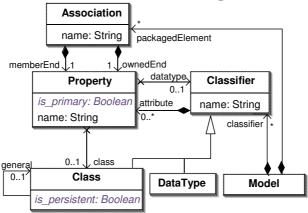
(a) UML Meta-model pruned



(b) samples of OCL Invariants

context Class

inv noCyclicInheritance:

not self.allGenerals()->includes(self)

inv uniquePropertiesAttributeName:

self.attribute->forAll(att1, att2 | att1.name=att2.name implies att1=att2)

context Model

inv uniqueClassifierNames:

self.classifier->forAll(c1, c2 | c1.name=c2.name implies c1=c2)

 $inv \ unique Class Association Source Name:$

self.packagedElement->forAll(ass1, ass2 | ass1.name=ass2.name implies (ass1=ass2 or ass1.ownedEnd.class!= ass2.ownedEnd.class))