

Holiday Travel Vehicles

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Requirements Statement (1)

- ☐ In the new system for Holiday Travel Vehicles, the system users follow a two-stage process to record complete information on all of the vehicles sold.
- ☐ When an RV or a trailer first arrives at the company from the manufacturer, a clerk from the inventory department creates a new vehicle record for it in the computer system.
- ☐ The data entered at this time include basic descriptive information on the vehicle such as manufacturer, name, model, year, base cost, and freight charges.
- ☐ When the vehicle is sold, the new vehicle record is updated to reflect the final terms of the sale and the dealer-installed options added to the vehicle. This information is entered into the system at the time of sale when the salesperson completes the sales invoice.



Requirements Statement (2)

- ❑ When it is time for the clerk to finalize the new vehicle record, the clerk will select a menu option from the system, which is called Finalize New Vehicle Record.
- ❑ The tasks involved in this process are described next. When the user selects the Finalize New Vehicle Record from the system menu, the user is immediately prompted for the serial number of the new vehicle. This serial number is used to retrieve the new vehicle record for the vehicle from system storage.



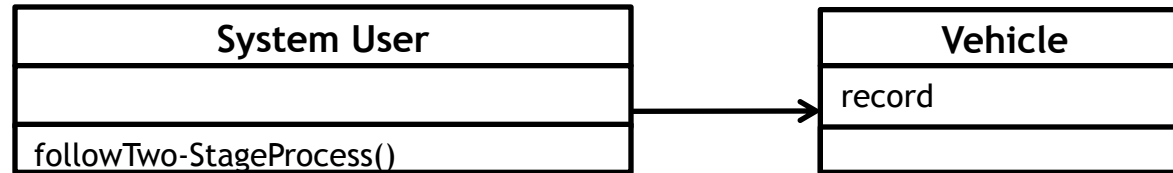
Requirements Statement (3)

- ☐ If a record cannot be found, the serial number is probably invalid. The vehicle serial number is then used to retrieve the option records that describe the dealer-installed options that were added to the vehicle at the customers request. There may be zero or more options.
- ☐ The cost of the option specified on the option record(s) is totaled. Then, the dealer cost is calculated, using the vehicles base cost, freight charge, and total option cost. The completed new vehicle record is passed back to the calling module.



Requirements Statement1

- ❑ In the new system for Holiday Travel Vehicles, the system users follow a two-stage process to record complete information on all of the vehicles sold.

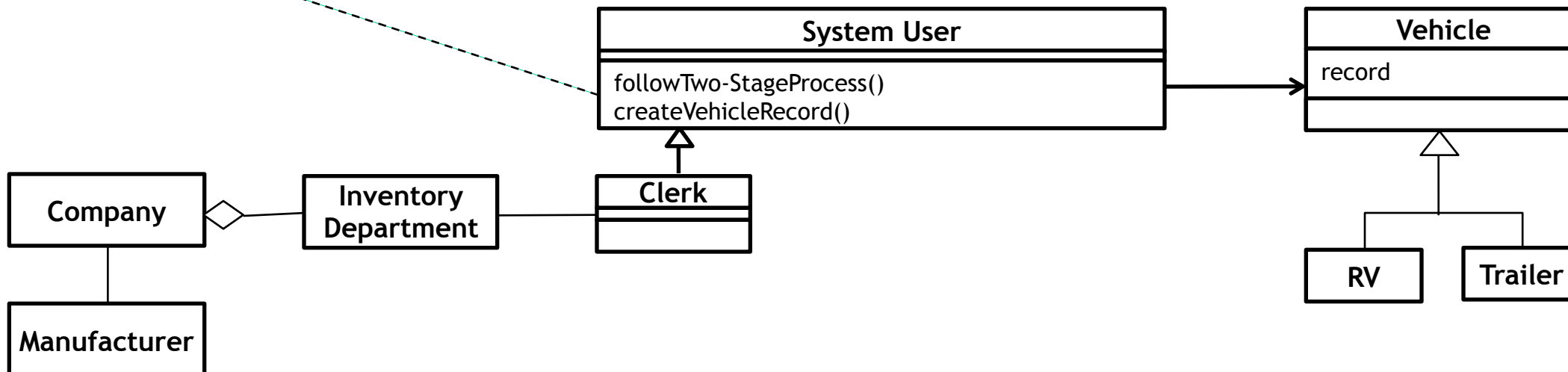


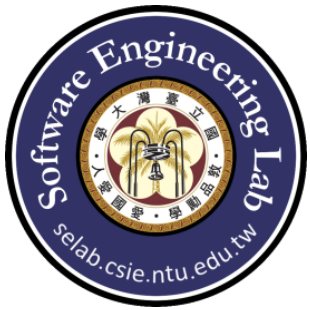


Requirements Statement2

- ❑ When an RV or a trailer first arrives at the company from the manufacturer, a clerk from the inventory department creates a new vehicle record for it in the computer system.

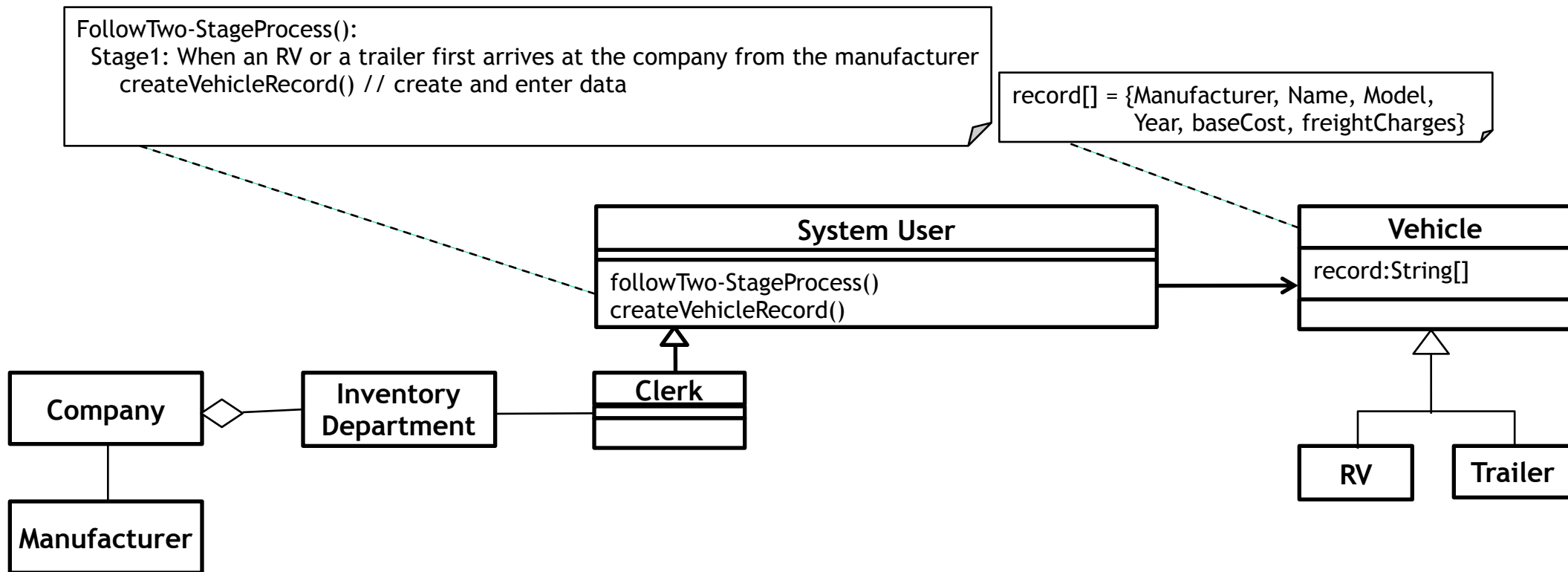
FollowTwo-StageProcess():
Stage1: When an RV or a trailer first arrives at the company from the manufacturer
createVehicleRecord() //create





Requirements Statement3

- ❑ The data entered at this time include basic descriptive information on the vehicle such as manufacturer, name, model, year, base cost, and freight charges.



Requirements Statement4

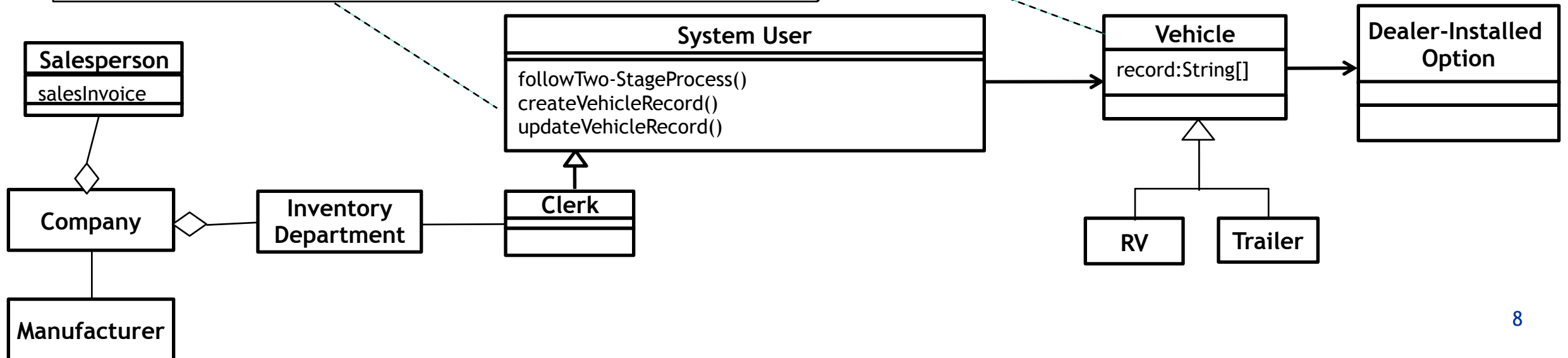
- When the vehicle is sold, the new vehicle record is updated to reflect the final terms of the sale and the dealer-installed options added to the vehicle. This information is entered into the system at the time of sale when the salesperson completes the sales invoice.

FollowTwo-StageProcess():

Stage1: When an RV or a trailer first arrives at the company from the manufacturer
createVehicleRecord() // create and enter data

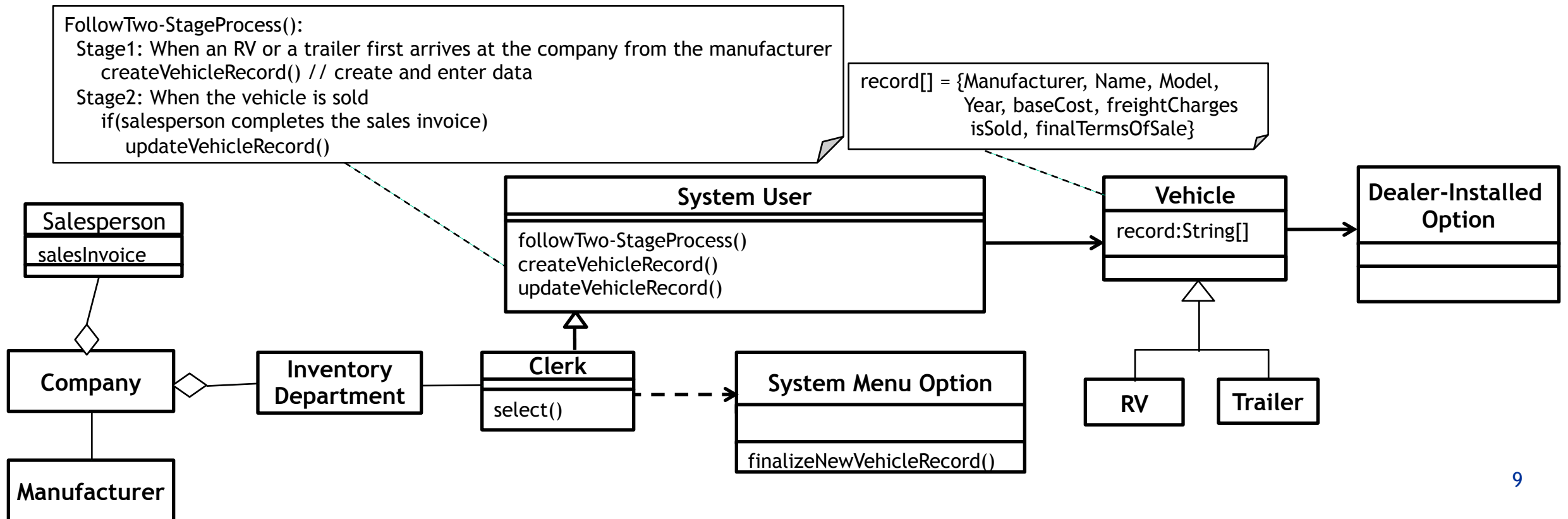
Stage2: When the vehicle is sold
if(salesperson completes the sales invoice)
updateVehicleRecord()

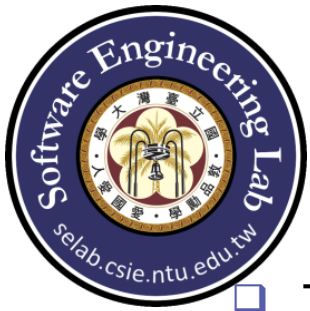
record[] = {Manufacturer, Name, Model,
Year, baseCost, freightCharges
isSold,finalTermsOfSale}



Requirements Statement5

- When it is time for the clerk to finalize the new vehicle record, the clerk will select a menu option from the system, which is called Finalize New Vehicle Record.





Requirements Statement6

- The tasks involved in this process are described next. When the user selects the Finalize New Vehicle Record from the system menu, the user is immediately prompted for the serial number of the new vehicle. This serial number is used to retrieve the new vehicle record for the vehicle from system storage.

FollowTwo-StageProcess():

Stage1: When an RV or a trailer first arrives at the company from the manufacturer
createVehicleRecord() // create and enter data

Stage2: When the vehicle is sold

if(salesperson completes the sales invoice)

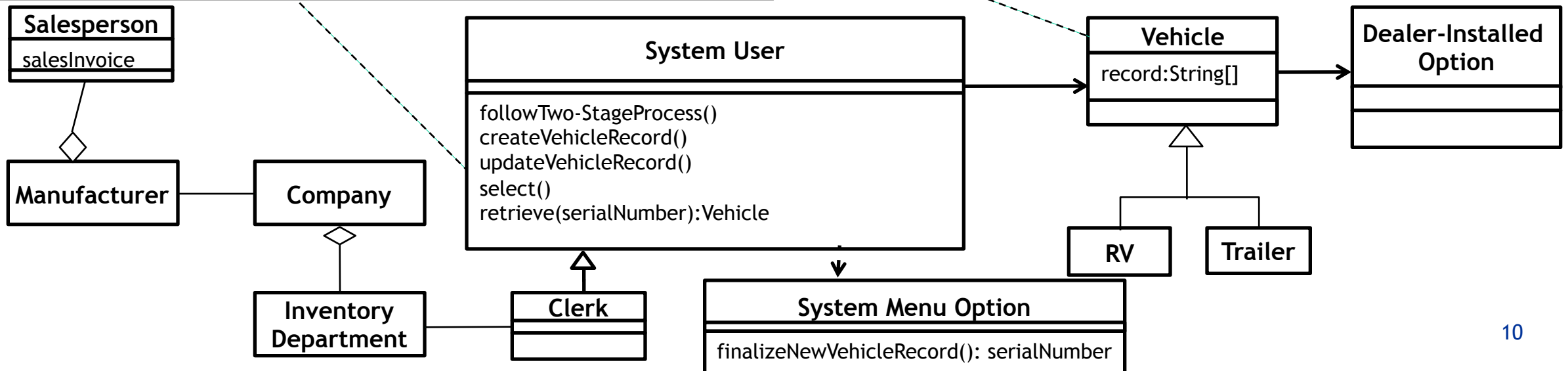
updateVehicleRecord()

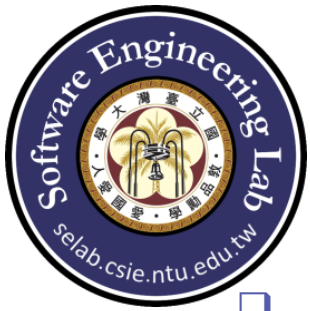
selects the Finalize New Vehicle Record from the system menu

serialNumber=finalizeNewVehicleRecord()

vehicle= retrieve(serialNumber)

```
record[] = {Manufacturer, Name, Model,
            Year, baseCost, freightCharges
            isSold, finalTermsOfSale,
            serialNumber}
```





Requirements Statement7

- ❑ If a record cannot be found, the serial number is probably invalid. The vehicle serial number is then used to retrieve the option records that describe the dealer-installed options that were added to the vehicle at the customers request. There may be zero or more options.

FollowTwo-StageProcess():

Stage1: When an RV or a trailer first arrives at the company from the manufacturer
createVehicleRecord() // create and enter data

Stage2: When the vehicle is sold

if(salesperson completes the sales invoice)

updateVehicleRecord()

selects the Finalize New Vehicle Record from the system menu

serialNumber=finalizeNewVehicleRecord()

vehicle= retrieve(serialNumber)

Dealer-InstalledOption = retrieveOptionRecord(serialNumber)

retrieve(serialNumber):
if(vehicle is found by serialNumber)
return vehicle

Manufacturer

Company

Salesperson
salesInvoice

Inventory
Department

Clerk

System User

followTwo-StageProcess()
createVehicleRecord()
updateVehicleRecord()
select()
retrieve(serialNumber):Vehicle
retrieveOptionRecord(serialNumber):Dealer-InstalledOption

System Menu Option

finalizeNewVehicleRecord(): serialNumber

record[] = {Manufacturer, Name, Model,
Year, baseCost, freightCharges
isSold, finalTermsOfSale,
serialNumber}

Customer
request

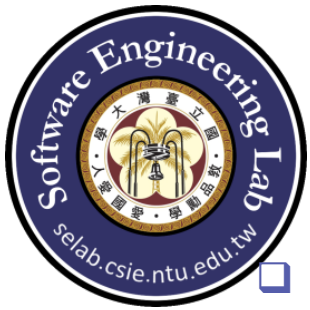
Vehicle
record:String[]

RV

Trailer

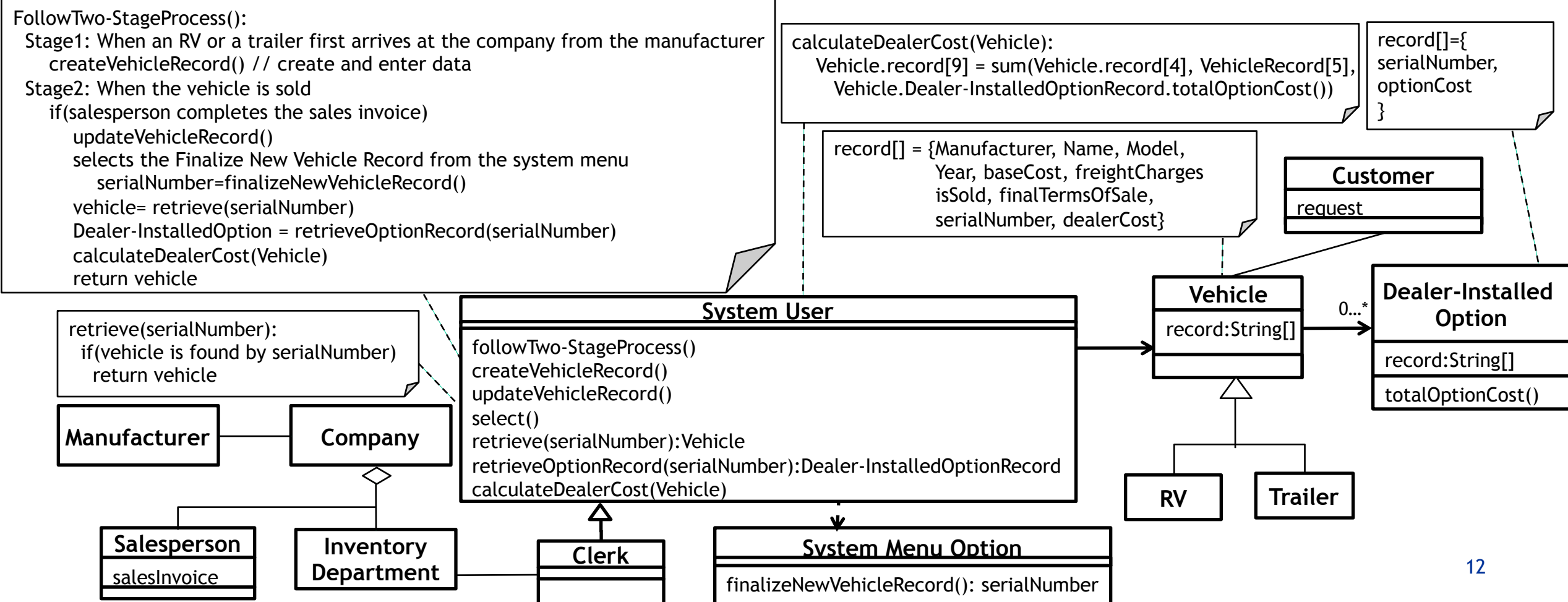
Dealer-Installed
Option
record:String[]

record[] = {serialNumber}



Requirements Statement8

- ❑ The cost of the option specified on the option record(s) is totaled. Then, the dealer cost is calculated, using the vehicles base cost, freight charge, and total option cost. The completed new vehicle record is passed back to the calling module.





Design Issue

- ☐ Should System class exist?
- ☐ Is a clerk also a system user?
- ☐ Is a Salesperson also a system user?

Sequence Diagram

