

Alta Restaurant

CONTEXT SISTEMA:: altaRestaurant (nomR: string, adr: string): Restaurant

PRE:

Restaurant.allInstances() → size() < 100 and Restaurant.allInstances() → forall (c | c.sala → size() <= 5)

POST:

Restaurant.allInstances() → exists (c | c.allIsNew() and c.nom = nomR and c.adreca = adr and result = c)

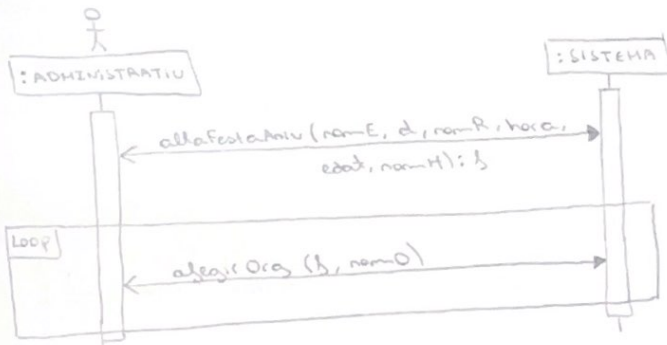
CONTEXT SISTEMA:: afegirSala (c: Restaurant, numS: int, cap: int)

PRE: ∅

POST:

Sala.allInstances() → exists (s | s.allIsNew() and s.numero = numS and s.capacitat = cap and s.restaurant = c)

Alta Festa d'Aniversari



CONTEXT SISTEMA:: altaFestaAniv (nomE: string, d: Date, nomR: string, hora: int, edat: Natural, nomH: string): Aniversari

PRE:

Empresa.allInstances() → exists (e | e.nom = nomE) and
Restaurant.allInstances() → exists (r | r.nom = nomR) and
TipusDeFesta.allInstances() → exists (t | t.nom = "FestaAniversari") and
Persona.allInstances() → exists (p | p.nom = nomH)

POST:

Aniversari.allInstances() → exists (b | b.allIsNew() and b.empresa.nom = nomE and b.data.data = d and
b.restaurant.nom = nomR and b.horaInici = hora and b.edat = edat and
b.tipusDeFesta.nom = "FestaAniversari" and b.homenajeada.nom = nomH and
Aniversari.allInstances() → exists (a | a.allIsNew() and a.participacions = b and
a.participant.nom = nomH and a.pagat = 1) and result = b)

CONTEXT SISTEMA:: a: ObjOrg (f: Aniversari, nomO: string)

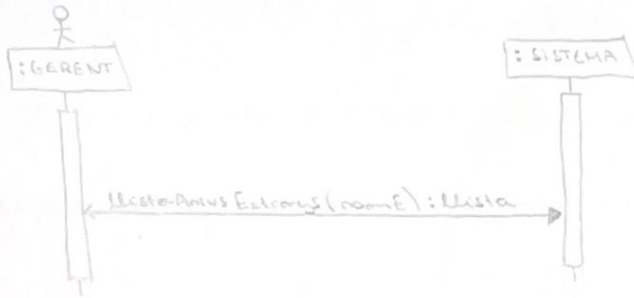
PRE:

Persona.allInstances() \rightarrow exists (p | p.nom = nomO)

POST:

f.organitzador.nom \rightarrow includes (nomO) and Assistant.allInstances() \rightarrow exists (a | a.isActive() and
a.participacions = f and
a.participant.nom = nomO and a.paga)

Consulta Aniversari Extrany



CONTEXT SISTEMA:: llistaAniversExtrany (nomEmp: string):

Set(TupleType (nomH: string, nomOrg: Set(string)))

PRE:

Empresa.allInstances() \rightarrow exists (e | e.nom = nomEmp and
e.festa.tipusDeFesta \rightarrow includesAll(e.tipusDeFesta))

Body:

let aniversaris: Set (Aniversari) = aniversari.allInstances() \rightarrow select (a | a.empresa.nom = nomEmp and
a.assistent \rightarrow size() > 30 and a.participant \rightarrow excludes (a.homenajada))

in

aniversaris \rightarrow collect (a | Tuple { nomH = a.homenajada.nom;
nomOrg = a.organitzador.nom })