

$$Type(_n, FuncProp)$$

and applies to containers only:

$$PropVal(_n, ?c, ?o) \longrightarrow Type(?c, Container)$$

2.7.4 RDF Schema

Subclasses and Subproperties

subClassOf is a property:

$$Type(subClassOf, Property)$$

If a class C is a subclass of a class C' , then all instances of C are also instances of C' :

$$\begin{aligned} & PropVal(subClassOf, ?c, ?c') \longleftarrow \\ & (Type(?c, Class) \wedge Type(?c', Class) \wedge \\ & \forall x (Type(x, ?c) \longrightarrow Type(x, ?c'))) \end{aligned}$$

Similarly for subPropertyOf: P is a subproperty of P' if $P'(x, y)$ whenever $P(x, y)$:

$$\begin{aligned} & Type(subPropertyOf, Property) \\ & PropVal(subPropertyOf, ?p, ?p') \longleftrightarrow \\ & (Type(?p, Property) \wedge Type(?p', Property) \wedge \\ & \forall r \forall v (PropVal(?p, ?r, ?v) \longrightarrow PropVal(?p', ?r, ?v))) \end{aligned}$$

Constraints

Every constraint resource is a resource:

$$PropVal(subClassOf, ConstraintResource, Resource)$$

Constraint properties are all properties that are also constraint resources: