Classes

Ability Ability $\sqsubseteq \exists$ is Affected By Disability Ability \sqsubseteq Thing Ability $\sqsubseteq \exists$ is Assisted By Device Ability $\sqsubseteq \neg$ Disability Ability $\sqsubseteq \neg$ Device Achondroplasia Achondroplasia \sqsubseteq PhysicalDisability Amputation Amputation \sqsubseteq PhysicalDisability AssistiveDevice Assistive Device \sqsubseteq Device Assistive Device $\sqsubseteq \exists$ assists With Ability Autism $Autism \sqsubseteq Mental Disability$ $Battery Powered_Wheel chair$ $Battery Powered_Wheel chair \sqsubseteq Motorised_Wheel chair$ Blind Blind \sqsubseteq VisualDisability ${\bf Braille Alarm Clock}$ $Braille Alarm Clock \sqsubseteq Tactile Reading$ ${\bf Braille Pill Organiser}$

Braille PillOrganiser \sqsubseteq Tactile Reading

 $BrailleWatch \sqsubseteq TactileReading$

BrailleWatch

BrailleWritingDevice
BrailleWritingDevice $\sqsubseteq \exists$ assistsWith SightAbility BrailleWritingDevice \sqsubseteq WritingDevice
Cerebral_palsy
Cerebral_palsy \sqsubseteq PhysicalDisability
Communication_Device
$\begin{array}{c} Communication_Device \sqsubseteq Assistive Device \\ Communication_Device \sqsubseteq \neg \ Mobility Device \\ \end{array}$
Deaf
$\begin{array}{l} \mathrm{Deaf} \sqsubseteq \mathrm{HearingDisability} \\ \mathrm{Deaf} \sqsubseteq \exists \ \mathrm{affects} \ \mathrm{SpeechAbility} \end{array}$
Deafened
Deafened \sqsubseteq Hearing Disability
Device
Device $\sqsubseteq \neg$ Disability Device $\sqsubseteq \neg$ Ability
Disability
Disability \sqsubseteq Thing Disability \sqsubseteq \exists affects Ability Disability \sqsubseteq \neg Device Disability \sqsubseteq \neg Ability
Dystonia
Dystonia \sqsubseteq Physical Disability
Epilepsy
Epilepsy \sqsubseteq MentalDisability
FaceToFaceCommunicationDevice
FaceToFaceCommunicationDevice $\sqsubseteq \exists$ assistsWith SpeechAbility FaceToFaceCommunicationDevice \sqsubseteq Communication_Device

FaceToFaceCommunicationSoftware $\label{eq:FaceToFaceCommunicationSoftware} \sqsubseteq \mbox{FaceToFaceCommunicationDevice}$ $Foldable_Wheel chair$ $Foldable_Wheelchair \sqsubseteq Manual_Wheelchair$ $Guillaume_Barre$ $Guillaume_Barre \sqsubseteq PhysicalDisability$ Hard_of_hearing $Hard_of_hearing \sqsubseteq HearingDisability$ Hear $Hear \sqsubseteq HearingAbility$ Hear_partially $Hear_partially \sqsubseteq HearingAbility$ HearingAbility $HearingAbility \sqsubseteq SensoryAbility$ HearingDisability Hearing Disability $\sqsubseteq \exists$ affects Hearing Ability Hearing Disability \sqsubseteq Disability Hearing Disability $\sqsubseteq \neg$ Visual Disability Hearing Disability $\sqsubseteq \neg$ MentalDisability Hearing Disability $\sqsubseteq \neg$ Speech Disability HearingDisability $\sqsubseteq \neg$ PhysicalDisability Hemiplegia Hemiplegia \sqsubseteq PhysicalDisability IntellectualDisability Intellectual Disability \sqsubseteq Mental Disability

Kyphosis

 $Kyphosis \sqsubseteq Physical Disability$

${f LightweightFoldable_Wheelchair}$
$\label{lightweightFoldable_Wheelchair} \sqsubseteq \ Lightweight_Wheelchair \sqsubseteq \ LightweightFoldable_Wheelchair \sqsubseteq \ Foldable_Wheelchair \sqsubseteq \ Foldable_Wheelchair$
${f Lightweight}_{-}{f Wheelchair}$
$\label{lightweight_Wheelchair} \verb Lightweight_Wheelchair = Manual_Wheelchair $
LimbMobility
$LimbMobility \sqsubseteq MovementAbility$
ListenDevice
ListenDevice $\sqsubseteq \exists$ assistsWith HearingAbility ListenDevice \sqsubseteq Communication_Device
${f Little_or_No_Speech}$
$\operatorname{LowVision}$
$LowVision \sqsubseteq VisualDisability$
${f LowerLimb Mobility}$
$\begin{aligned} & LowerLimbMobility \sqsubseteq LimbMobility \\ & LowerLimbMobility \sqsubseteq \neg \ UpperLimbMobility \end{aligned}$
Manual_Wheelchair
Manual_Wheelchair ⊑ ∃ requiresAbility UpperLimbMobility Manual_Wheelchair ⊑ ∃ assistsWith LowerLimbMobility Manual_Wheelchair ⊑ Wheelchair Manual_Wheelchair ⊑ ¬ Motorised_Wheelchair
MentalDisability
MentalDisability ☐ Disability MentalDisability ☐ ¬ PhysicalDisability MentalDisability ☐ ¬ HearingDisability MentalDisability ☐ ¬ VisualDisability MentalDisability ☐ ¬ SpeechDisability

MobilityDevice
$\begin{tabular}{ll} Mobility Device \sqsubseteq Assistive Device \\ Mobility Device \sqsubseteq \exists assists With Movement Ability \\ Mobility Device \sqsubseteq \neg Communication_Device \\ \end{tabular}$
${\bf Motorised_Wheelchair}$
$\label{eq:motorised_Wheelchair} $\sqsubseteq \exists \ assistsWith \ UpperLimbMobility \\ Motorised_Wheelchair $\sqsubseteq \exists \ assistsWith \ LowerLimbMobility \\ Motorised_Wheelchair $\sqsubseteq $ \ Wheelchair \\ Motorised_Wheelchair $\sqsubseteq $ \ Manual_Wheelchair \\ $
MovementAbility
$MovementAbility \sqsubseteq PhysicalAbility$
Multiple_sclerosis
$\label{eq:Multiple_sclerosis} \ \sqsubseteq \ Physical Disability$
Muscular_dystrophy
${\it Muscular_dystrophy} \sqsubseteq {\it PhysicalDisability}$
Osteogensis_Imperfecta
Osteogensis_Imperfect a \sqsubseteq Physical Disability
Paraplegia
Paraplegia \sqsubseteq PhysicalDisability Paraplegia \sqsubseteq \exists affects LowerLimbMobility
PhysicalAbility
PhysicalAbility \sqsubseteq Ability PhysicalAbility \sqsubseteq \neg SpeechAbility PhysicalAbility \sqsubseteq \neg SensoryAbility
PhysicalDisability
PhysicalDisability $\sqsubseteq \exists$ affects PhysicalAbility PhysicalDisability \sqsubseteq Disability PhysicalDisability $\sqsubseteq \neg$ MentalDisability PhysicalDisability $\sqsubseteq \neg$ SpeechDisability PhysicalDisability $\sqsubseteq \neg$ VisualDisability PhysicalDisability $\sqsubseteq \neg$ HearingDisability

Poliomyelitis \sqsubseteq PhysicalDisability Quadriplegia Quadriplegia $\sqsubseteq \exists$ affects LowerLimbMobility Quadriplegia \sqsubseteq PhysicalDisability Quadriplegia $\sqsubseteq \exists$ affects UpperLimbMobility Reach $Reach \sqsubseteq MovementAbility$ ReadingDevice Reading Device $\sqsubseteq \exists$ assists With SightAbility ReadingDevice \sqsubseteq Communication_Device Scoliosis Scoliosis \sqsubseteq PhysicalDisability See See \sqsubseteq SightAbility See_partially See_partially \sqsubseteq SightAbility **Sensory Ability** Sensory Ability \sqsubseteq Ability Sensory Ability $\sqsubseteq \neg$ Speech Ability Sensory Ability $\sqsubseteq \neg$ Physical Ability **SightAbility** $SightAbility \sqsubseteq SensoryAbility$ **SpeechAbility** $SpeechAbility \sqsubseteq Ability$ SpeechAbility $\sqsubseteq \neg$ PhysicalAbility Speech Ability $\sqsubseteq \neg$ Sensory Ability

Poliomyelitis

SpeechDevice
$\begin{array}{c} \mathbf{SpeechDevice} \sqsubseteq \exists \ \mathbf{assistsWith} \ \mathbf{SpeechAbility} \\ \mathbf{SpeechDevice} \sqsubseteq \mathbf{Communication_Device} \end{array}$
SpeechDisability
SpeechDisability \sqsubseteq Disability SpeechDisability $\sqsubseteq \neg$ PhysicalDisability SpeechDisability $\sqsubseteq \neg$ HearingDisability SpeechDisability $\sqsubseteq \neg$ VisualDisability SpeechDisability $\sqsubseteq \neg$ MentalDisability
Spina_Bifida
Spina_Bifida \sqsubseteq PhysicalDisability
Stuttering
Stuttering \sqsubseteq SpeechDisability
SymbolBoard
SymbolBoard \sqsubseteq FaceToFaceCommunicationDevice
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TactileAbility
TactileAbility \sqsubseteq SensoryAbility
TactileReading
Tactile Reading $\sqsubseteq \exists$ assists With SightAbility
TactileReading \sqsubseteq ReadingDevice TactileReading \sqsubseteq \exists requiresAbility TactileAbility
TalkingReading
TalkingReading $\sqsubseteq \exists$ assistsWith SightAbility
TalkingReading \sqsubseteq ReadingDevice TalkingReading \sqsubseteq \exists requiresAbility HearingAbility
$Talking_Thermometer$
${\it Talking_Thermometer} \sqsubseteq {\it TalkingReading}$
Telephone Aid
$TelephoneAid \sqsubseteq ListenDevice$
$TelephoneAid \sqsubseteq SpeechDevice$

Thing

UpperLimbMobility

 $\begin{array}{c} \textbf{UpperLimbMobility} \sqsubseteq \textbf{LimbMobility} \\ \textbf{UpperLimbMobility} \sqsubseteq \neg \textbf{LowerLimbMobility} \end{array}$

VisualDisability

 $\begin{tabular}{ll} Visual Disability \sqsubseteq Disability \\ Visual Disability \sqsubseteq \neg Hearing Disability \\ Visual Disability \sqsubseteq \neg Physical Disability \\ Visual Disability \sqsubseteq \neg Speech Disability \\ Visual Disability \sqsubseteq \neg Mental Disability \\ \hline \end{tabular}$

Wheelchair

Wheelchair \sqsubseteq MobilityDevice Wheelchair \sqsubseteq \exists assistsWith LimbMobility

WritingDevice

 $Writing Device \sqsubseteq Communication_Device$

Object properties

affects

 $isAffectedBy \equiv affects^-$

assistsWith

is Assisted By \equiv assists With

isAffectedBy

is Affected By \equiv affects^-

isAssistedBy

is Assisted By \equiv assists With ${\bf requires Ability}$

Data properties

Individuals

Datatypes

 \mathbf{string}