Description logic view: DOLCE Functional Participation

Classes

action

activity

agent

amount-of-matter

endurant

information-object

perdurant

physical-object

state

Object properties

causally-follows

$\sqsubseteq$ follows
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlcausally-follows¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/Fun
precedes¿$^-$
$\exists$ causally-follows Thing $\sqsubseteq$ perdurant
$\top \sqsubseteq \forall$ causally-follows activity

causally-precedes

$\sqsubseteq$ precedes
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlcausally-follows¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/Fun
precedes¿$^-$
$\exists$ causally-precedes Thing $\sqsubseteq$ activity
$\top \sqsubseteq \forall$ causally-precedes perdurant

follows

functional-participant

$\sqsubseteq$ participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlfunctional-participant-in¿ $\equiv$ ¡http://www.loa-cnr.it/ontolo
participant¿$^-$
$\exists$ functional-participant Thing $\sqsubseteq$ perdurant
$\top \sqsubseteq \forall$ functional-participant endurant

functional-participant-in

⊑ participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlfunctional-participant-in¿ ≡ ¡http://www.loa-cnr.it/ontolo
participant¿⁻
∃ functional-participant-in Thing ⊑ endurant
⊤ ⊑ ∀ functional-participant-in perdurant

generic-target

⊑ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlgeneric-target¿ ≡ ¡http://www.loa-cnr.it/ontologies/Funct
target-of¿⁻
∃ generic-target Thing ⊑ activity
⊤ ⊑ ∀ generic-target endurant

generic-target-of

⊑ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlgeneric-target¿ ≡ ¡http://www.loa-cnr.it/ontologies/Funct
target-of¿⁻
∃ generic-target-of Thing ⊑ endurant
⊤ ⊑ ∀ generic-target-of activity

has-state

⊑ substrate-of
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlstate-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
state¿⁻
∃ has-state Thing ⊑ endurant
⊤ ⊑ ∀ has-state state

instrument

⊑ use-of
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlinstrument-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functi
∃ instrument Thing ⊑ activity
⊤ ⊑ ∀ instrument physical-object

instrument-of

⊑ used-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlinstrument-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functi
∃ instrument-of Thing ⊑ physical-object
⊤ ⊑ ∀ instrument-of activity

participant

participant-in

patient

⊑ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlpatient-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functiona
∃ patient Thing ⊑ perdurant
⊤ ⊑ ∀ patient endurant

patient-of

⊑ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlpatient-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functiona
∃ patient-of Thing ⊑ endurant
⊤ ⊑ ∀ patient-of perdurant

performed-by

⊑ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlperformed-by¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functi
∃ performed-by Thing ⊑ action
⊤ ⊑ ∀ performed-by agent

performs

⊑ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlperformed-by¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functi
∃ performs Thing ⊑ agent
⊤ ⊑ ∀ performs action

precedes

TransitivePropertyprecedes

prescribed-by

⊑ performed-by
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlprescribes¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functiona
by¿⁻
∃ prescribed-by Thing ⊑ action
⊤ ⊑ ∀ prescribed-by agent

prescribes

⊑ performs
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlprescribes¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functiona
by¿⁻

∃ prescribes Thing ⊑ agent
⊤ ⊑ ∀ prescribes action

product

⊑ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlproduct¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
of¿⁻
∃ product Thing ⊑ activity
⊤ ⊑ ∀ product endurant

product-of

⊑ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlproduct¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
of¿⁻
∃ product-of Thing ⊑ endurant
⊤ ⊑ ∀ product-of activity

resource

⊑ use-of
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlresource-for¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functio
∃ resource Thing ⊑ activity
⊤ ⊑ ∀ resource amount-of-matter

resource-for

⊑ used-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlresource-for¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functio
∃ resource-for Thing ⊑ amount-of-matter
⊤ ⊑ ∀ resource-for activity

result

⊑ causally-precedes
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlresult-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
∃ result Thing ⊑ activity
⊤ ⊑ ∀ result perdurant

result-of

⊑ causally-follows
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlresult-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
∃ result-of Thing ⊑ perdurant
⊤ ⊑ ∀ result-of activity

state-of

⊑ substrate
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlstate-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalP
state¿⁻
∃ state-of Thing ⊑ state
⊤ ⊑ ∀ state-of endurant

substrate

⊑ total-constant-participant
⊑ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlsubstrate-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functio
∃ substrate Thing ⊑ perdurant
⊤ ⊑ ∀ substrate endurant

substrate-of

⊑ total-constant-participant-in
⊑ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlsubstrate-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functio
∃ substrate-of Thing ⊑ endurant
⊤ ⊑ ∀ substrate-of perdurant

target

⊑ patient
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owltarget¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalPar
of¿⁻
∃ target Thing ⊑ perdurant
⊤ ⊑ ∀ target endurant

target-of

⊑ patient-of
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owltarget¿ ≡ ¡http://www.loa-cnr.it/ontologies/FunctionalPar
of¿⁻
∃ target-of Thing ⊑ endurant
⊤ ⊑ ∀ target-of perdurant

theme

⊑ patient
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owltheme-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/Functional
∃ theme Thing ⊑ perdurant
⊤ ⊑ ∀ theme information-object

theme-of

$\sqsubseteq$ patient-of
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owltheme-of¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/Functional
$\exists$ theme-of Thing $\sqsubseteq$ information-object
$\top \sqsubseteq \forall$ theme-of perdurant

total-constant-participant

total-constant-participant-in

use-of

$\sqsubseteq$ functional-participant
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlused-in¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/FunctionalPa
of¿$^-$
$\exists$ use-of Thing $\sqsubseteq$ action
$\top \sqsubseteq \forall$ use-of endurant

used-in

$\sqsubseteq$ functional-participant-in
¡http://www.loa-cnr.it/ontologies/FunctionalParticipation.owlused-in¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/FunctionalPa
of¿$^-$
$\exists$ used-in Thing $\sqsubseteq$ endurant
$\top \sqsubseteq \forall$ used-in action

Data properties

Individuals

Datatypes

string