## Jacobo Moral i Adrìa Ferré

**Context:Sistema::**AltaEmpresa (nomE:String, adreçaE:String, TdF: Set(TupleType (nom:String, preu:Integer)))

**Pre:** Empresa.allInstances()  $\rightarrow$  size() < 100 and Empresa.allInstances()  $\rightarrow$  notExists (e|e.tipusDeFesta  $\rightarrow$  size() > 10)

**Post:** Empresa.allInstances() → exists (e|e.ocllsNew() and e.nom = nomE and e.adreça = adreçaE and

If TipusDeFesta.allInstances() → includesAll(TdF)

Then e.tipusDeFesta → includesAll(TdF)

Else TipusDeFesta.allInstances() → exists(tf|tf.oclIsNew() and tf.nom = TdF.nom and tf.preu = TdF.preu \*)

**Context:Sistema::**AltaFestaAniversari (nomE:String, data:Data, nomRest:String, horaIn:Integer, edat:Natural, nomOrg:Set(String), nomAniv:String)

**Pre:** Festa.allInstances() → notexists (f|f.data.data = data and f.horalnici = horaln and f.person.nom → includes(nomOrg)

**Post:** Festa.allInstances() → exists (f|f.oclIsNew() and f.empresa.nom = nomE and f.data.data = data and f.restaurant.nom = nomRest and f.horaInici = horaIn and f.person.nom → includesAll(nomOrg) and f.oclAsType(FestaDAniversari).edat = edat and f.oclAsType(FestaDAniversari).person.nom = nomAniv)

**Context:Sistema::**ConsultaSoparsAmicsMultitudinaris(nomE:String):Set(TupleType(nomR, nomOrg:Set(String)))

**Pre:** festa.allInstances() → f.empresa.nom = nomE and f.oclAsType(FestaDAniversari) → size() > 10

**Body:** let sopar: Set(festa) = Festa.allInstances() → select (f|f.oclAsType(FestaSoparDAmics).sala.numero > 2 and f.assistent → count(pagat = true) > 50)

In sopar → collect(f|Tuple {nomR = f.restaurant.nom, nomOrg = f.person.nom})

*Sabem que no quadren els tipus, pero no sabem com fer-ho bé.