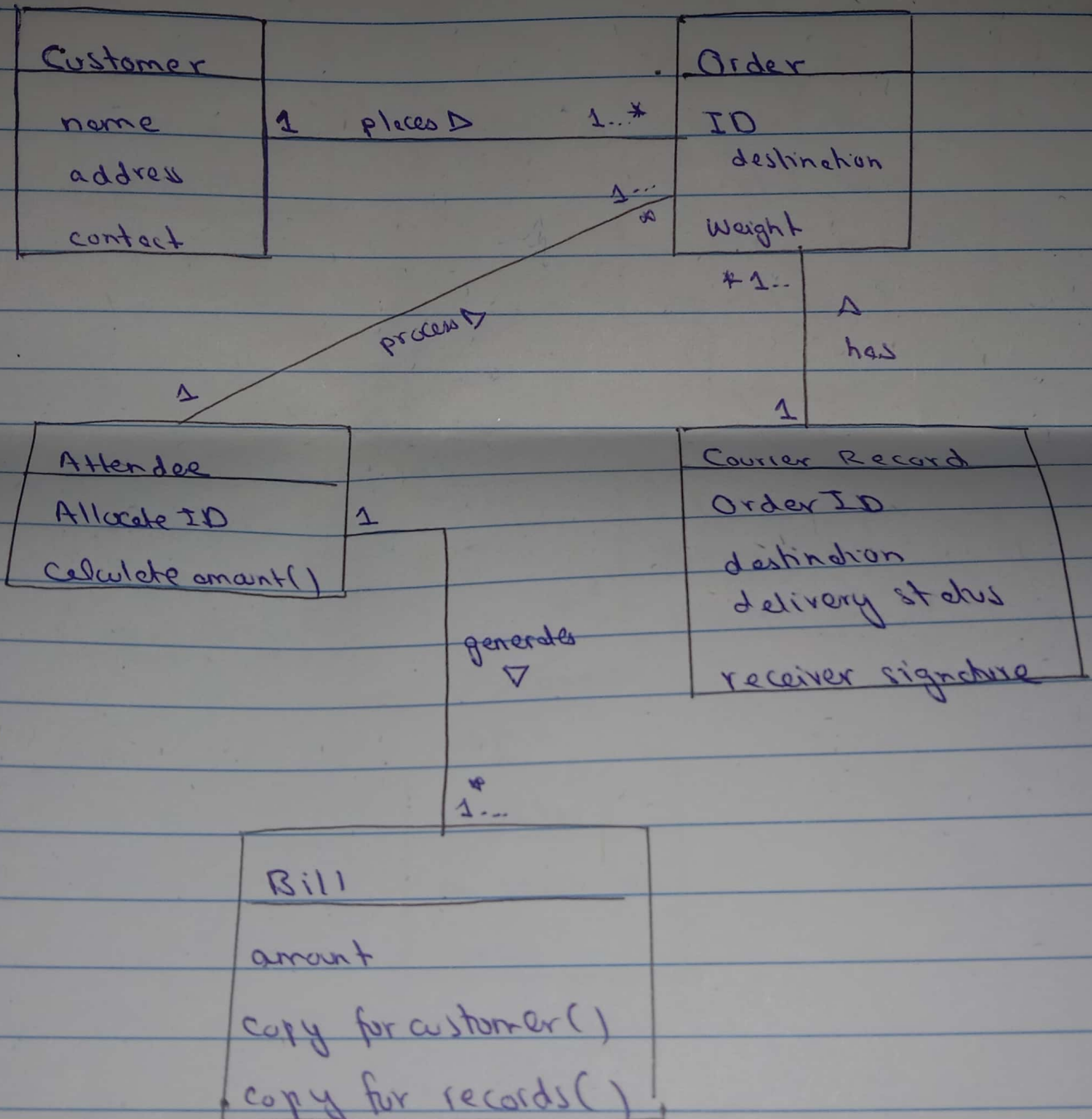
CASE STUDY 2:

Soft Drink Dispenser Machine

DCD:

```
┌─────────────────────┐              ┌──────────────────────────┐
│ Coin                │              │ Vending Machine          │
├─────────────────────┤ 1*  inserts △│ 1                        │
│ Currency Type       │──────────────│ available items          │
│ Quantity            │              │ accepted  coins          │
└─────────────────────┘              │ display   menu()         │
                              1       │ select item()            │
                                      └──────────────────────────┘
                     checks △                  1
                   △ dispenses              generates/
                                            calculates
         1..*                     1..*            ▽
   ┌─────────────────┐       ┌──────────────────────┐
   │ Drink Item      │       │ Bill                 │
   ├─────────────────┤       ├──────────────────────┤
   │ Type            │   1..*│ Amount               │
   │ availability    │       │ change               │
   └─────────────────┘       └──────────────────────┘
                                      updates
                                        ▽
                            1
                      ┌──────────────────────┐
                      │ Inventory            │
                      ├──────────────────────┤
                      │ available item       │
                      │ price                │
                      └──────────────────────┘
```
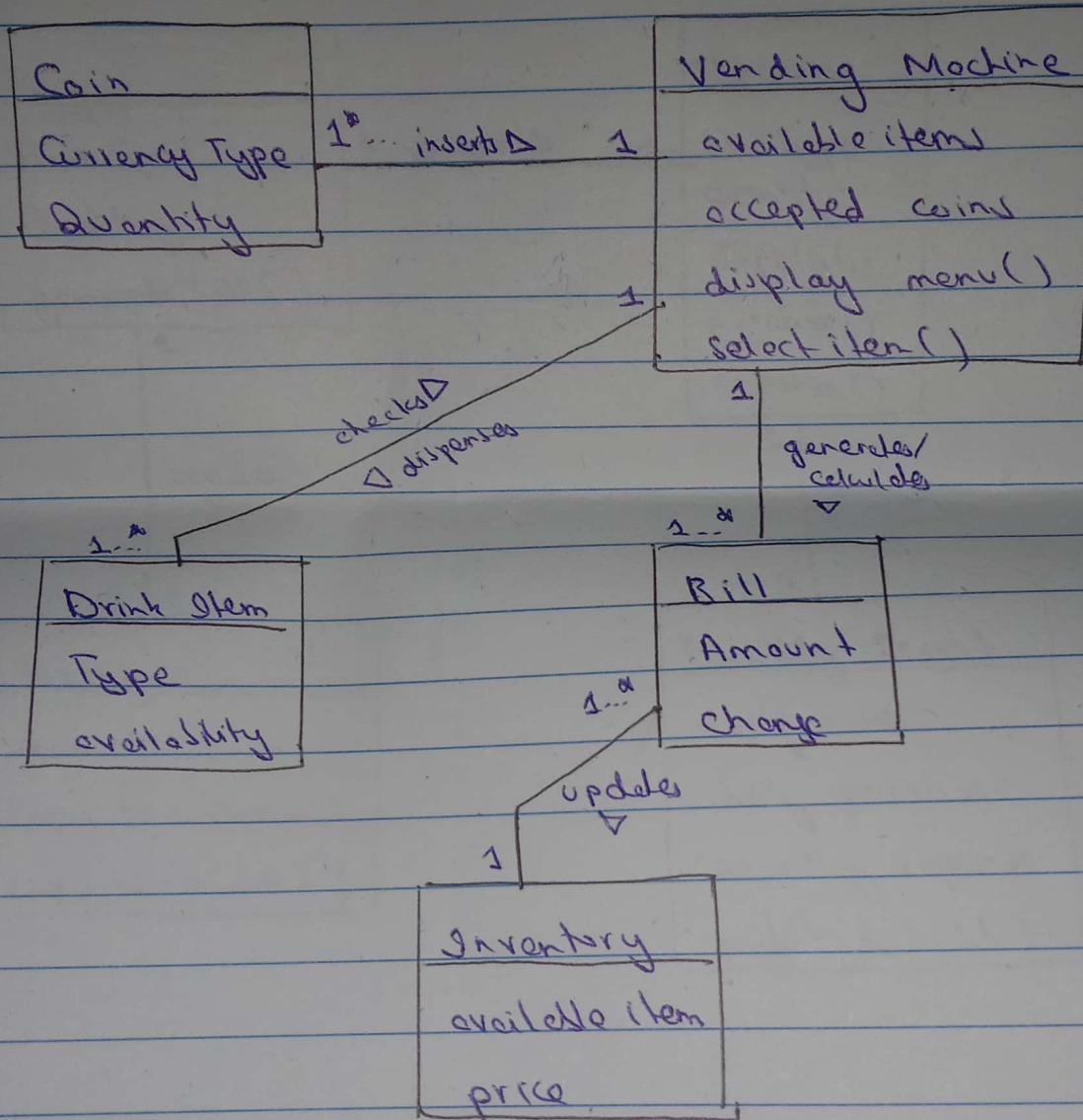
CASE STUDY 3:

Petrol Pump Management System.

DCD:

```
┌─────────────────────────┐              ┌─────────────────────┐
│ Pump                    │              │ Records             │
├─────────────────────────┤ 1 update ▷ 1 ├─────────────────────┤
│ Fuel Type               │              │ Fuel type           │
│ Quantity                │              │ quantity            │
│ generate bill ()        │              │ Supply ()           │
└───────────┬─────────────┘              │ purchase ()         │
            1                            │ expense ()          │
            │ create                     └──────────┬──────────┘
            │      ▽                                1
          ▲ 1...                           contribute to
┌─────────────────────┐                           ▽
│ Bill                │                    1
├─────────────────────┤          ┌─────────────────────────┐
│ amount              │          │ Monthly Report          │
│ copy to customer()  │          ├─────────────────────────┤
│ copy to records ()  │          │ daily sales             │
└─────────────────────┘          │ daily purchase          │
                                 │ monthly expense         │
                                 │ profit & loss ()        │
                                 └─────────────────────────┘
```
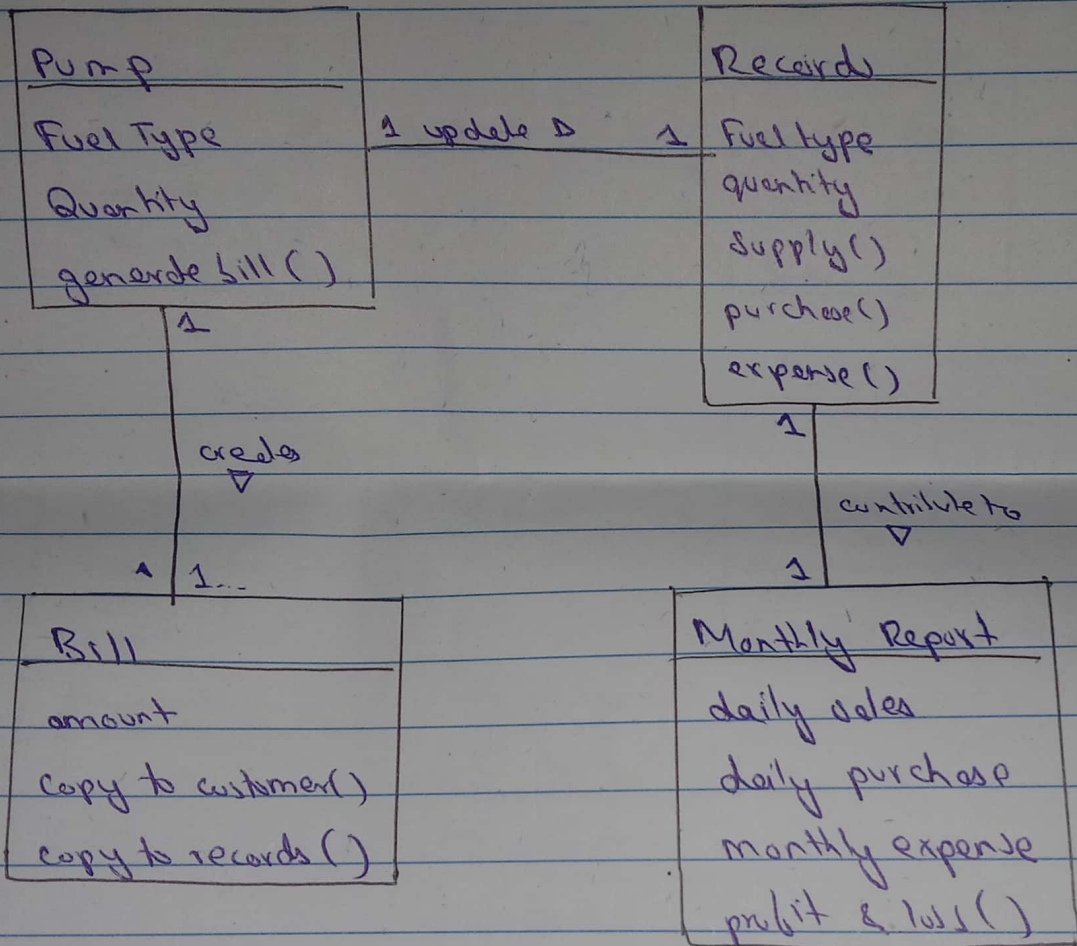
CASE STUDY 4:

Physician Billing System

DCD:

Physician
name
examination
records()

1   makes △   1..∞

Examination
patient data
date
fee

1

requires ▽

1

Patient
insurance details
name
address
Payment

1   files △   1

Insurance form
Licence No.
insurance amount
Patient amount

1

makes ▽

1

Payment
amount
verify payment()