

Type of restriction	Qualified	Not qualified
Exact cardinality	owl:qualifiedCardinality	owl:cardinality
Minimum cardinality	owl:qualifiedMinCardinality	owl:minCardinality
Maximum cardinality	owl:qualifiedMaxCardinality	owl:maxCardinality

Table 4.2: Cardinality restrictions in OWL2

datatype as value for the property. Sometimes we need more precise definitions to define, for instance, the class of adults who can rent apartments, or the minimum size of apartments. In OWL2, we can specify restrictions on the range of values allowed for a property:

```
:Adult  rdfs:subClassOf  dbpedia:Person ;
        rdfs:subClassOf [ rdf:type      owl:Restriction ;
                          owl:onProperty :hasAge ;
                          owl:someValuesFrom
                            [ rdf:type      rdfs:Datatype ;
                              owl:onDatatype xsd:integer ;
                              owl:withRestrictions (
                                [ xsd:minInclusive "18"^^xsd:integer ]
                              )
                            ]
                          ] .
```

This defines :Adult as the subclass of persons that have a value for the :hasAge that falls within the range of integers equal to or larger than 18. You can see that the data range is defined as an anonymous class of type rdfs:Datatype. We could also have introduced a new *named* datatype that we could reuse throughout the ontology:

```
:AdultAge rdf:type      rdfs:Datatype ;
          owl:onDatatype xsd:integer ;
          owl:withRestrictions (
            [ xsd:minInclusive "18"^^xsd:integer ]
          ) .
```