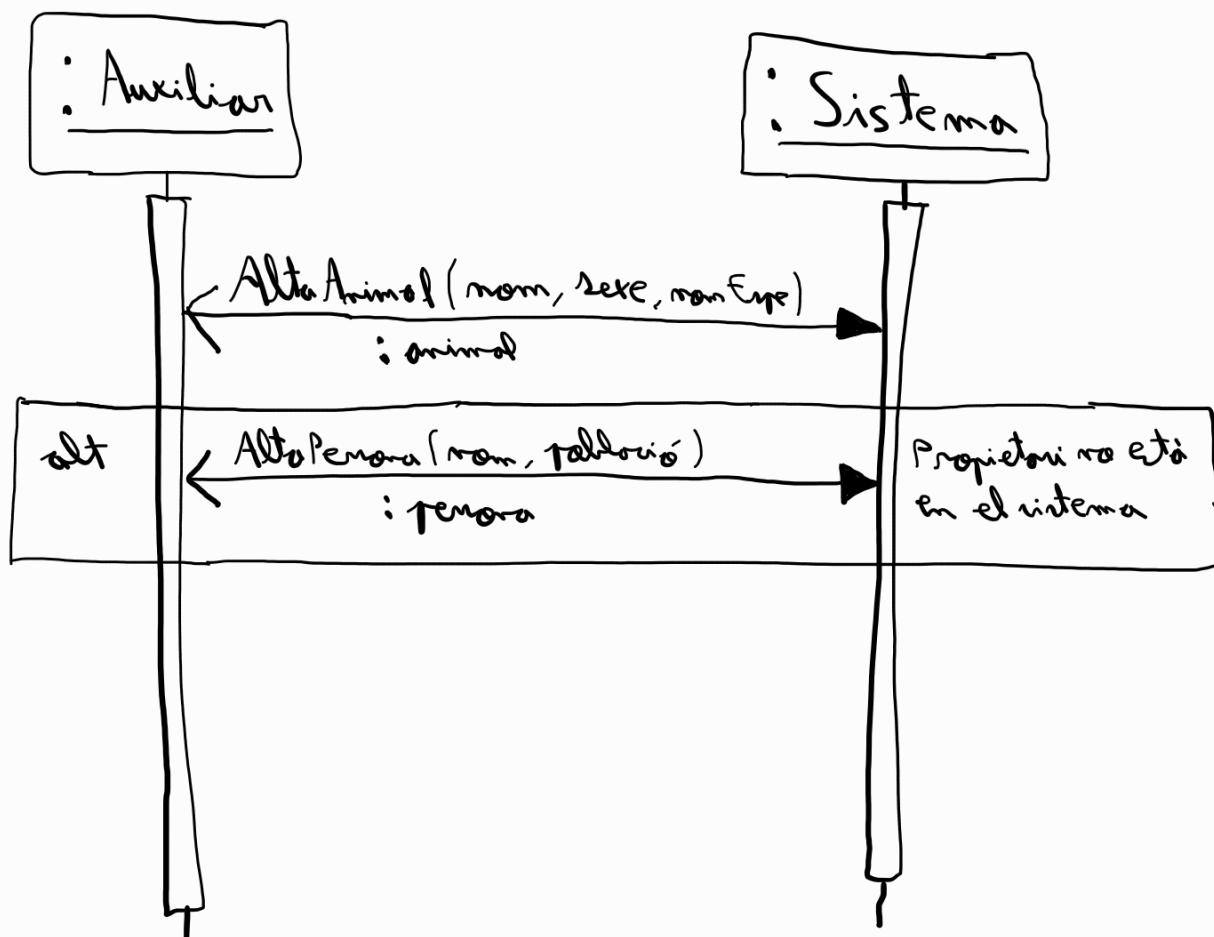


6è Problema IES

- Alta Animal:



Context: Sistema::AltaAnimal (nom:string,
sexe:TSexe,
nomEspe:string) : Animal

Pre: // existe l'especie introducida

especie.allInstances() → exists (e |
e.nom = nomEspe)

Post: animal.allInstances() → exists (a |

a.nom = nom AND
a.sexe = sexe AND
a.especie.nom = nomEspe AND
a.isNew() AND
a = result())

Context: Sistema:: AltaPersona (nom : string,
poblacio : string) : Persona

Pre: / no habrá pre

Post: persona.allInstances() → exists (↑)

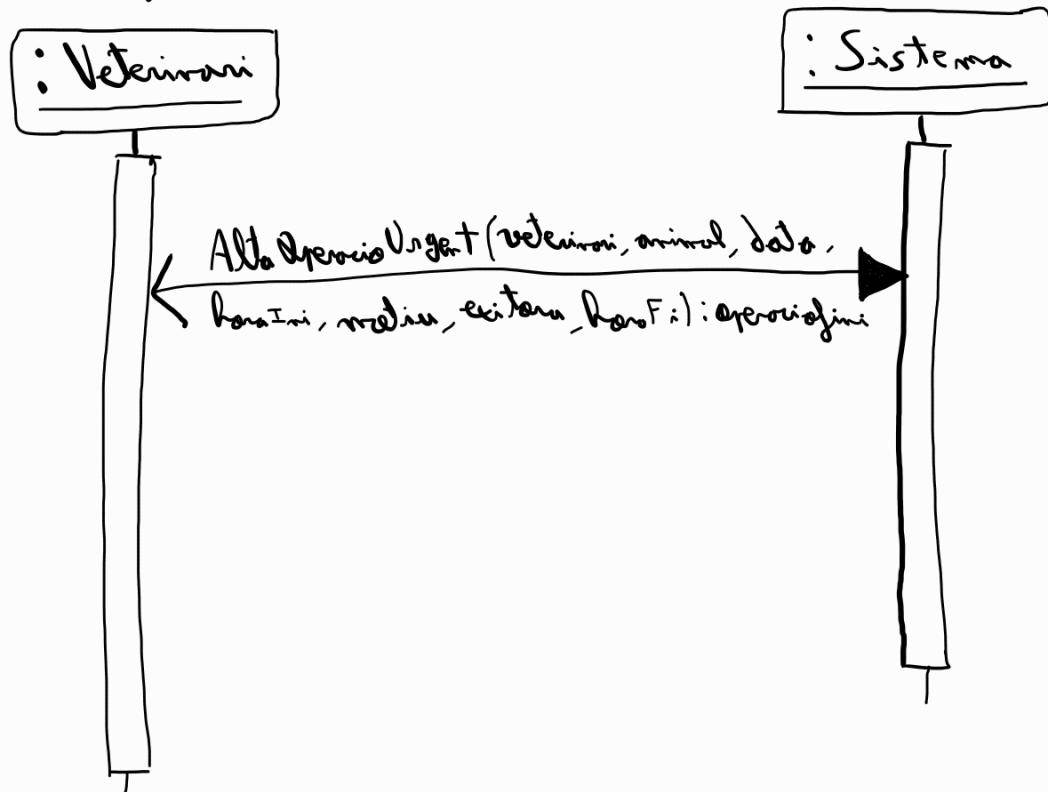
↑ . nom = nom AND

↑ . poblacio = poblacio AND

↑ . addNew() AND

↑ = result()

- Alta Operació Urgent:

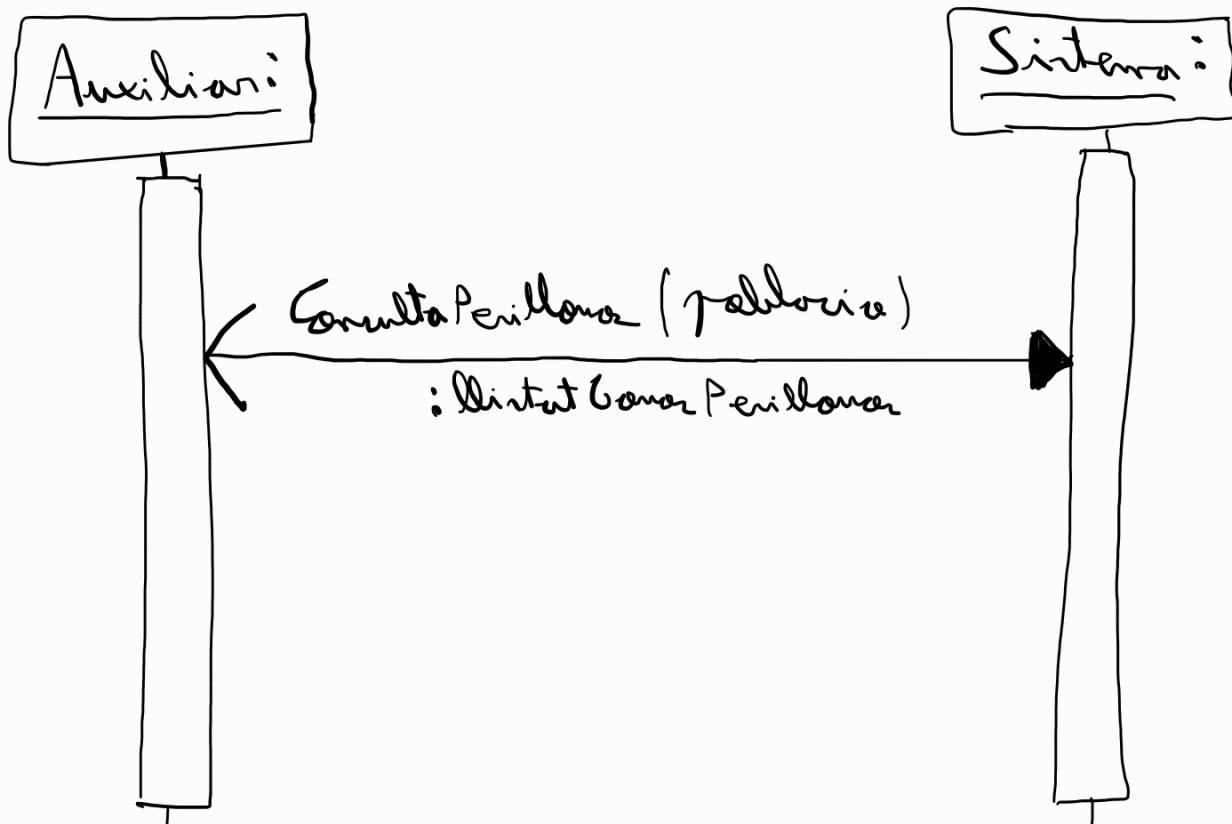


Context: Sistema:: AltaOperacioUrgent (veterani : Veterinari,
animal : Animal,
dato : Dato
horaIni : Time
min : string
extera : boolean
horaFi : Time) : operaciojini

pre: // veterinari expertista en l'espècie de l'animal que opera i existeix
 veterinari.allInstances() → existe (v)
 $v.\text{animal} = \text{veterinari}.animal \text{ AND}$
 $v.\text{especie}.nom = animal.especie.nom$)
 // animal existeix
 AND animal.allInstances() → existe (a)
 $a.\text{nom} = animal.nom$)

post: OperacioFinalitzada.allInstances() → existe (of)
 $of.animal = animal \text{ AND}$
 $of.veterinari = veterinari \text{ AND}$
 $of.data = data \text{ AND}$
 $of.horaInici = horaInici \text{ AND}$
 $of.motiu = motiu \text{ AND}$
 $of.exitosa = exitosa \text{ AND}$
 $of.horaFi = horaFi \text{ AND}$
 $of.odInew() \text{ AND}$
 $of = result()$

— Consulta Comer Perilloner no Finalitzat



Context: Sistema:: ConsultaPerdidos (perdido: string):

Set | TupleType (nombre: string, nomProp: string,
isVet: bool)

pre: // proprietari num olo perdido i te obinu un animal
pero. allInstances() \rightarrow existz (\uparrow)

\uparrow . perdido = perdido AND

\uparrow . animal \rightarrow Num() ≥ 1

// yor no esterilizat i mard

AND yor. allInstances() \rightarrow existz (y)

y. animal. sexe = mard AND

y. animal. operacion != esterilizacion)

body: let MardGonePerdidos : Set (Gox) =

Gox. allInstances() \rightarrow

Collect (y | y. animal. sexe \rightarrow include (mard) AND
y. animal. operacion \rightarrow not include (esterilizacion))

in

MardGonePerdidos \rightarrow collect (y | Tuple {

nomGox = y. animal. nom ,

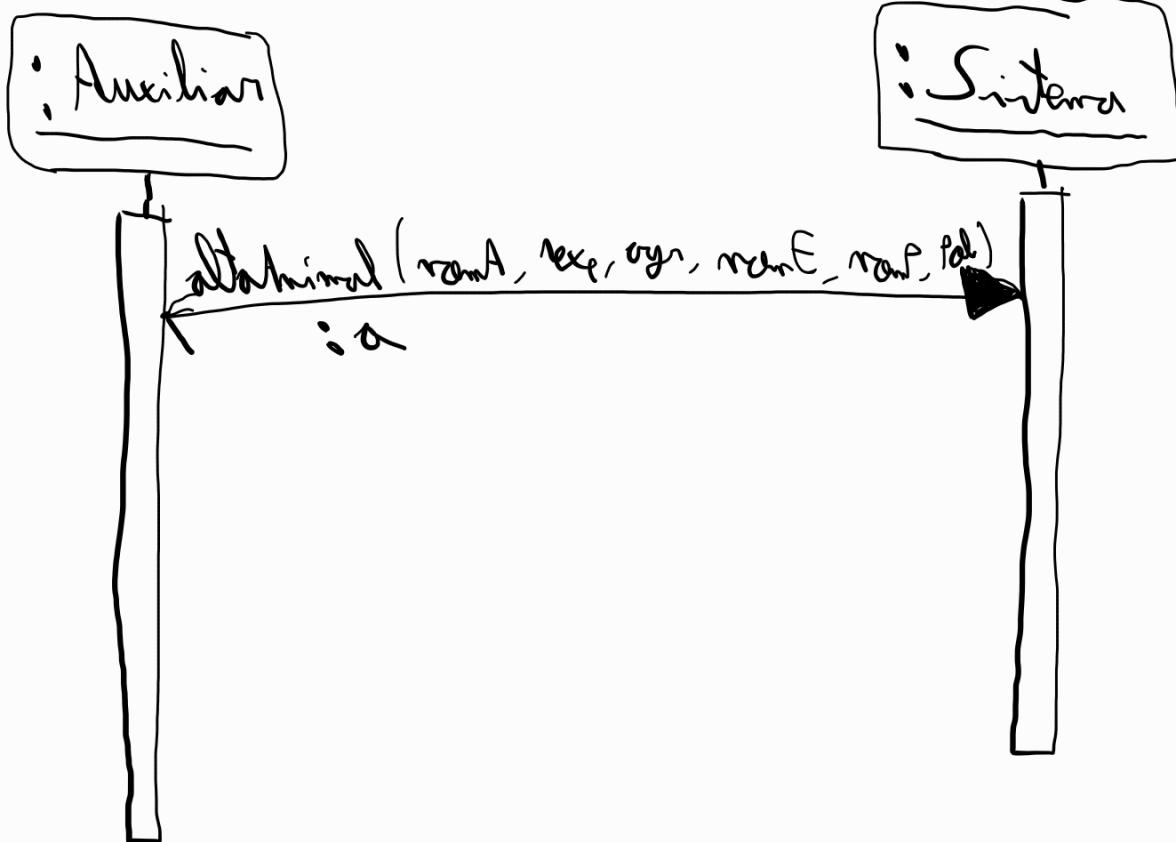
nomProp = y. animal. perros. nom ,

isVet = y. animal. perros. veterinari })

RESOLUCIÓ

(d'après la 1 → *)
i el seu entorn

- AltarAnimal;



Context Sistema::Altanimal (name : String,

type : Tree,

ogr : boolean,

nameE : string,

nameP : string

pol : string) : Animal

/entitat espècie

Pre: Existeix. all \$instance[() → exists (e | e.name = nameE)]

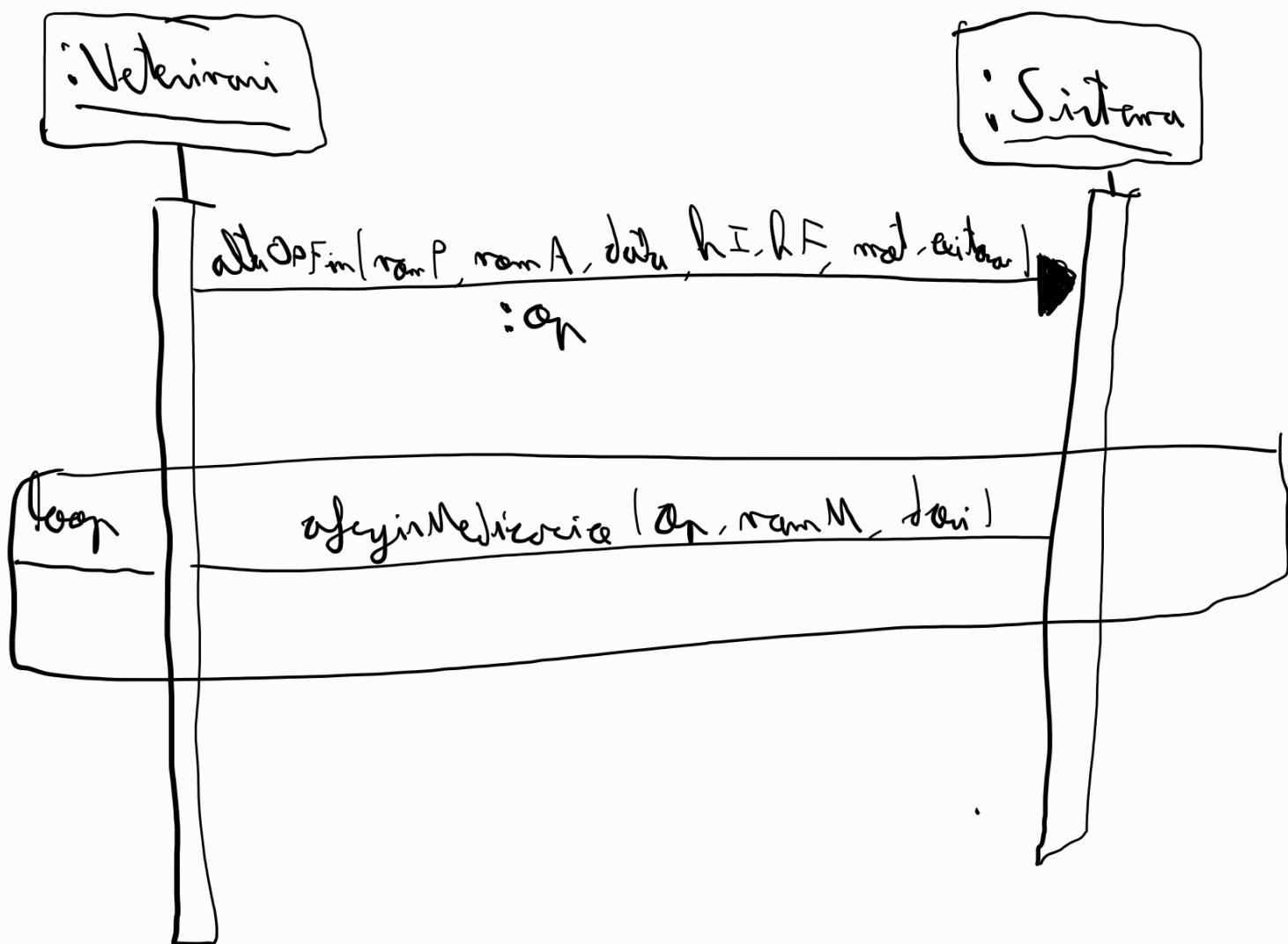
If $\exists \text{Person} \text{ exists } \text{and } \text{name} \text{ del } p$
 $\text{Person}. \text{allInstances} () @ \text{Pre} \rightarrow \text{exists} (\exists p | p. \text{name} = \text{nameP}) \text{ then}$
 $\text{Person}. \text{allInstances} () \rightarrow \text{exists} (\exists p | p. \text{orI2New} ()) \text{ AND}$
 $p. \text{name} = \text{nameP} \text{ AND}$
 $p. \text{projection} = \text{proj} \text{ AND}$
 $\text{result} = p)$

end if

$\text{Animal}. \text{allInstances} () \rightarrow \text{exists} (a) . a. \text{orI2New} () \text{ AND}$
 $a. \text{name} = \text{nameA} \text{ AND}$
 $a. \text{race} = \text{race} \text{ AND}$
 $a. \text{projection}. \text{name} = \text{nameP} \text{ AND}$
 $a. \text{exercise}. \text{name} = \text{nameE} \text{ AND}$
 $\text{if nameE} = "go" \text{ then}$
 $a. \text{ordA2Type} (\text{Go}) \text{ AND}$
 $a. \text{ordA2Type} (\text{Go}), \text{agreement} = \text{go}$
end if
 $\text{AND result} = a \}$

Person name
de not

- Alta Operación Urgent:



Context Sistema :: altaOpFin (nomP : thing, nomI : thing, data : date,
hI : time, hF : time, motivo : thing,
extera : bool) ; OperacionFinal₂₀₂

Pre Data.allInstances() \rightarrow exists (d | d.data = data) AND
Veterinari.allInstances() \rightarrow exists (v | v.nom = nomP AND
v.especie \rightarrow includes2 [Animal.allInstances \rightarrow select(a | a.nom = nomA)])
Animal.allInstances() \rightarrow exists (a | a.nom = nomA)

Point OperacionFinalizada - allInstances () → (of |

of.veterinario . nom = nomP AND of . data . data = data AND
of . animal . nom = nomA AND of . horarioInici = hI AND
of . motivo = motivo AND of . criterio = criterio AND
of . horarioFin = hF and of . ordInNew () and result = of)

Context Sistema :: ofejInMedicoria [op : OperacionFinalizada , nomM : string
doi : Integer]

Point Medicamento . allInstances () → exists (m |

m . nom = nomM)

Point MedicamentAdministracion . allInstances () → exists2 (ma | ma . ordInNew () AND
ma . medicamento . nom = medicamento AND
ma . OperacionFinalizada = op AND
ma . doi = doi AND
ma = result)

- ConsultGoverPermitance : (Consulta)

Context Sistema:: ConsultGoverPermit (mampthing) :

Set (TupleType (nonGen: string,
nonPerson: string
e_Vet: boolean))

Pre Person-allOccurrences () \rightarrow exists (\uparrow | \uparrow .projection = nonP
AND \uparrow .animal.size() > 0)

Body:

let yonos : Set (Animal) =

Animal-allOccurrences () \rightarrow select (a) a.type = "Mammal"
AND a.oldTypeOf('Gen') AND a.oldTypeOf('Gen').asym =
AND a.projection.polygon = nonP AND
not a.projection.name \rightarrow inductive ('exhibitario')

in yonos \rightarrow collect (yonos | Tuple { nonGen = yonos.name,
nonPerson = yonos.projection.name,
e_Vet = yonos.projection.old
Type(Vet) })