IFB105 - Consolidation Lecture #2
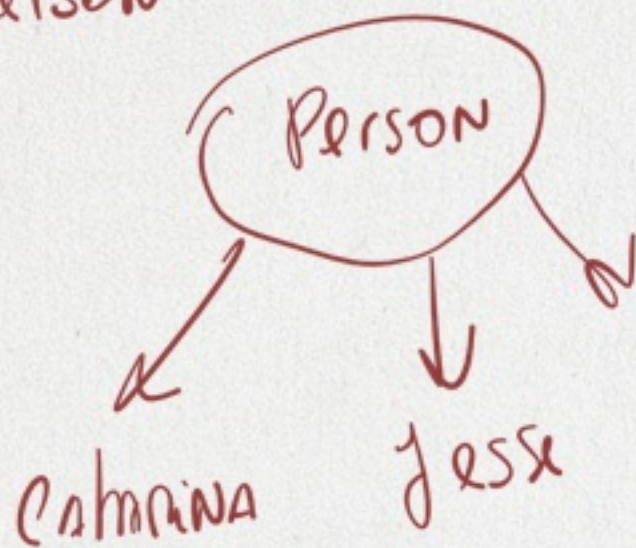
ELEMENTARY FACTS   RAW NARRATIVE/CONTEXT

| Catarina | has voted to name the ship | titanic |

↓   ↓
PERSON   Ship

(Person)
   ↙   ↓   ↘
Catarina Jesse   thomas ← instances   predicate
                                              ↓
                                             ROLE

PERSON with NAME   "Catarina" | VOTED | in Ship
Entity reference   VALUE   ENTITY
        MODE   with name, "titanic"
          ↳ PK

Elementary Fact

                                          Not mentioning
                                          an entity

Person with ID, VALUE[55783] has NAME "Catarina"

SHIP   ↑   tl23   "titanic"

PERSON	
ID	NAME
85783	Catarin

SHIP	
ID	NAME

Fruit "Apple" is harvested in "Australia" in

"June".

Fruit "Apple" is harvested in "Australia"

Fruit "Banana" i . . . . . -- in "July"

"NZ"

in "June"

Fruit	Country	Month
Apple	Australia	June
Apple	Australia	July
Banana	NZ	June

Fact type

Elementary Facts

What you CANNOT DO!

Joseph likes lamb

→ Negation ("Not") | Person Catarina DOES ✗
Not like lamb

Connector Operators ("AND", "OR", ...) ✗
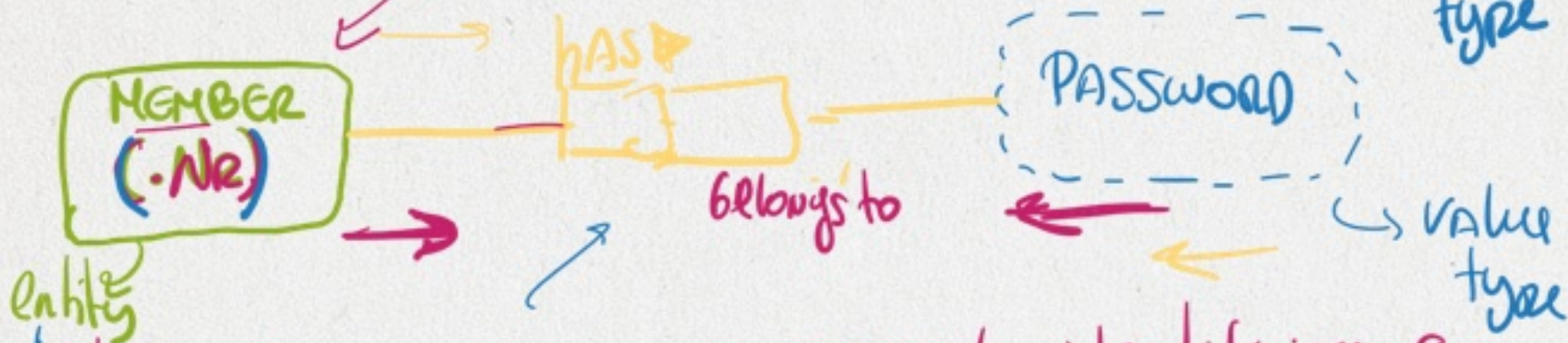
Person "Catarina" visited "Country
Australia AND
UK"

Conditional (IF/then/else) | Questions

Quantitative Operators ("All", "Some", "Exists", ...)

Step 2: Draw

THE **MEMBER** with Nr '33' **hAS** Password 'password'
Entity   _ROLE_   ~~Entity~~

ref. Mode

VALUE type

MEMBER
(.Nr)

has ▸

PASSWORD

entity   belongs to   ↳ value type

* there is no way of uniquely identifying a
Password!

Nr	
33	'PASSWORD'
34	'PASSWORD'

Member

NR	PASSWORD

Heuristic: (Entity vs value type)

* Q: Can this "object" be uniquely identified by
a primary key?

this means:

↱ Prices
↳ Heights / weights
↳ Date

→ "yes" → "Entity"

→ "NO" ⟶ Is the object expressed
AS UNIT/METRIC/FORMAT?
    ↳ yes → "Entity" ✓
    ↳ NOT → "Value type".

Entities!
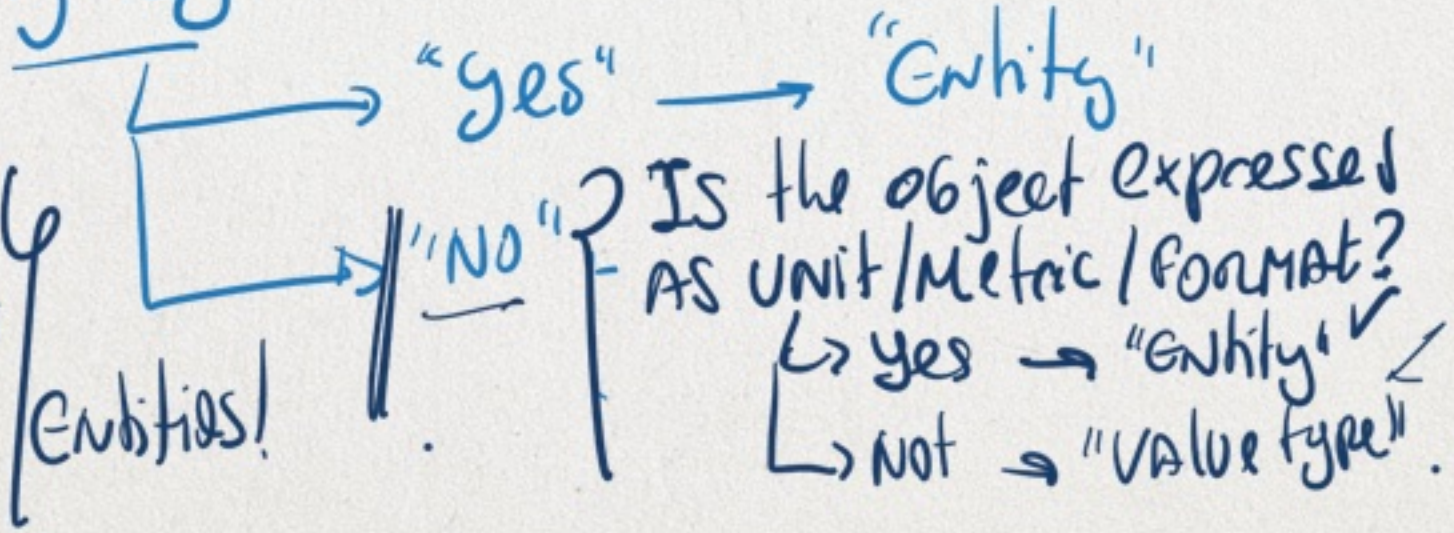
tHe MEMBER, with MemberNr '33' | Reject : | Role

Entity

Ref role
Member

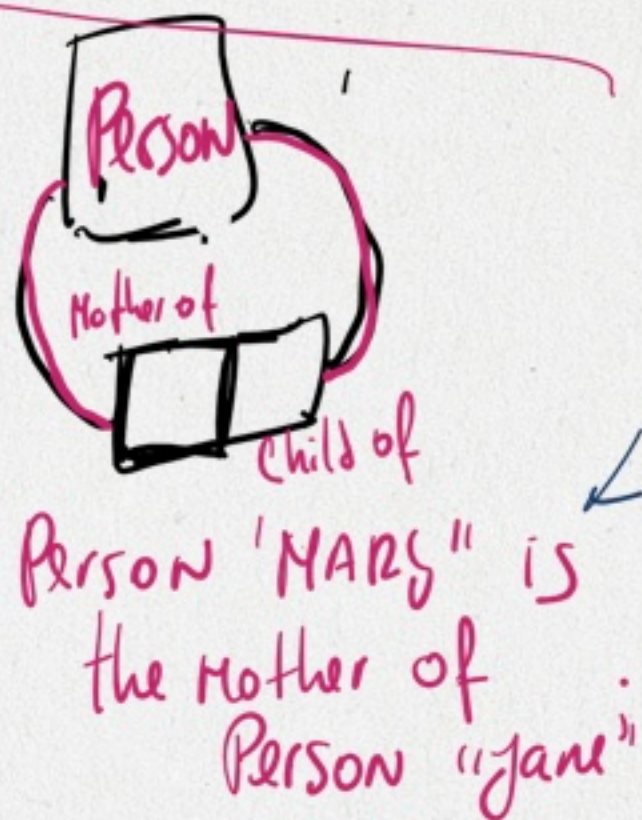tho Mohion, with MohionNr '52'

Entity

Ref role

Approved

Member
(.NR)

Mohion
(.MohionNr)

Fact
type
BINARY

has

Rejected

has

'MohionTxt'
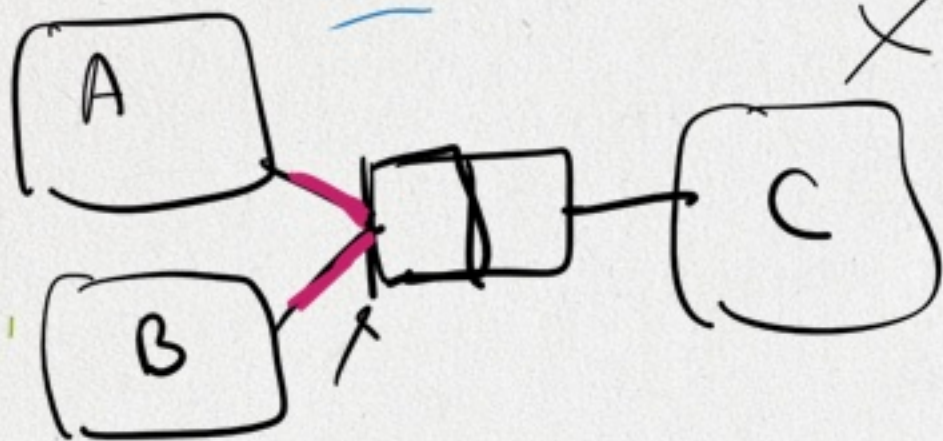
Password
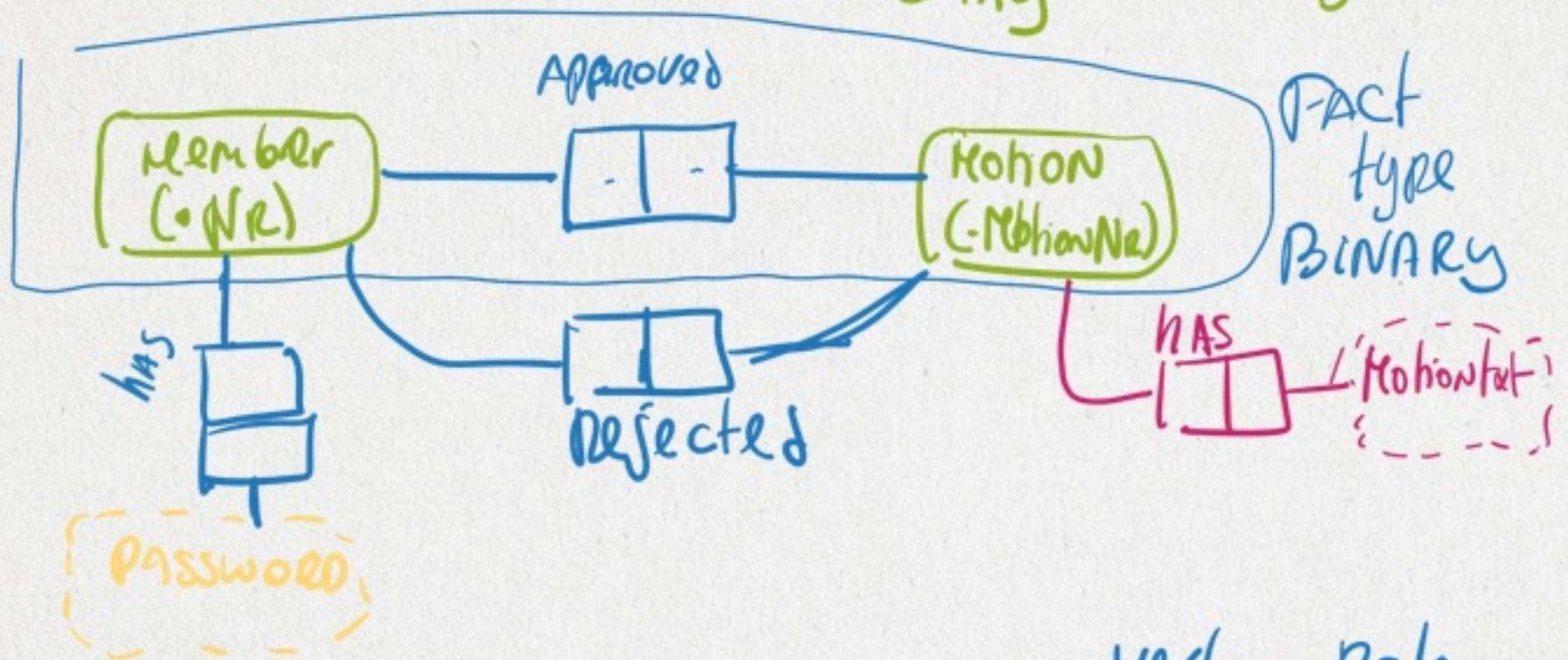
verb = Role

Person, with Name "CATARINA" | eats
is eating

Entity

Ref role

Person
(.Name)

eats
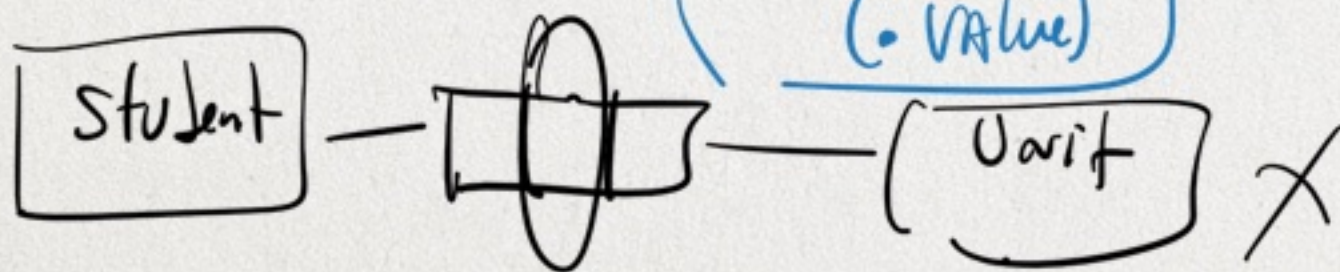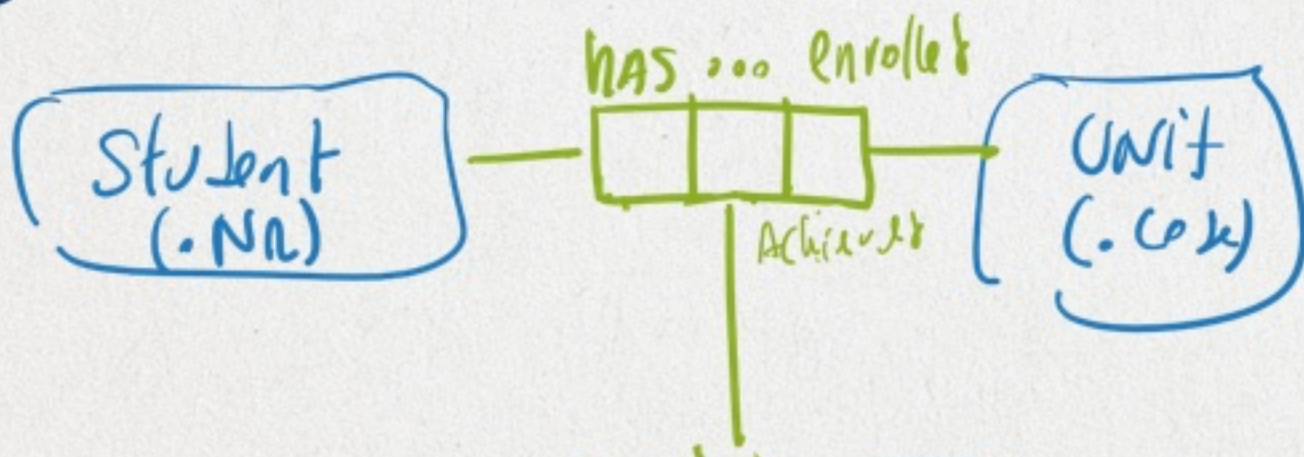
UNARY

Student with Nr 557 enrolled in Unit with
code "IFB105" has GRADE with value 7

Mother 'Mary' has Child

Mother —[ ]— Child Jane

Person
Mother of
Child of
Person 'MARY" is
the mother of
Person "Jane"

has ... enrolled
Student — [ ] — Unit
(.Nr)   Achieved   (.Code)

GRADE
(.VALUE)

Student — [ ] — Unit

Step 3: COMBINING THINGS

Mother with name "Mary" has **child** with
Person   _Person_
name "Jane"

has

Mother
(.Name)

Child
(.NAME)
→ res mode

→ primitive

converted the old entity name into the role

PERSON
(.name)

Person with name "MARY" | is the mother

Mother
(.name)

Child
(.name)

of Person with
Name
"Jane"

PERSON
(.NAME)

motherof   child of