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[Namespaces:
  rdf   = http://www.w3.org/1999/02/22-rdf-syntax-ns#
  xsd   = http://www.w3.org/2001/XMLSchema#
  rdfs  = http://www.w3.org/2000/01/rdf-schema#
  owl = http://www.w3.org/2002/07/owl#
  pp    = http://cohse.semanticweb.org/ontologies/people#
]

Ontology(
  Class(pp:bone partial)
  Class(pp:brain partial)
  Class(pp:white+thing partial)

  Class(pp:plant partial)
  Class(pp:grass partial pp:plant)
  Class(pp:tree partial pp:plant)
  Class(pp:leaf partial restriction(pp:part_of someValuesFrom(pp:tree)))

  Class(pp:vehicle partial)
  Class(pp:bicycle partial pp:vehicle)
  Class(pp:bus partial pp:vehicle)
  Class(pp:car partial pp:vehicle)
  Class(pp:lorry partial pp:vehicle)
  Class(pp:truck partial pp:vehicle)
  Class(pp:van partial pp:vehicle)

  Class(pp:company partial)
  Class(pp:bus+company partial pp:company)
  Class(pp:haulage+company partial pp:company)

  Class(pp:publication partial)
  Class(pp:magazine partial pp:publication)
  Class(pp:broadsheet partial pp:newspaper)
  Class(pp:quality+broadsheet partial pp:broadsheet)
  Class(pp:tabloid partial pp:newspaper)
  Class(pp:red+top partial pp:tabloid)
  Class(pp:newspaper partial unionOf(pp:broadsheet pp:tabloid) pp:publication)

  Class(pp:male partial)
  Class(pp:female partial)
  Class(pp:young partial)
  Class(pp:adult partial)
  Class(pp:elderly partial pp:adult)

  Class(pp:pet complete restriction(pp:is_pet_of someValuesFrom(owl:Thing)))

  Class(pp:animal partial restriction(pp:eats someValuesFrom(owl:Thing)))
  Class(pp:vegetarian complete
    intersectionOf(pp:animal
      restriction(pp:eats allValuesFrom(complementOf(pp:animal)))
      restriction(pp:eats
        allValuesFrom(complementOf(restriction(pp:part_of
          someValuesFrom(pp:animal)))))))

  Class(pp:duck partial pp:animal)
  Class(pp:cat partial pp:animal)
  Class(pp:tiger partial pp:animal)
  Class(pp:dog partial restriction(pp:eats someValuesFrom(pp:bone)))
  Class(pp:sheep partial pp:animal restriction(pp:eats allValuesFrom pp:grass))
  Class(pp:giraffe partial pp:animal restriction(pp:eats allValuesFrom pp:leaf))
  Class(pp:cow partial pp:vegetarian)
  Class(pp:mad+cow complete
    intersectionOf(pp:cow restriction(pp:eats
      someValuesFrom(intersectionOf(pp:brain
        restriction(pp:part_of someValuesFrom pp:sheep))))))
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Class(pp:person partial pp:animal)
Class(pp:kid complete intersectionOf(pp:young pp:person))
Class(pp:man complete intersectionOf(pp:person pp:male pp:adult))
Class(pp:woman complete intersectionOf(pp:female pp:person pp:adult))
Class(pp:old+lady complete intersectionOf(pp:elderly pp:female pp:person))
Class(pp:old+lady partial
  intersectionOf(restriction(pp:has_pet allValuesFrom(pp:cat))
    restriction(pp:has_pet someValuesFrom(pp:animal))))
Class(pp:grownup complete intersectionOf(pp:person pp:adult))

Class(pp:animal+lover complete
  intersectionOf(pp:person restriction(pp:has_pet minCardinality(3))))
Class(pp:pet+owner complete
  intersectionOf(restriction(pp:has_pet someValuesFrom(pp:animal)) pp:person))
Class(pp:cat+liker complete
  intersectionOf(restriction(pp:likes someValuesFrom(pp:cat)) pp:person))
Class(pp:cat+owner complete
  intersectionOf(pp:person restriction(pp:has_pet someValuesFrom(pp:cat))))
Class(pp:dog+liker complete
  intersectionOf(restriction(pp:likes someValuesFrom(pp:dog)) pp:person))
Class(pp:dog+owner complete
  intersectionOf(restriction(pp:has_pet someValuesFrom(pp:dog)) pp:person))

Class(pp:driver partial pp:adult)
Class(pp:driver complete
  intersectionOf(restriction(pp:drives someValuesFrom(pp:vehicle)) pp:person))
Class(pp:lorry+driver complete
  intersectionOf(restriction(pp:drives someValuesFrom(pp:lorry)) pp:person))
Class(pp:haulage+worker complete
  restriction(pp:works_for
    someValuesFrom(unionOf(restriction(pp:part_of someValuesFrom(pp:haulage+company))
      pp:haulage+company))))
Class(pp:haulage+truck+driver complete
  intersectionOf(pp:person
    restriction(pp:drives someValuesFrom(pp:truck))
    restriction(pp:works_for
      someValuesFrom(
        restriction(pp:part_of someValuesFrom(pp:haulage+company))))))
Class(pp:van+driver complete
  intersectionOf(pp:person restriction(pp:drives someValuesFrom(pp:van))))
Class(pp:bus+driver complete
  intersectionOf(pp:person restriction(pp:drives someValuesFrom(pp:bus))))
Class(pp:white+van+man complete
  intersectionOf(pp:man
    restriction(pp:drives
      someValuesFrom(intersectionOf(pp:white+thing pp:van))))
Class(pp:white+van+man partial
  restriction(pp:reads allValuesFrom pp:tabloid))

DisjointClasses(pp:broadsheet pp:tabloid)
DisjointClasses(pp:dog pp:cat)
DisjointClasses(pp:young pp:adult)
DisjointClasses(unionOf(pp:animal restriction(pp:part_of
  someValuesFrom pp:animal))
  unionOf(pp:plant restriction(pp:part_of
  someValuesFrom pp:plant)))

ObjectProperty(pp:likes)
ObjectProperty(pp:drives)
ObjectProperty(pp:eaten_by)
ObjectProperty(pp:eats inverseOf(pp:eaten_by) domain(pp:animal))
ObjectProperty(pp:works_for)
ObjectProperty(pp:reads range(pp:publication))

ObjectProperty(pp:has_parent)
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ObjectProperty(pp:has_father range(pp:man))
ObjectProperty(pp:has_mother range(pp:woman))
ObjectProperty(pp:has_child)

ObjectProperty(pp:has_pet domain(pp:person) range(pp:animal))
ObjectProperty(pp:is_pet_of inverseOf(pp:has_pet))
ObjectProperty(pp:part_of)
ObjectProperty(pp:has_part inverseOf(pp:part_of))

DataProperty(pp:service_number range(xsd:integer))

SubPropertyOf(pp:has_mother pp:has_parent)
SubPropertyOf(pp:has_pet pp:likes)
SubPropertyOf(pp:has_father pp:has_parent)

Individual(pp:Tom type(owl:Thing))
Individual(pp:Dewey type(pp:duck))
Individual(pp:Huey type(pp:duck))
Individual(pp:Louie type(pp:duck))
Individual(pp:Fido type(pp:dog))
Individual(pp:Flossie type(pp:cow))
Individual(pp:Fluffy type(pp:tiger))
Individual(pp:Rex type(pp:dog) value(pp:is_pet_of pp:Mick))
Individual(pp:Q123+ABC type(pp:white+thing) type(pp:van))
Individual(pp:Tibbs type(pp:cat))

Individual(pp:Daily+Mirror type(owl:Thing))
Individual(pp:The+Guardian type(pp:broadsheet))
Individual(pp:The+Sun type(pp:tabloid))
Individual(pp:The+Times type(pp:broadsheet))

Individual(pp:The42 type(pp:bus)
  value(pp:service_number [42^^http://www.w3.org/2001/XMLSchema#integer]))

Individual(pp:Kevin type(pp:person))
Individual(pp:Fred type(pp:person) value(pp:has_pet pp:Tibbs))
Individual(pp:Joe type(pp:person)
  type(restriction(pp:has_pet maxCardinality(1)))
  value(pp:has_pet pp:Fido))
Individual(pp:Mick type(pp:male)
  value(pp:reads pp:Daily+Mirror)
  value(pp:drives pp:Q123+ABC))
Individual(pp:Minnie type(pp:elderly) type(pp:female)
  value(pp:has_pet pp:Tom))
Individual(pp:Walt type(pp:person)
  value(pp:has_pet pp:Huey)
  value(pp:has_pet pp:Louie)
  value(pp:has_pet pp:Dewey))
)
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