

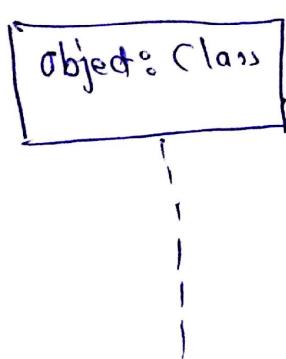
①
Sequence dia : one kind of interaction dia. which
Show communication among system objects.

(Time based , ordering of comm^m sequence)
not duration.

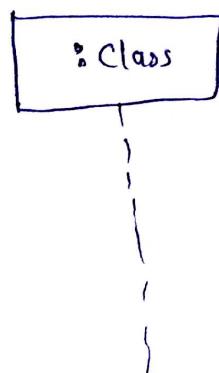
→ Captures the seq. of action that happens bet^m the obj.
showing the time ordering of comm^m events.

Vertical — time (life time of obj).

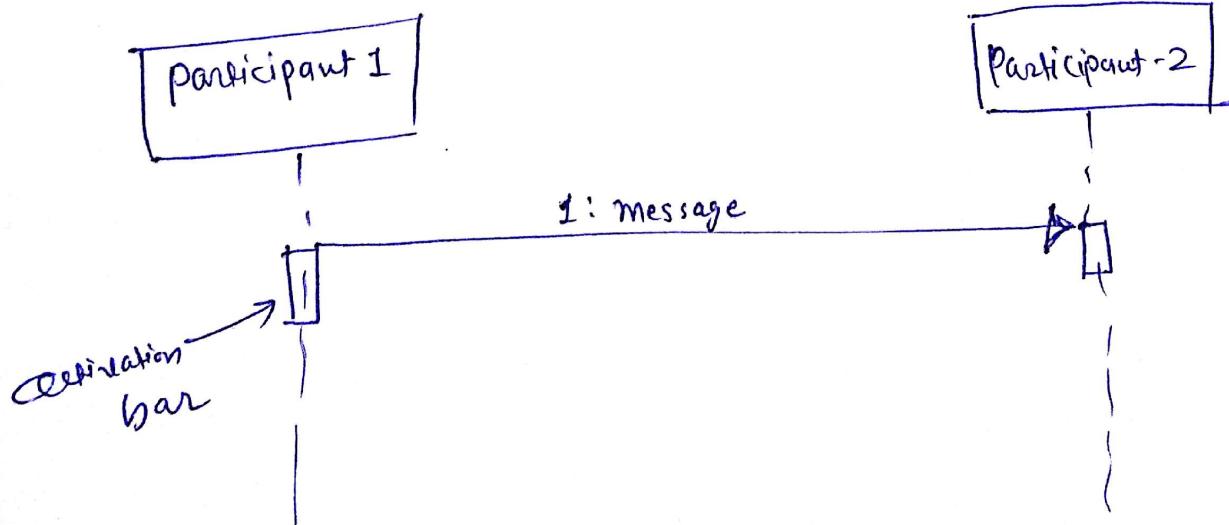
Horizontal — diff. obj. (participants).



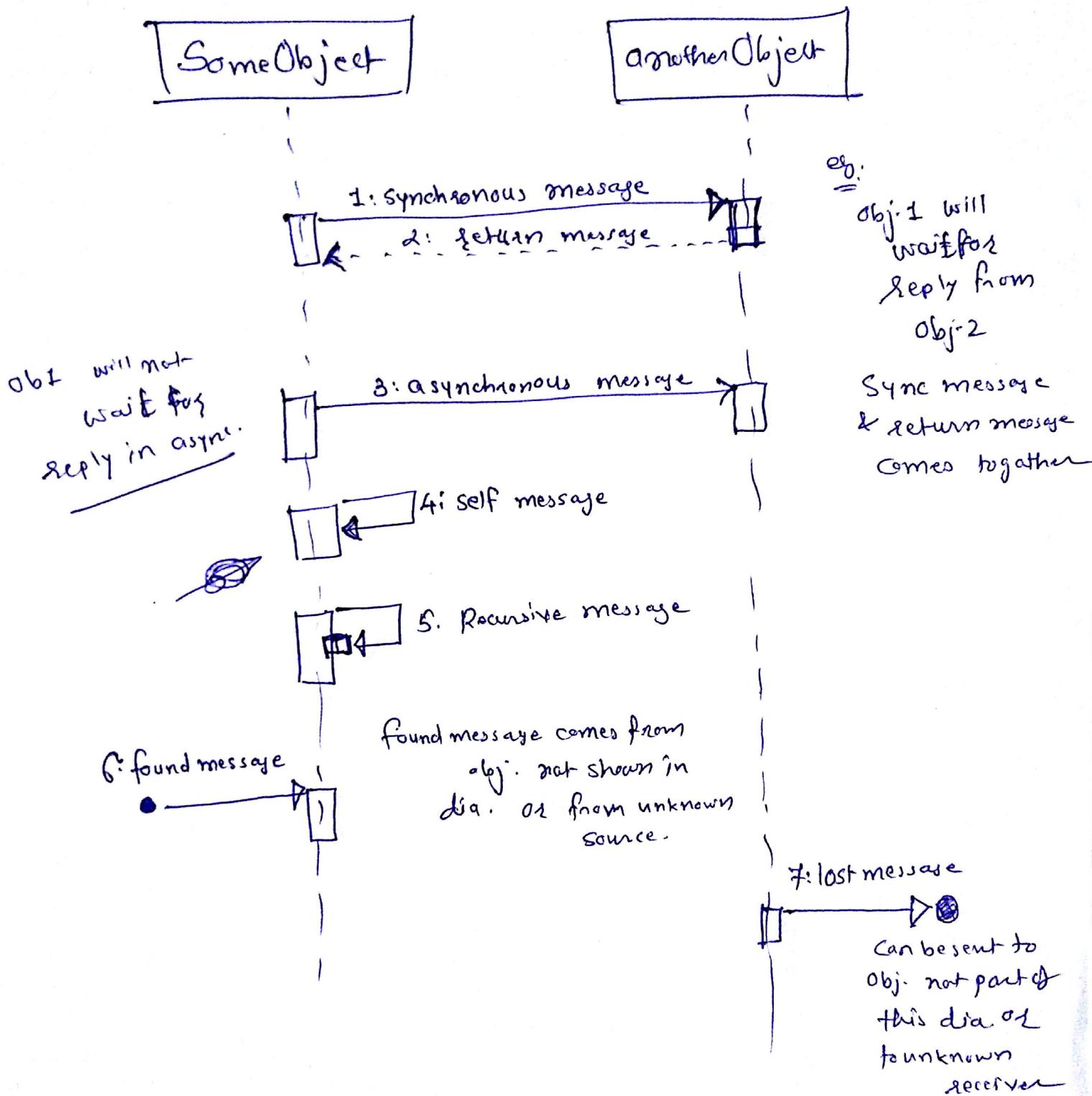
↔ Lifeline ↔



- Rather than obj. → we think participants.

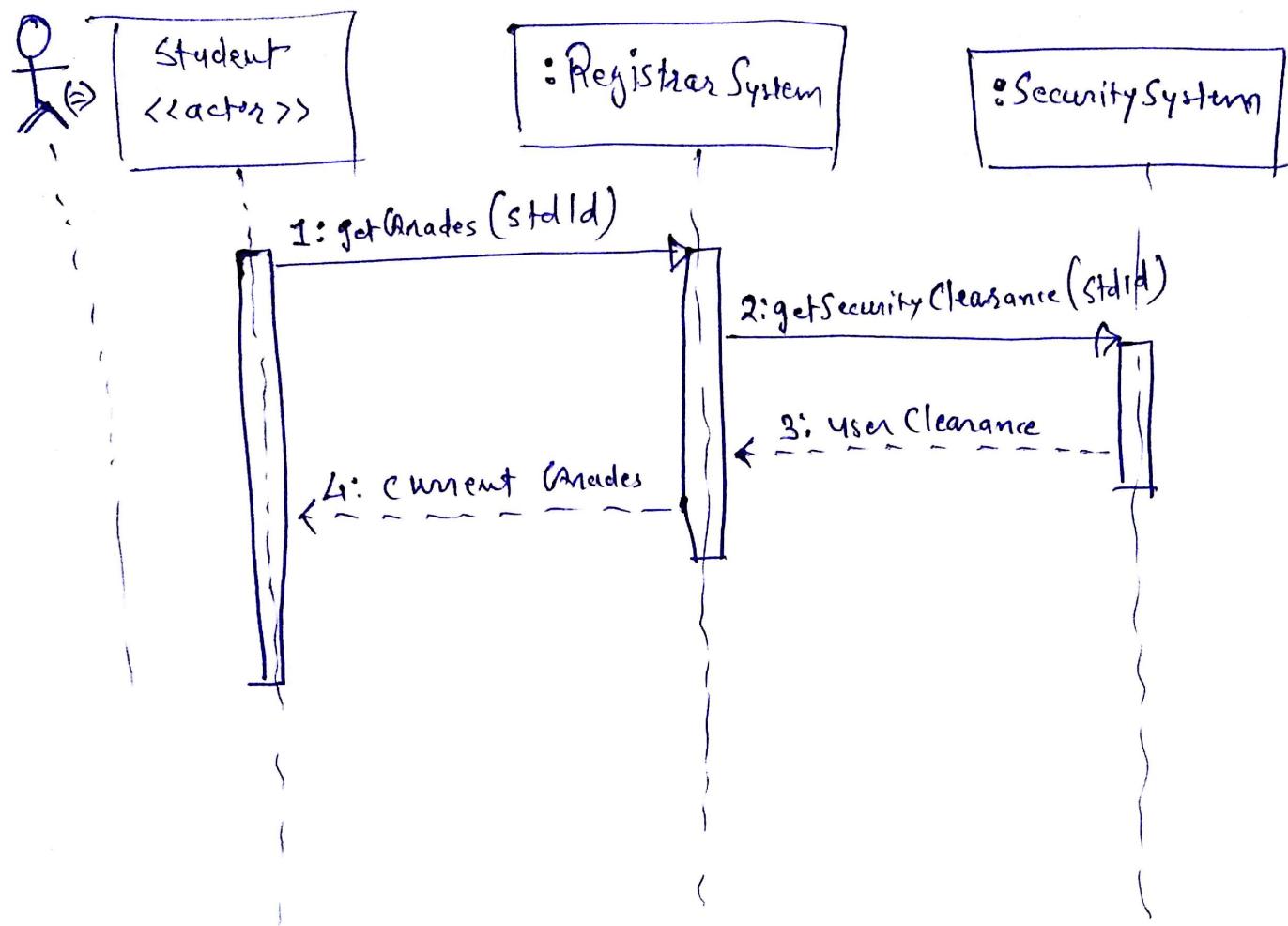


Types of Messages



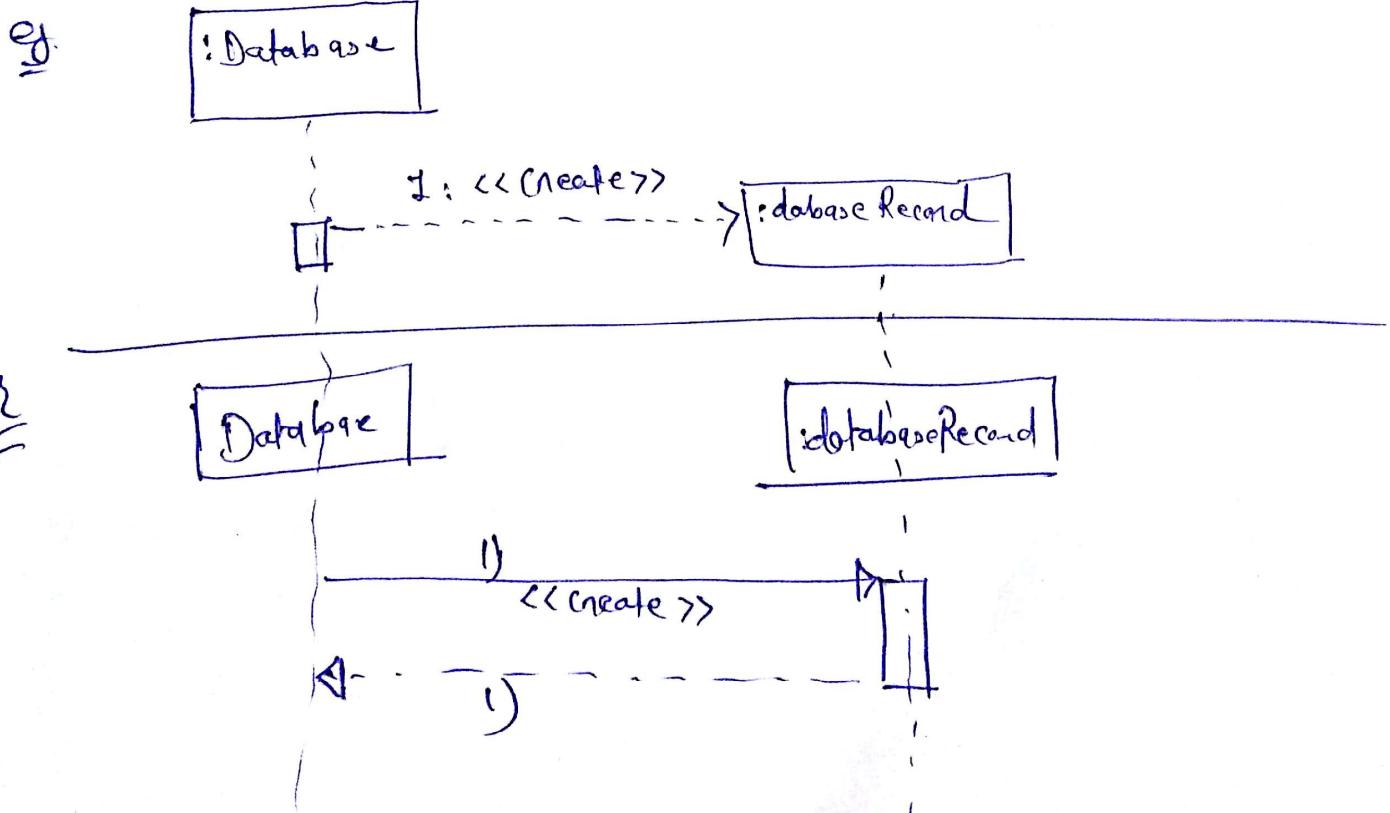
Eg. std. register to get grades.

(3)



Create & destroy messages

One obj may create another obj.



(4)

Database

Database Record

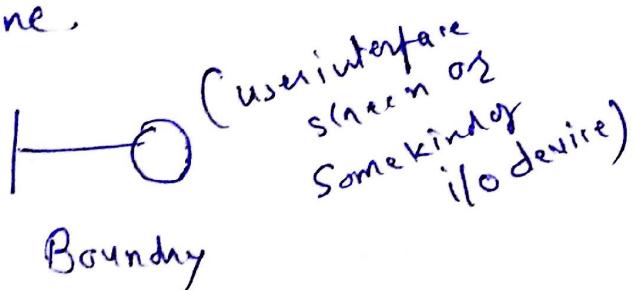
destroy message



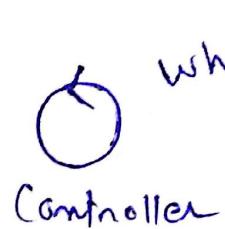
Lifeline stops here

Boundary , Entity & Control Element

classes, obj. & actors can be participants. in seq. dia.
other then that boundaries, controls & entities can have
lifeline.



(User interface
screen or
Some kind of
I/O device)



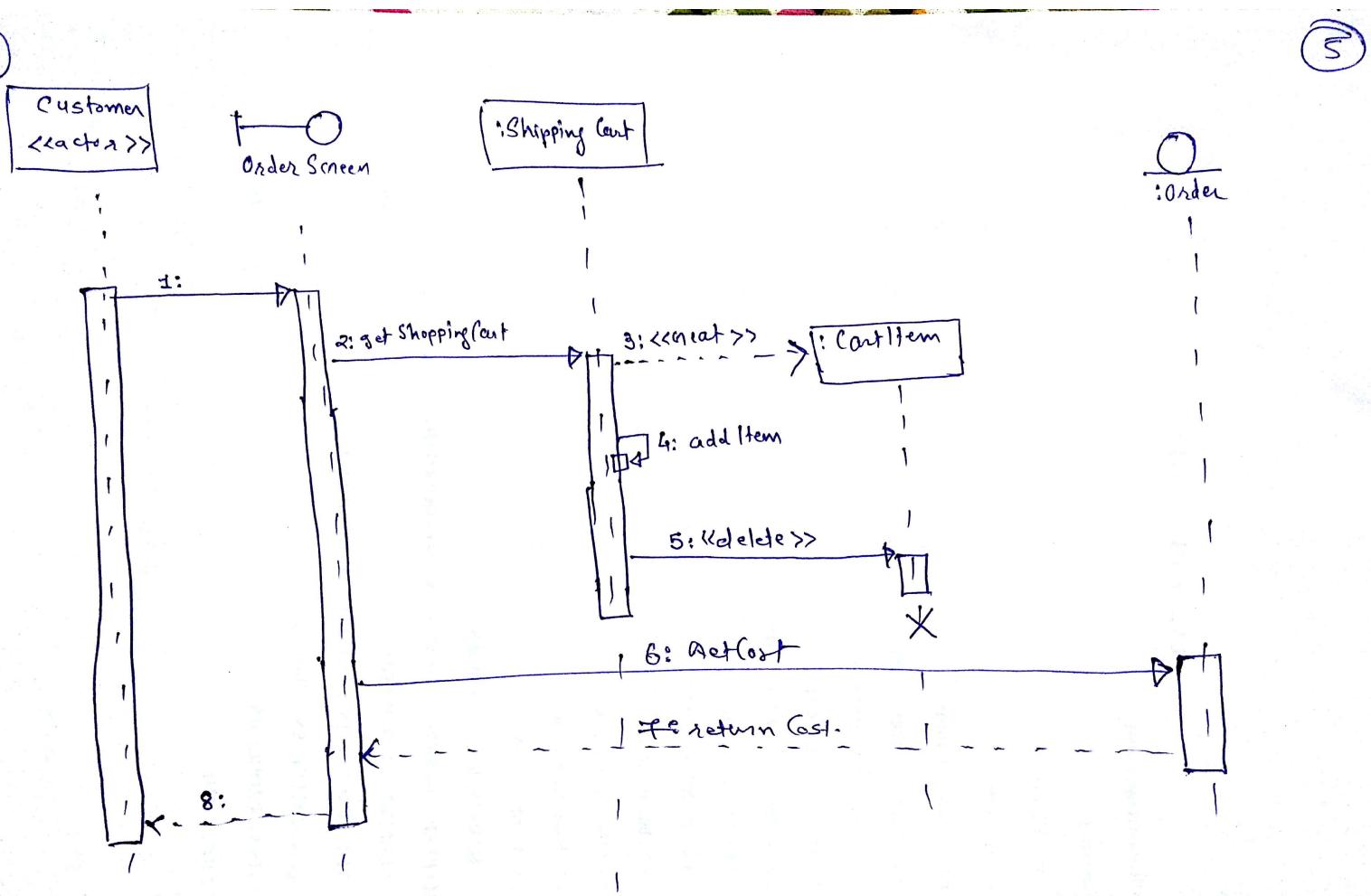
What controls
the work
being done
& How &
when?

2)

3)



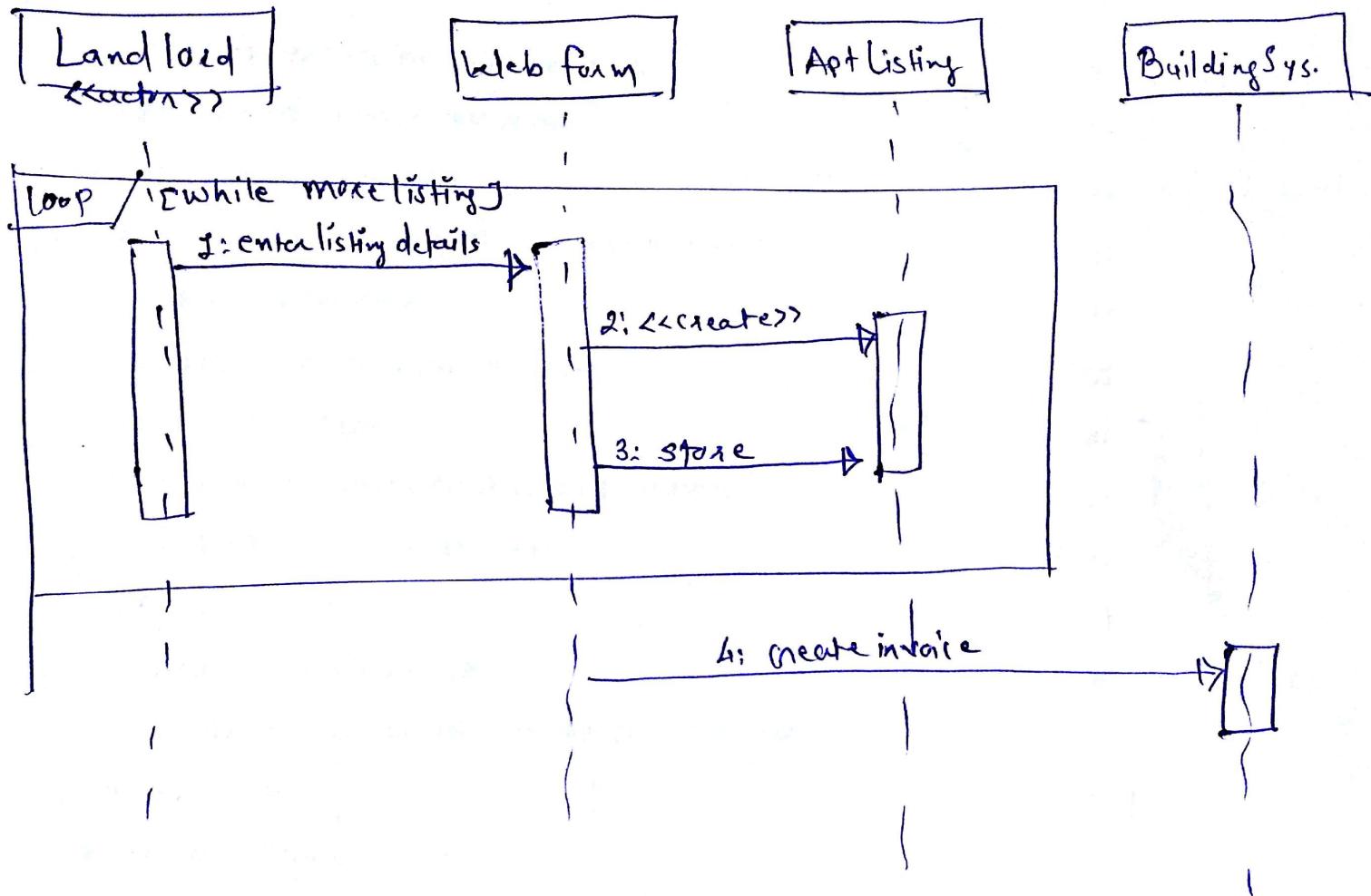
Some
persistent
element
that we
store
in a
file



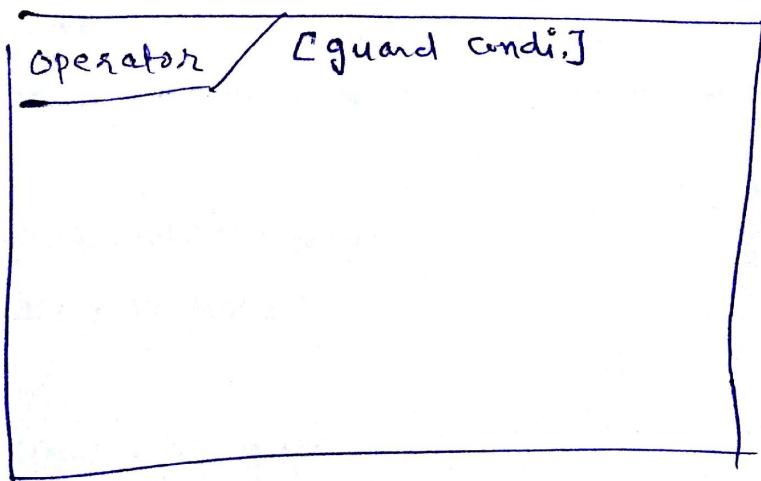
Interaction Frames

(6)

Using OML 2.0 Seq. dia. we can show looping & Iterations.



Symbol

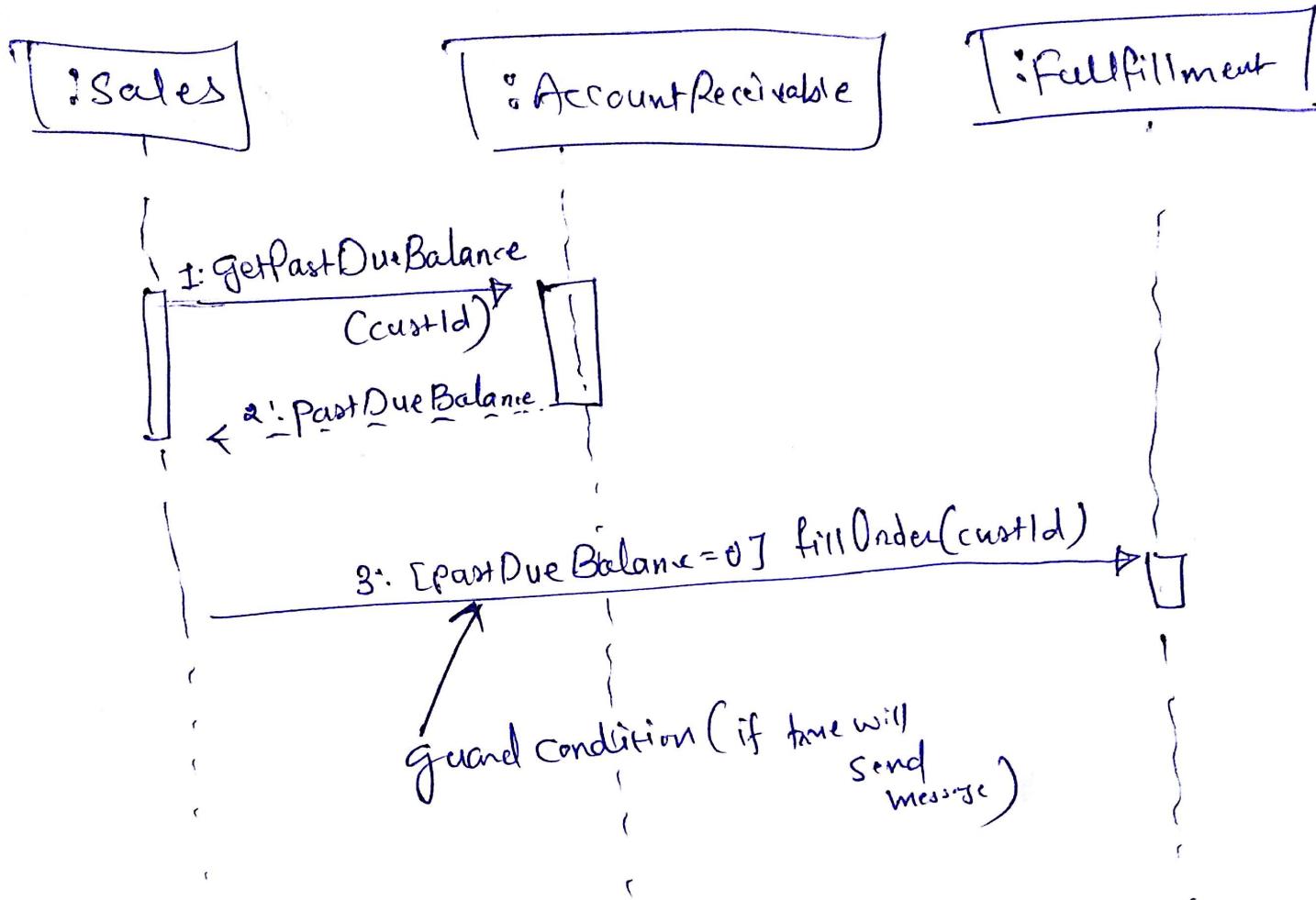


- alt - alternative multiple fragments. Guard condi. must be true to execute P
- loop - May execute multiple times, as indicated by guard.
- neg - invalid interaction
- opt - Fragment is optional (works like an if cond. with no else)
- par - fragments are run in parallel
- ref - reference to an interaction that's defined in another dia.
(eg. authenticate user, login, logout)
Refers to separate dia.
- Region - A critical region; only one thread can execute it at a time.
- sd - stands for sequence dia. and can surround your entire seq. dia. Q

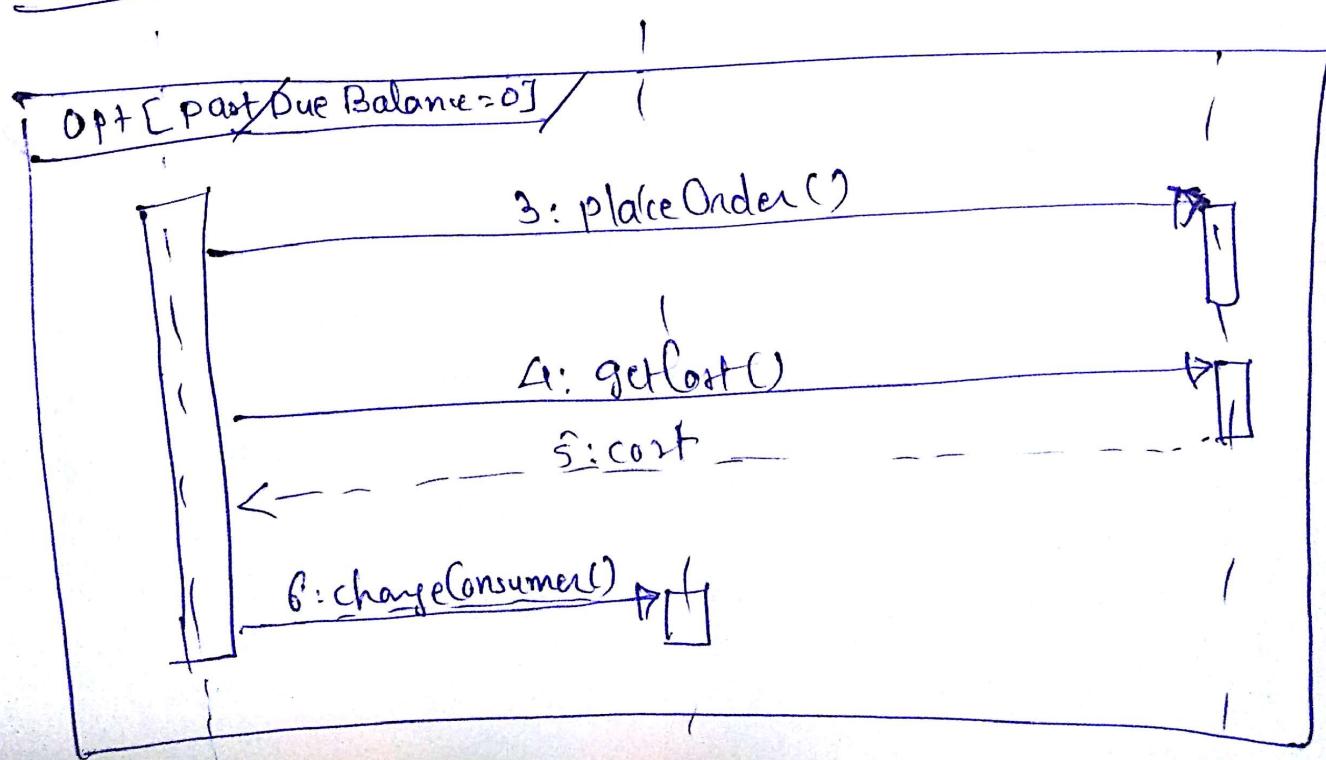
Fragments - Options

8

Sending the message based on guard condition
(UML 1.0).



Several messages for one condition → use opt



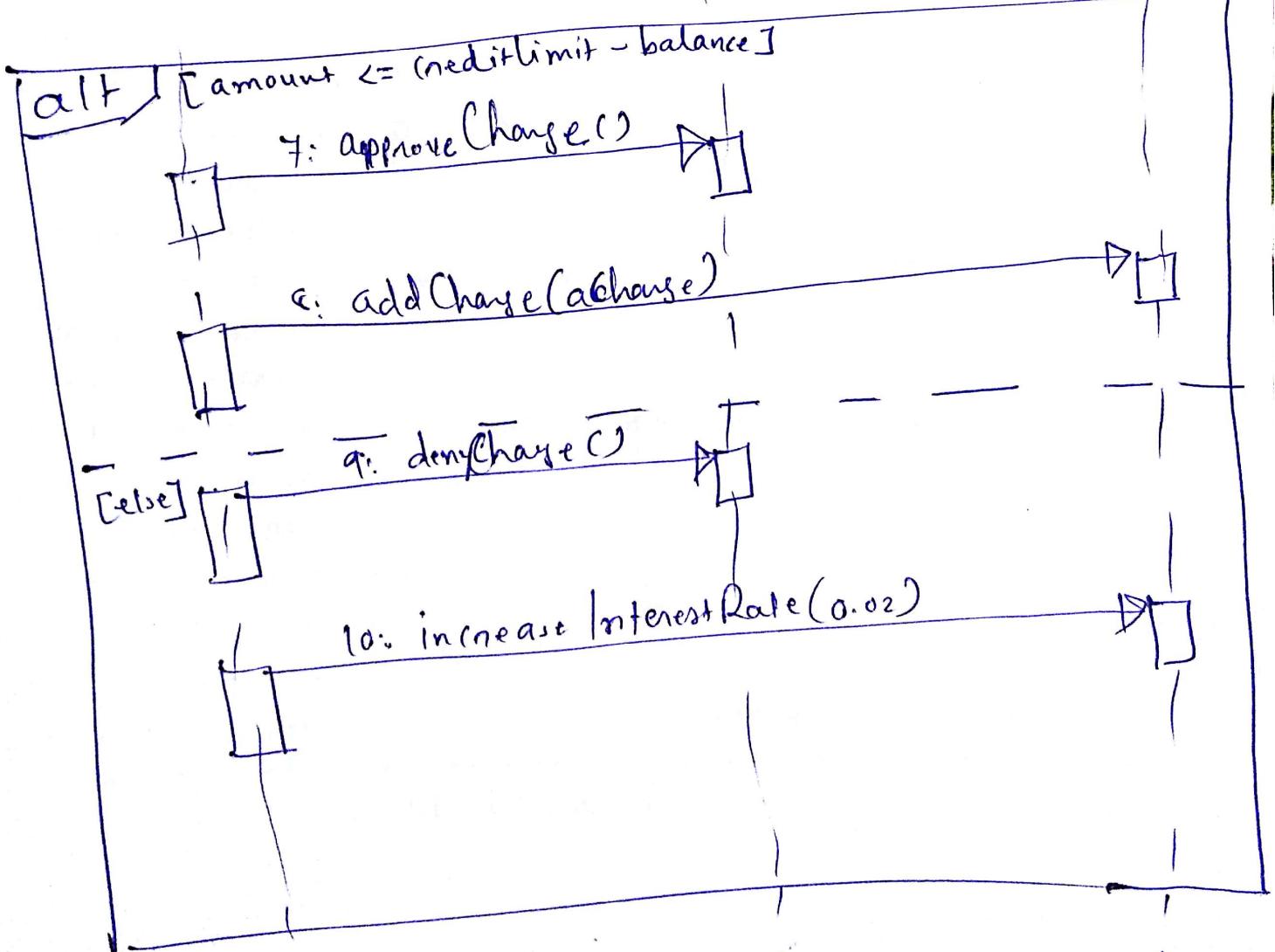
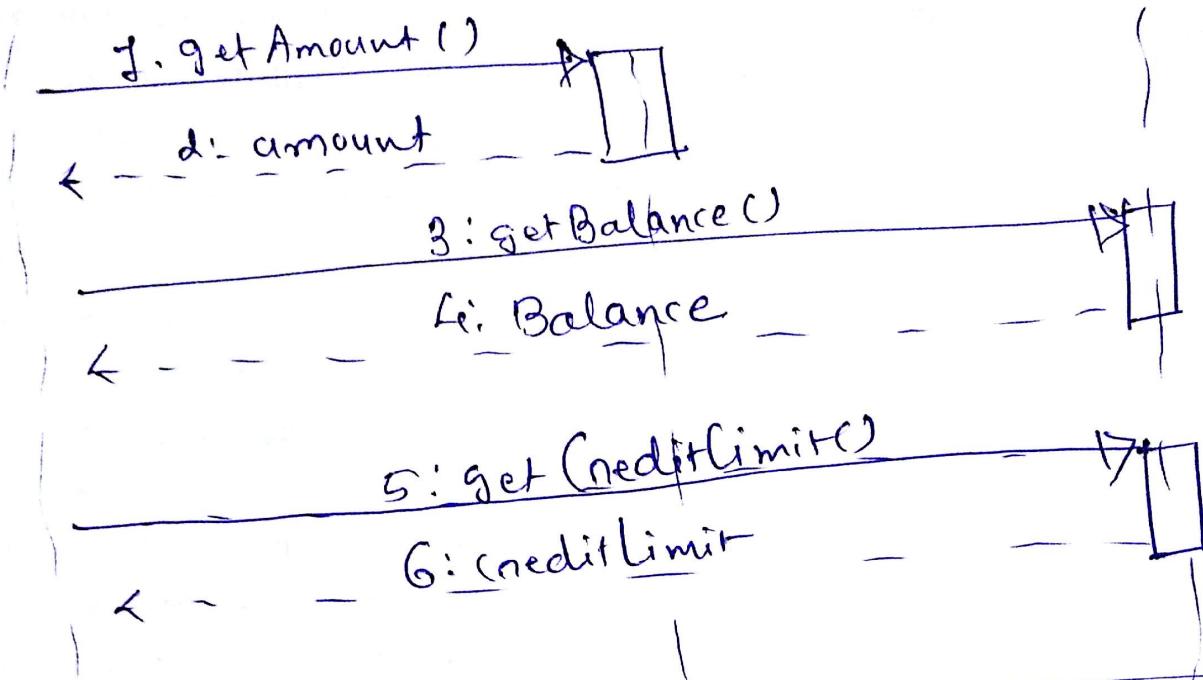
if - then - else (Alt) Alternatives

(9)

| : Bank

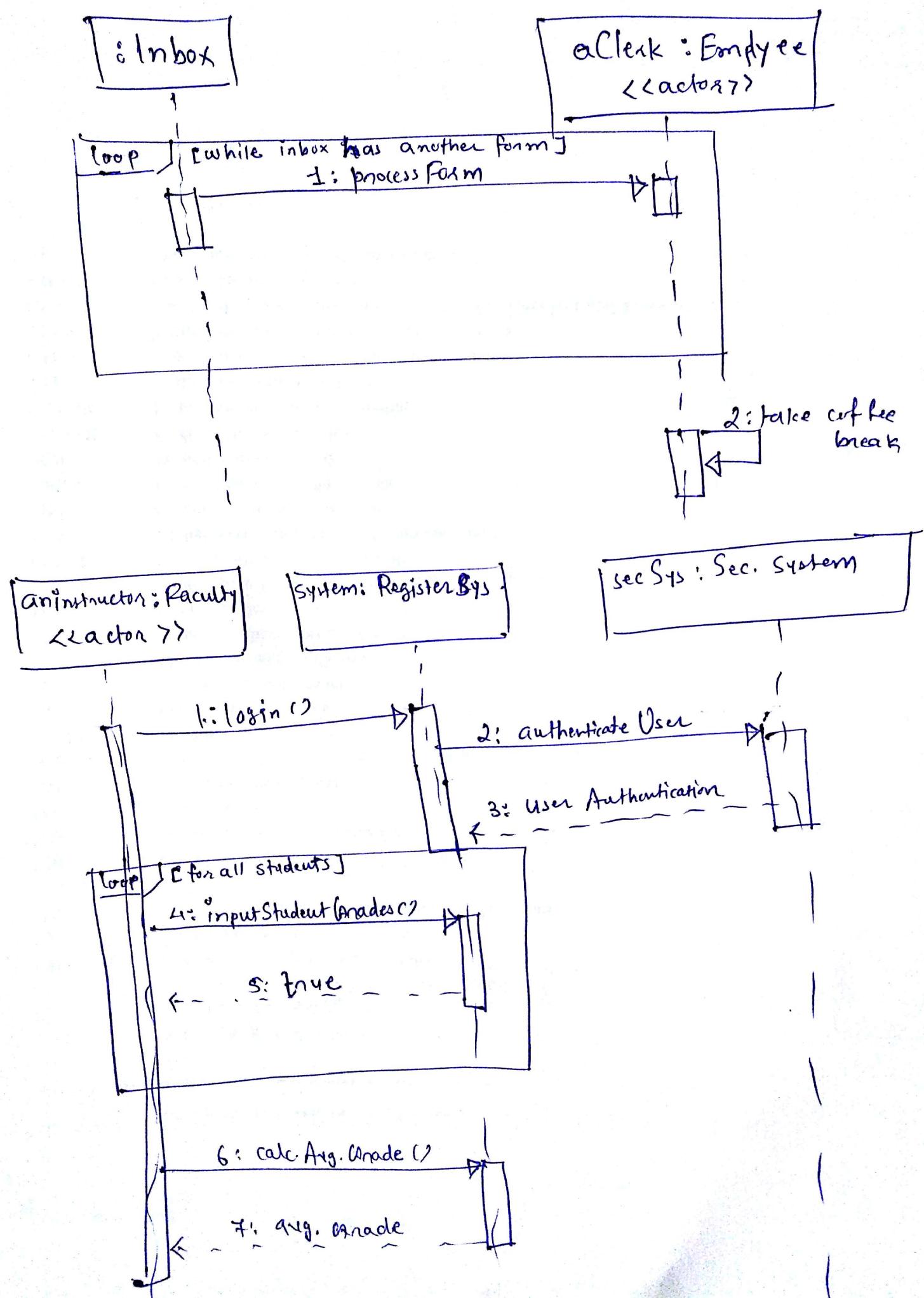
| : Charge: Charge

| : Account: CreditCardAcct



Loops - fragments

(10)



Parallels - Fragments



Thermostat

1: heat House ()

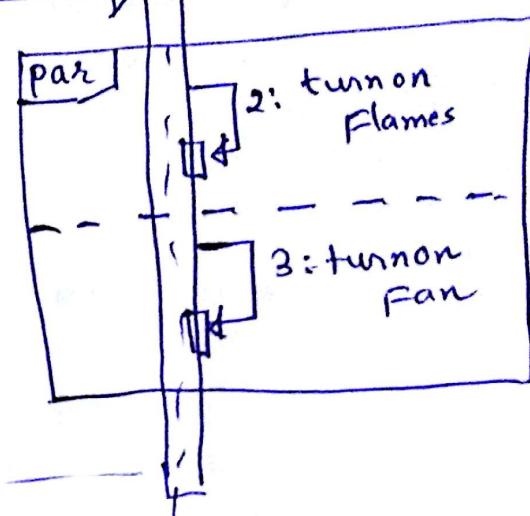


2a: Warm House

Furnace

1
1

par



→ note:
"no guard
needed as
both happens
together"

Relation between Use case & Seq.

what to do?

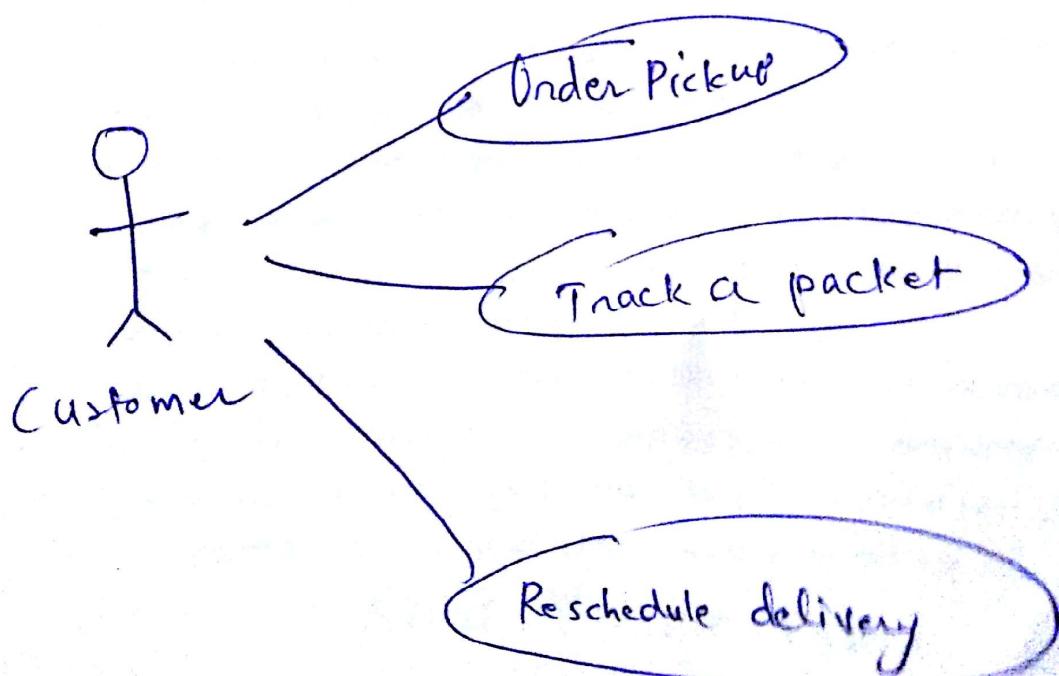
goals of

cust.

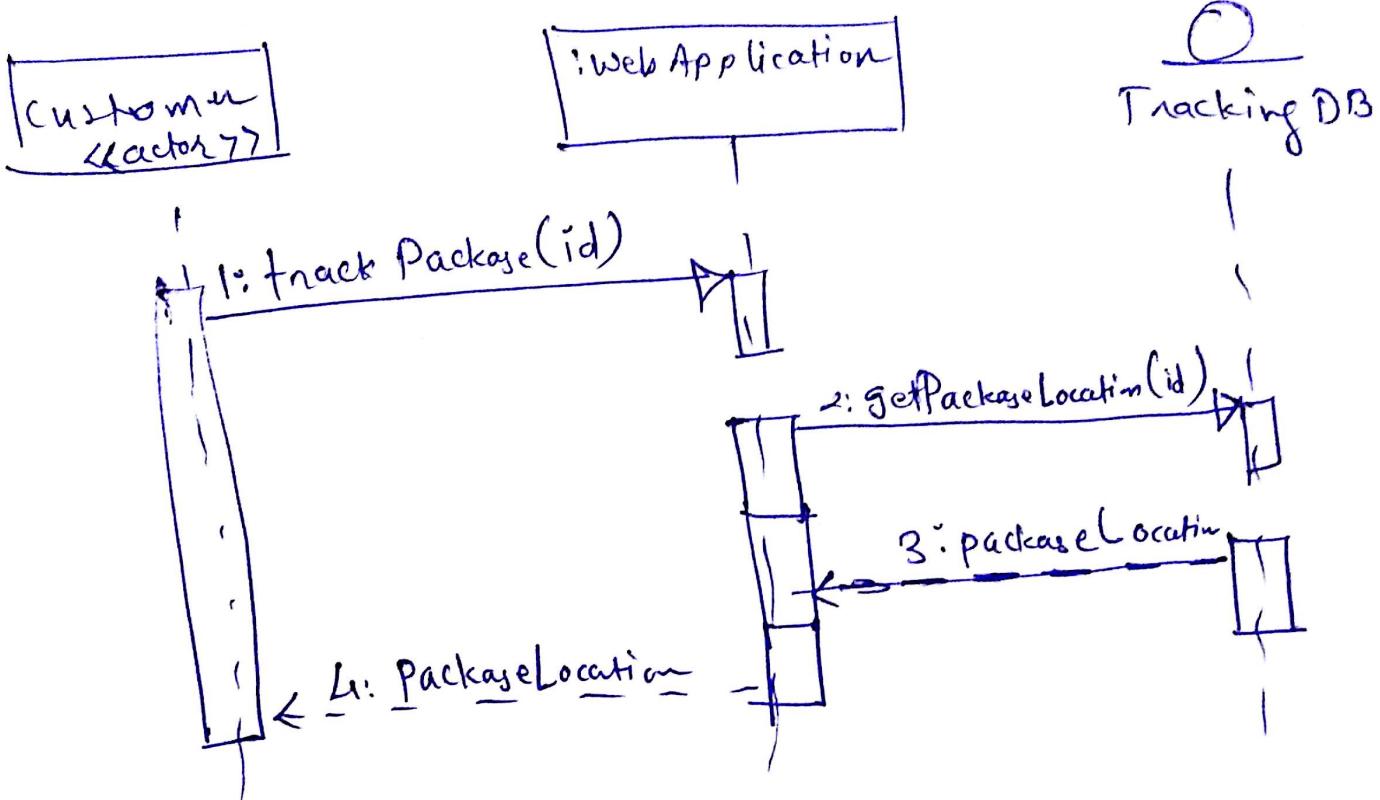
How to
achieve
goals:



Seq. diag
helps.



(12)



Seq. for track package