

4156 Thursday

10/10/13

page 0

student asked about  
hashed parameters

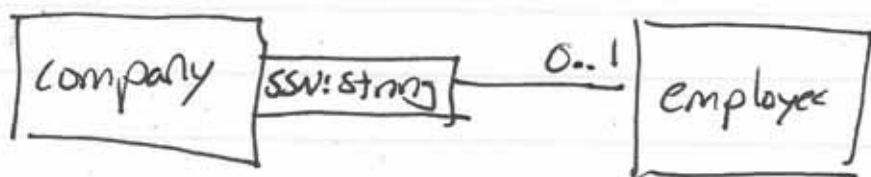
~~can~~ can be modeled as  
"association qualifiers in  
class diagrams"

UML 2.4

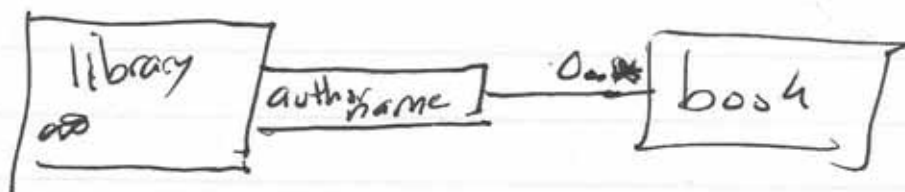
qualifier defines a partition  
model Java hashmaps  
C# dictionaries  
index tables

where fast access to linked object(s)  
is provided using the qualifier  
as a hash key, search argument or index

"UML 2.4 ~~is~~ specification is gibberish  
explaining multiplicity of qualifier"



show link  
to details  
website



4156

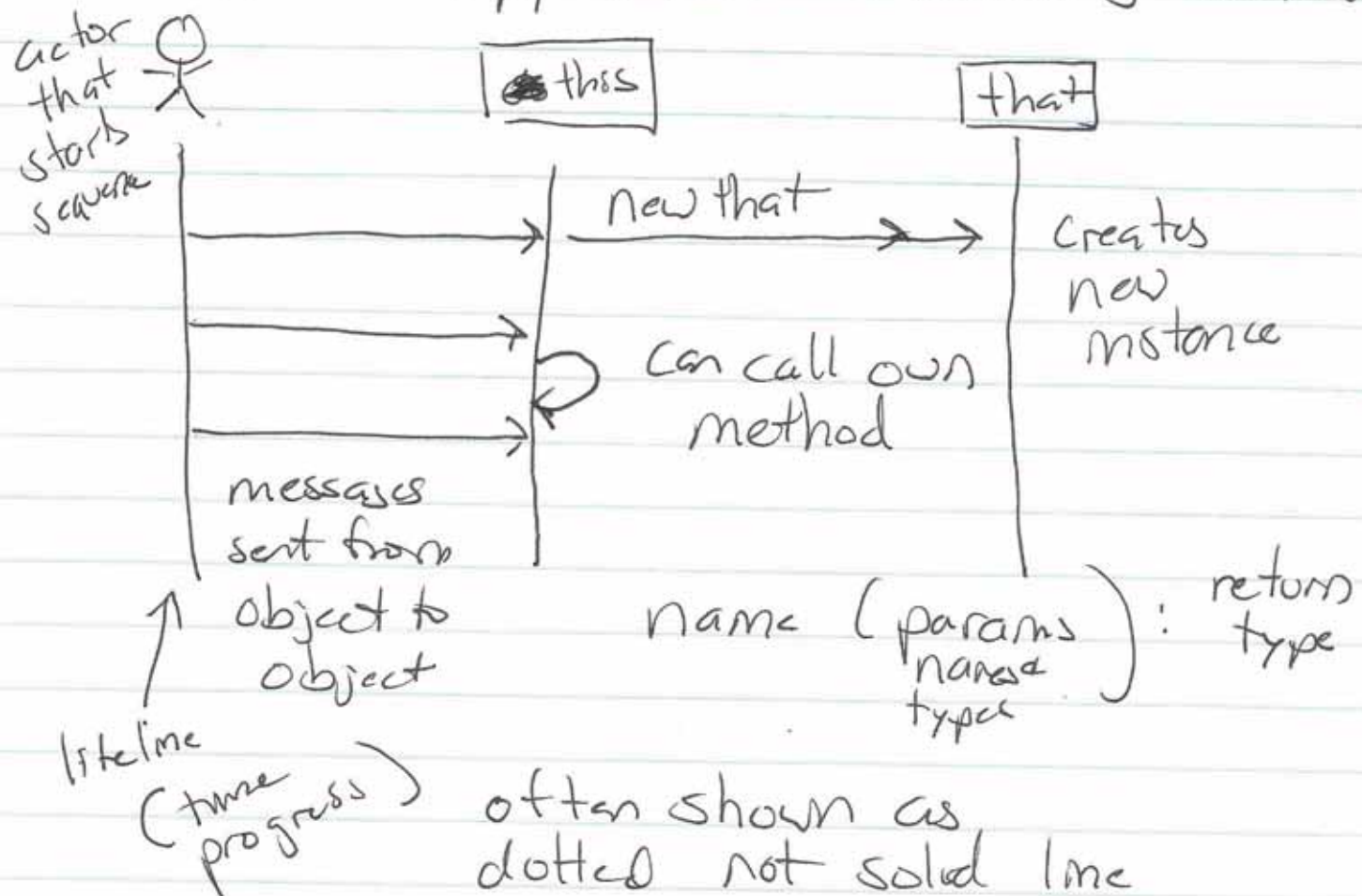
Thursday  
~~Tuesday~~

10  
10/8/13

page # 1

sequence (kind of interaction) diagrams  
dynamic - shows how classes  
work together at runtime

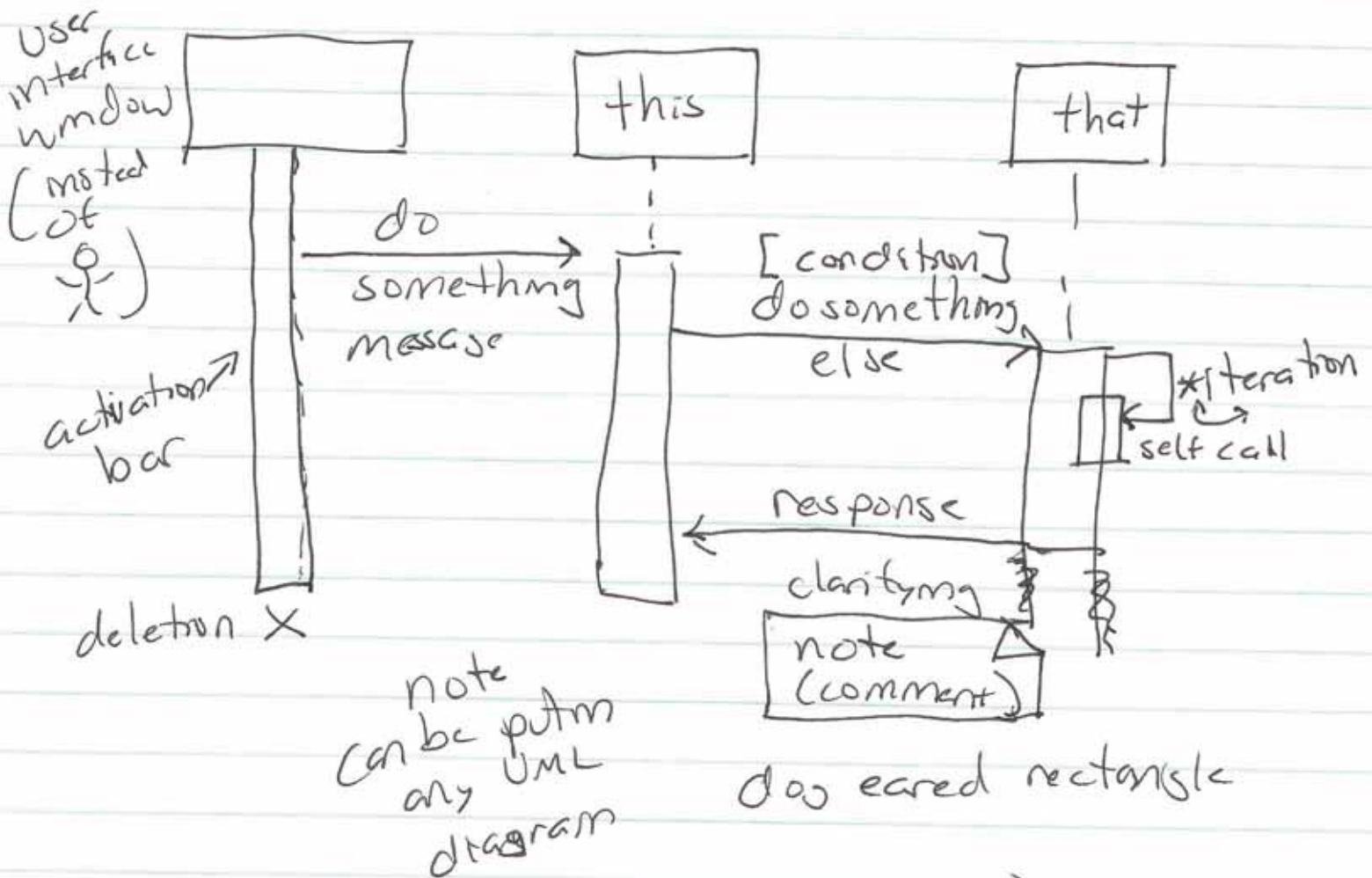
visual way to show order of events  
that happen, such as invoking methods



This is an overview sequence diagram  
with multiple messages from actor

Thursday  
4156 Tuesday 10/8/13 page 52

also need specific Sequence diagrams  
for individual messages



focuses on timing (ordering)

collaboration diagram is another  
kind of interaction diagram  
focus on object roles rather  
than message timing  
ignore for now

4156

Thursday  
~~Tuesday~~

10<sup>10</sup>  
10/8/13

page 3

→ show google maps sequence diagrams

Exercise: with teams, sketch ~~1~~ 2  
~~(2-3) few~~ sequence diagrams for  
main operations between main classes

TAs check, I walk around

Volunteers present - a gam overview  
of project, then draw a couple  
sequence diagrams on board  
& explain

→ do state charts too,  
and only afterwards  
the exercises



4156

Thursday

10/10/13

page 4

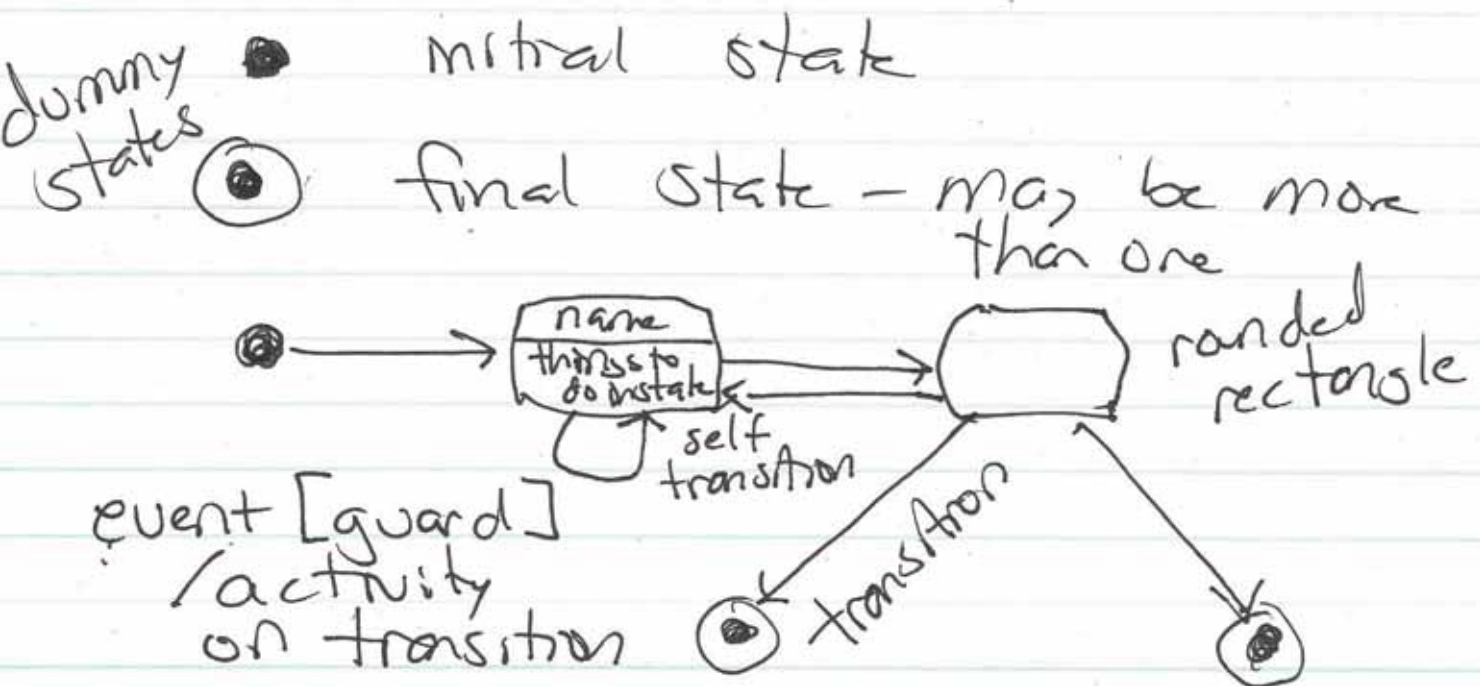
reminder - design & revised plan  
due M one week

you must use JIRA & UML

you do not need to use a UML editor

state (or state chart) diagrams  
- not covered in textbook

objects have behavior & state  
diagram shows possible states  
of an object & the transitions  
that cause it to change state

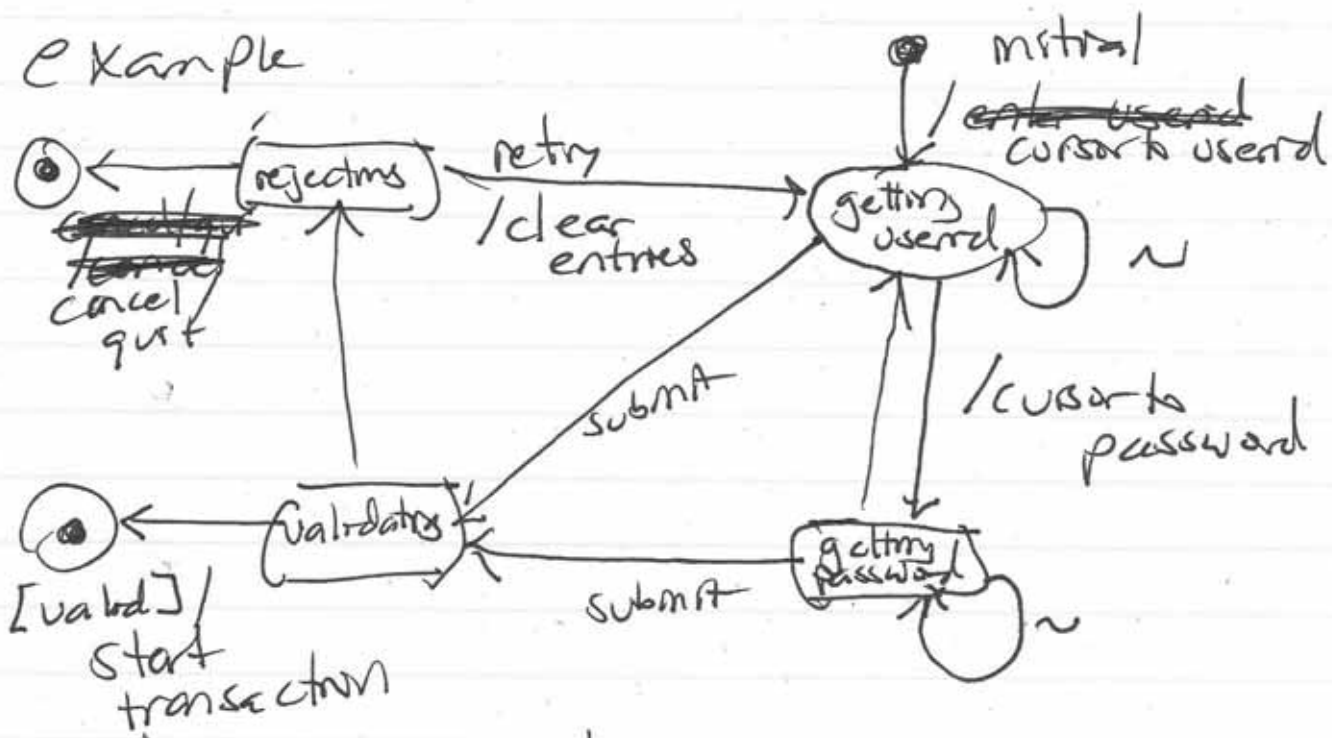


4156 Thursday 10/10/13 page 5

activity diagrams are similar but  
show flow chart across  
multiple objects -  
swimlane per object



Example



distinction between waiting for  
outside event to trigger us.  
perform activity

4156

Thursday

10/10/13 page #6

also component & deployment diagrams  
we do not address

→ show google images

~~the~~ exercise: teams develop  
statecharts to ~~228~~ objects  
from expected design for project

Volunteers give project synopsis &  
present statecharts

→ pick ~~one~~ 1-2 main  
classes

sequence diagram starting from  
that class  
statechart for that class

are they consistent?