Milk Delivery System

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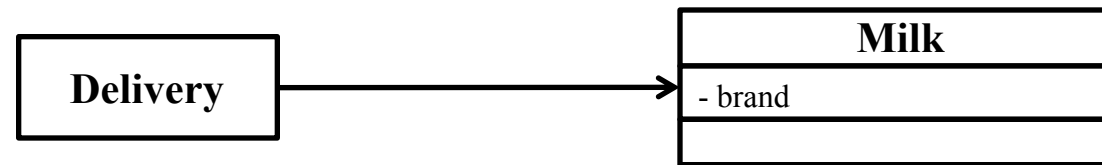
Requirement Statements

❑ A system is to be produced which holds details of deliveries of different brands of milk in a small town.

❑ As well as recording which households take which brand(s) of milk, this system also includes billing details and details of customer vacations when milk will not be delivered.

❑ The household will phone the delivery company to change the personal information, like address, to inform of the vacation, and to change the order of milk.

❑ For each delivery person, the system prints a daily list of which brands of milk are to be delivered to which households. The system should also be able to produce summary information showing how many liters of each milk type were sold each day of the week.

❑ Bills for each customer are printed at the end of each month and delivered with the first delivery of the following month.

Requirement Statement1

❑ A system is to be produced which holds details of deliveries of different brands of milk in a small town.

Requirement Statement2

❑ As well as recording which households take which brand(s) of milk, this system also includes billing details and details of customer vacations when milk will not be delivered.

Requirement Statement3

❑ The household will phone the delivery company to change the personal information, like address, to inform of the vacation, and to change the order of milk.
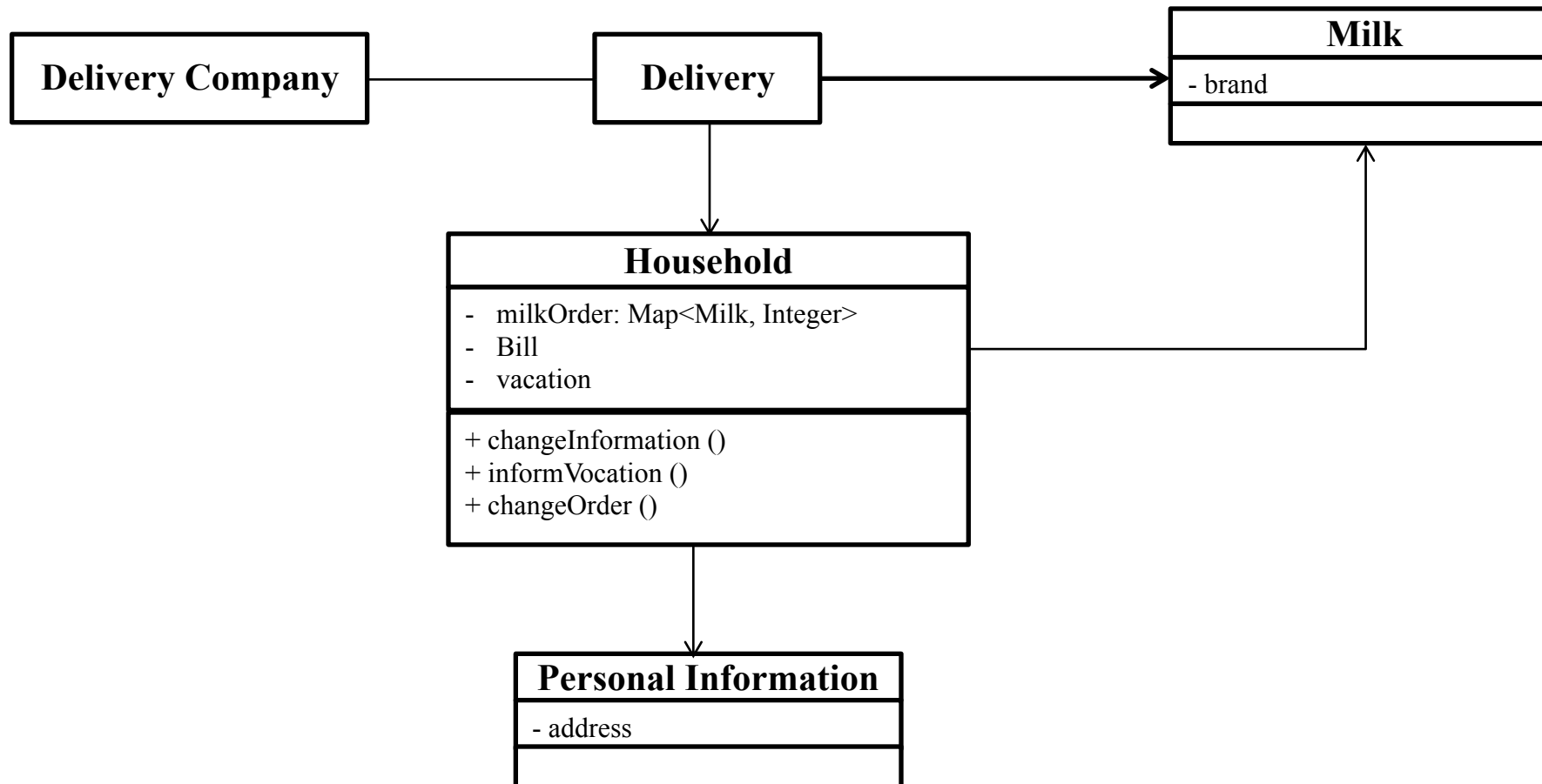
Requirement Statement4

☐ For each delivery person, the system prints a daily list of which brands of milk are to be delivered to which households. The system should also be able to produce summary information showing how many liters of each milk type were sold each day of the week.

Delivery Company

Delivery
+ printDailyList ()
+ produceSummaryInformation ()

Milk
- brand

Delivery Person

DailyList
- milkToDeliver: Map<Household, Map<Milk, Integer>>

print

Summary Information
- milkSoldofWeek: Map<Day, Map<Milk,Integer>>
- milkLiters: Map<Day, Map<Milk,Liters>>

produce

Household
- milkOrder: Map<Milk, Integer>
- Bill
- vacation

+ changeInformation ()
+ informVocation ()
+ changeOrder ()

produveSummaryInformation():
    for each brand of Milk
       milkLiters = calculateMilkLiter(milkSoldofWeek)

Personal Information
- address

printDailyList() :
    for each delivery person in deliveryPersons :
       daily list = new DailyList()
       for each household in households dispatch to delivery person :
         if (household.vacation contain today):
           continue
       daily list.add(household, household.milkOrder)

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Requirement Statement5

□ Bills for each customer are printed at the end of each month and delivered with the first delivery of the following month.
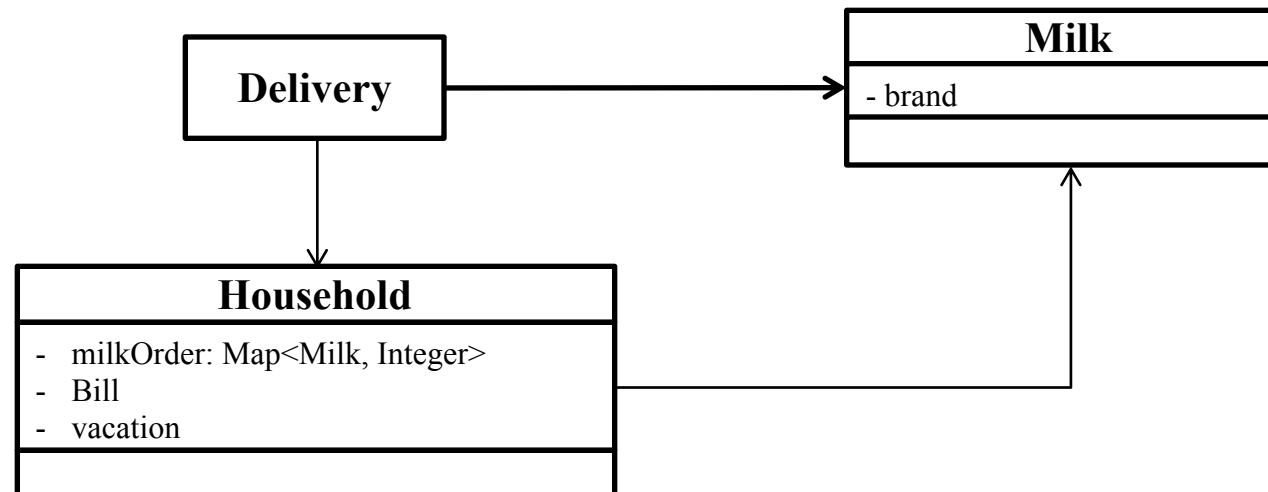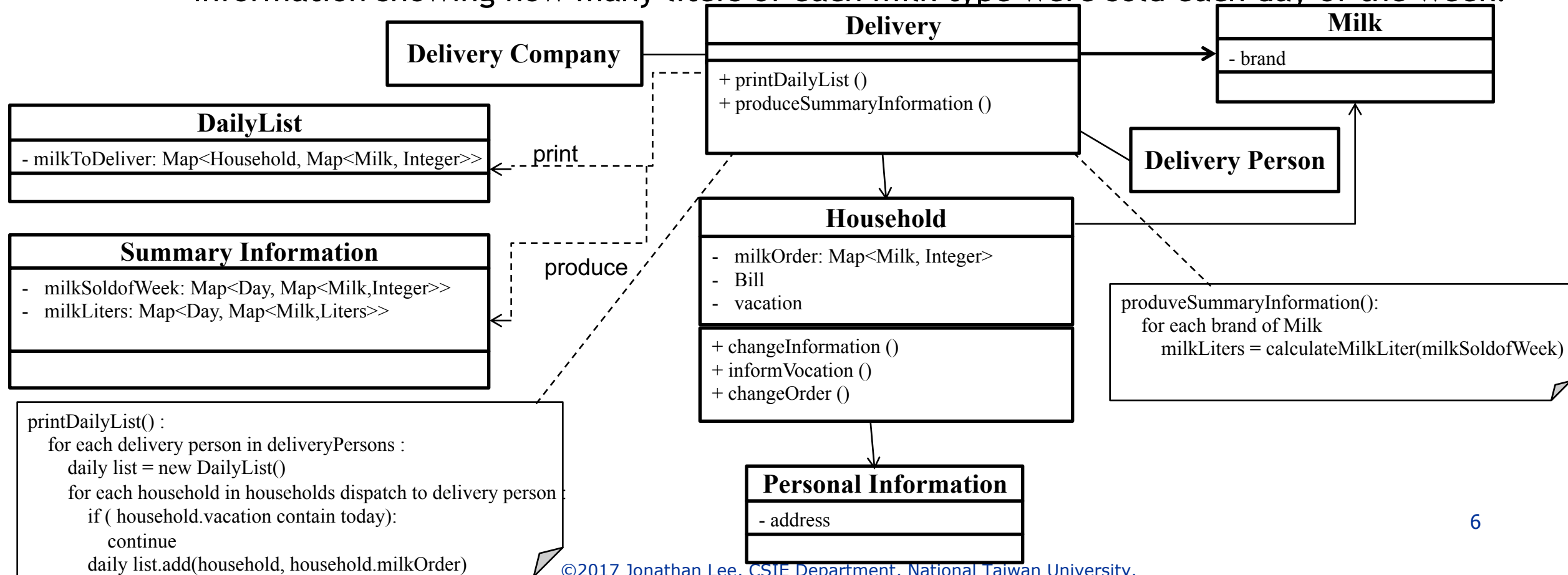
Delivery Company

Delivery

+ printDailyList ()
+ produceSummaryInformation ()
+ printBill (): Bill

Milk

- brand

DailyList

- milkToDeliver: Map<Household, Map<Milk, Integer>>

print

Delivery Person

Summary Information

- milkSoldofWeek: Map<Day, Map<Milk,Integer>>
- milkLiters: Map<Day, Map<Milk,Liters>>

produce

Household

- milkOrder: Map<Milk, Integer>
- Bill
- vacation

+ changeInformation ()
+ informVocation ()
+ changeOrder ()

produveSummaryInformation():
  for each brand of Milk
    milkLiters = calculateMilkLiter(milkSoldofWeek)

if(end of the month) :
  for each household :
    household.printBill()

Personal Information

- address

printDailyList() :
  for each delivery person in deliveryPersons :
    daily list = new DailyList()
    for each household in households dispatch to delivery person :
      if (household.vacation contain today):
        continue
      daily list.add(household, household.milkOrder)
      if(first delivered of the month):
        daily list.add(household, household.bill)

Design Issue

❑ Is a customer also a household?

Sequence Diagram