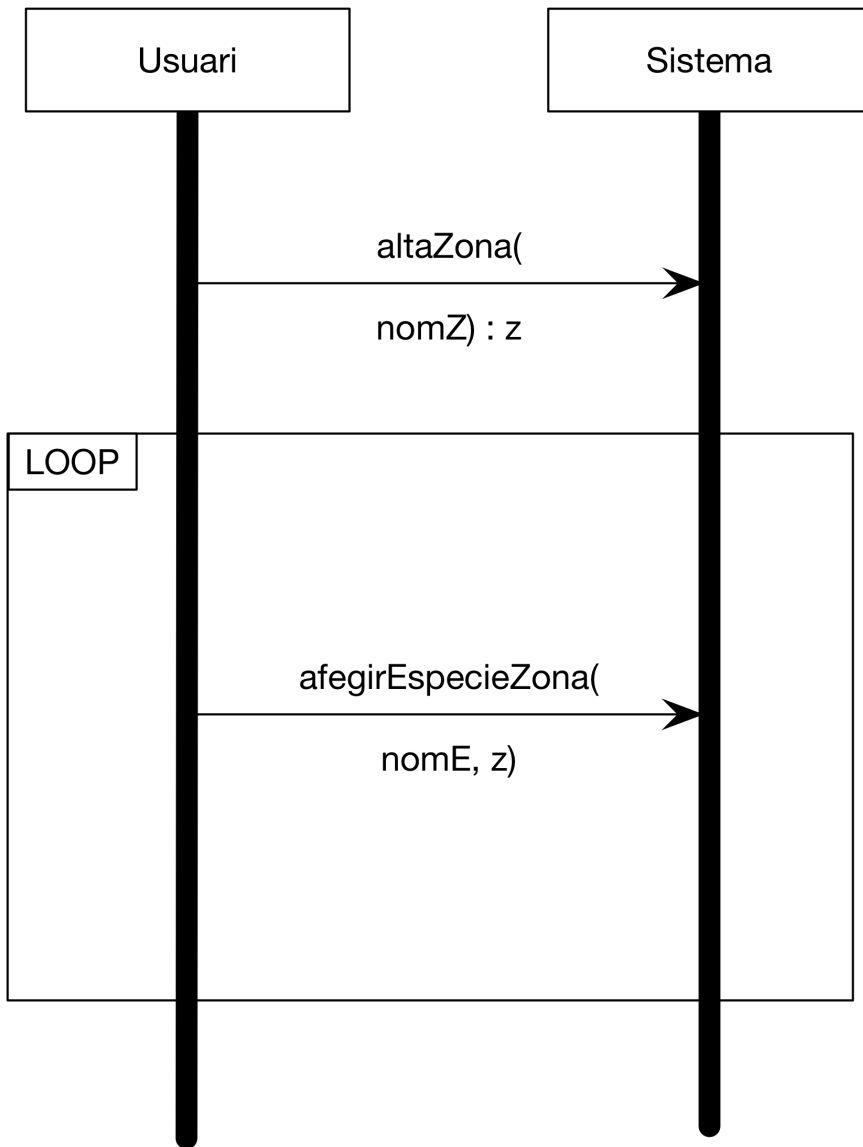


```
1.
context: Sistema::altaExemplar(nomEx: String, sexeEx: TipusSexe, nomEsp: String) : Exemplar
pre:
    Especie.allInstances()->exists(e |
        e.nom = nomEsp and
        e.zona->exists(z |
            z.especie->size() > 2
        )
    )

post:
    Exemplar.allInstances()->exists(ex |
        ex.oclIsNew() and
        ex.nom = nomEx and
        ex.sexe = sexeEx and
        ex.especie.nom = nomEsp and
        result = ex
    )
```



```

2.
context: Sistema::altaZona(nomZ: String) : Zona
post:
    Zona.allInstances()->exists(z |
        z.oclIsNew() and
        z.nom = nomZ and
        result = z
    )

context: Sistema::afegirEspecieZona(nomEsp: String, zo: Zona, nomPais: Pais, estatCons: TipusEstat)
pre:
    if not Especie.allInstances()->exists(e |
        e.nom = nomEsp
    )
    then
        nomPais.notEmpty() and
        estatCons.notEmpty() and
        Pais.allInstances()->exists(p |
            p.nom = nomPais
        )
    endif

post:
    if not Especie.allInstances()@pre->exists(e |
        e.nom = nomEsp
    )
    then
        zo.especie->exists(e |
            e.oclIsNew() and
            e.nom = nomEsp and
            e.pais->exists(p |
                p.nom = nomPais
            ) and
            Localitzacio.allInstances()->exists(l |
                l.especie.nom = nomEsp and
                l.pais.nom = nomPais and
                l.estatConservacio = estatCons
            )
        )
    else
        zo.especie->exists(e |
            e.nom = nomEsp
        )
    endif
  
```



```
3.
context: Sistema::consultaAgressionsRellevants(nomEx: String) : Set(TupleType(data: Data, nomFerit: String))
pre:
    Exemplar.allInstances()->exists(ex |
        ex.nom = nomEx and
        not Localitzacio.allInstances()->exists(l |
            ex.especie.pais.nom->includes(l.pais.nom) and
            l.especie.nom = ex.especie.nom and
            l.estatConservacio = TipusEstat.EnPerillGreu
        )
    )

body:
    result = Agressio.allInstances()->select(a |
        a.agressor.nom = nomEx and
        Localitzacio.allInstances()->exists(l |
            a.agredit.especie.pais.nom->includes(l.pais.nom) and
            l.especie.nom = a.agredit.especie.nom and
            l.estatConservacio = TipusEstat.EnPerillGreu
        )
    )->collect(a |
        Tuple{ data = a.data.data, nomFerit = a.ferit.nom }
    )
```