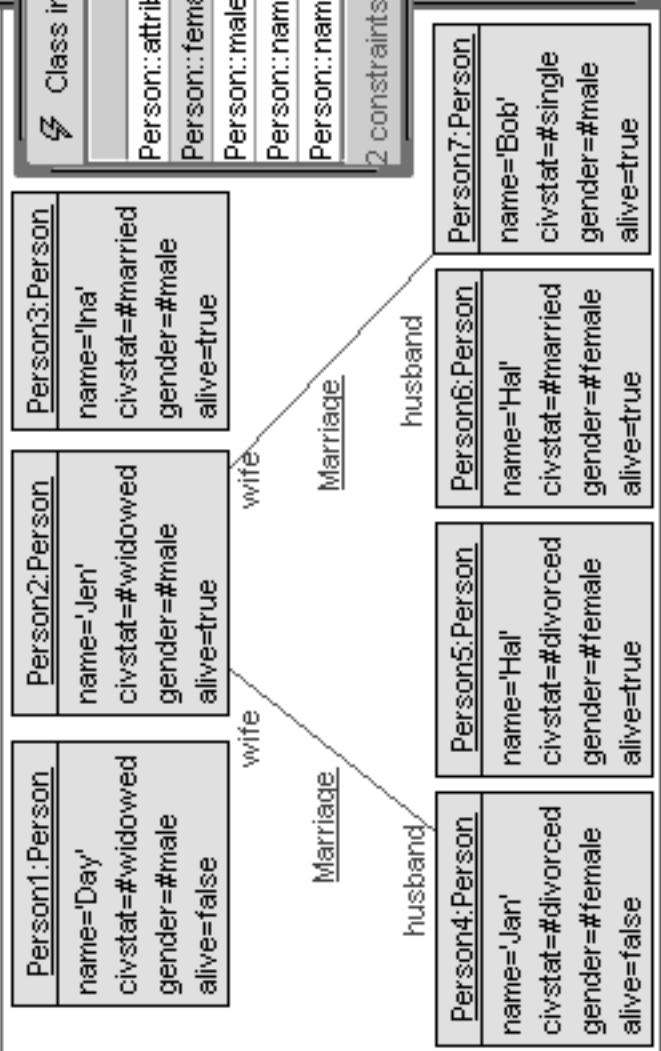




- CivilStatusWorld
- Classes
  - Person
- Associations
  - Marriage
- Invariants
  - Person::attributesDefined
  - Person::nameCapitalThenSmallLetters
  - Person::nameIsUnique
  - Person::femaleHasNoWife
  - Person::maleHasNoHusband
- Pre-/Postconditions
  - pre birth::freshUnlinkedPerson
  - post birth::nameAssigned
  - post birth::civstatAssigned
  - post birth::genderAssigned
  - post birth::isAliveAssigned
  - pre marry::aSpouseDefined
  - pre marry::isAlive
  - pre marry::aSpouseAlive
  - pre marry::isUnmarried
  - pre marry::aSpouseUnmarried
  - pre marry::differentGenders
  - post marry::isMarried
  - post marry::femaleHasMarriedHusband
  - post marry::maleHasMarriedWife
  - pre divorce::isMarried
  - pre divorce::isAlive
  - pre divorce::husbandAlive
  - pre divorce::wifeAlive
  - post divorce::isDivorced

**context** Person **inv** maleHasNoHusband:  
 ((self.gender = #male) implies  
 self.husband.isUndefined)

Object diagram



Class invariants

Invariant	Result
Person::attributesDefined	true
Person::femaleHasNoWife	false
Person::maleHasNoHusband	n/a
Person::nameCapitalThenSmallLetters	true
Person::nameIsUnique	false

2 constraints failed.

Evaluation browser

```

Person.allInstances->forAll(self : Person | ((self.gender = #female) implies self.wife.isUndefined)) = false
Person.allInstances = Set{@Person1, @Person2, @Person3, @Person4, @Person5, @Person6, @Person7}
((self.gender = #female) implies self.wife.isUndefined) = true
((self.gender = #female) implies self.wife.isUndefined) = true
((self.gender = #female) implies self.wife.isUndefined) = true
((self.gender = #female) implies self.wife.isUndefined) = false
(self.gender = #female) = true
self.gender = #female
self = @Person4
#female = #female
self.wife.isUndefined = false
self.wife = @Person2
self = @Person4
    
```

Close

Log

checking structure ...  
 Multiplicity constraint violation in association `Marriage`:  
 Object `Person2` of class `Person` is connected to 2 objects of class `Person`  
 but the multiplicity is specified as `0..1`.  
 checking structure, found errors.

Ready.