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The Type Hierarchy

Here is the entire hierarchy in a single file.

Types that have multiple parents are expanded out only once and have an asterisk

DataType

[Boolean](#)
[Date](#)
[DateTime](#)
[Number](#)
[Float](#)
[Integer](#)
[Text](#)
[URL](#)
[Time](#)

Thing: [additionalType](#), [description](#), [image](#), [name](#), [url](#)

Class

CreativeWork: [about](#), [accountablePerson](#), [aggregateRating](#), [alternativeHeadline](#), [associatedMedia](#), [audience](#), [audio](#), [author](#), [award](#), [awards](#), [comment](#), [contentLocation](#), [contentRating](#), [contributor](#), [copyrightHolder](#), [copyrightYear](#), [creator](#), [dateCreated](#), [dateModified](#), [datePublished](#), [discussionUrl](#), [editor](#), [educationalAlignment](#), [educationalUse](#), [encoding](#), [encodings](#), [genre](#), [headline](#), [inLanguage](#), [interactionCount](#), [interactivityType](#), [isBasedOnUrl](#), [isFamilyFriendly](#), [keywords](#), [learningResourceType](#), [mentions](#), [offers](#), [provider](#), [publisher](#), [publishingPrinciples](#), [review](#), [reviews](#), [sourceOrganization](#), [text](#), [thumbnailUrl](#), [timeRequired](#), [typicalAgeRange](#), [version](#), [video](#)

Article: [articleBody](#), [articleSection](#), [wordCount](#)

BlogPosting

NewsArticle: [dateline](#), [printColumn](#), [printEdition](#), [printPage](#), [printSection](#)

ScholarlyArticle

MedicalScholarlyArticle: [citation](#), [publicationType](#)

TechArticle: [dependencies](#), [proficiencyLevel](#)

APIReference: [assembly](#), [assemblyVersion](#), [programmingModel](#), [targetPlatform](#)

Blog: [blogPost](#), [blogPosts](#)

Book: [bookEdition](#), [bookFormat](#), [illustrator](#), [isbn](#), [numberOfPages](#)

Code: [codeRepository](#), [programmingLanguage](#), [runtime](#), [sampleType](#), [targetProduct](#)

Comment**DataCatalog**: dataset**Dataset**: catalog, distribution, spatial, temporal**Diet**: dietFeatures, endorsers, expertConsiderations, overview, physiologicalBenefits, proprietaryName, risks**ExercisePlan**: activityDuration, activityFrequency, additionalVariable, exerciseType, intensity, repetitions, restPeriods, workload**ItemList**: itemListElement, itemListOrder**Map****MediaObject**: associatedArticle, bitrate, contentSize, contentUrl, duration, embedUrl, encodesCreativeWork, encodingFormat, expires, height, interactionCount, offers, playerType, regionsAllowed, requiresSubscription, uploadDate, width**AudioObject**: transcript**DataDownload****ImageObject**: caption, exifData, representativeOfPage, thumbnail**MusicVideoObject****VideoObject**: caption, productionCompany, thumbnail, transcript, videoFrameSize, videoQuality**Movie**: actor, actors, director, duration, musicBy, producer, productionCompany, trailer**MusicPlaylist**: numTracks, track, tracks**MusicAlbum**: byArtist**MusicRecording**: byArtist, duration, inAlbum, inPlaylist**Painting****Photograph****Recipe**: cookingMethod, cookTime, ingredients, nutrition, prepTime, recipeCategory, recipeCuisine, recipeInstructions, recipeYield, totalTime**Review**: itemReviewed, reviewBody, reviewRating**Sculpture****SoftwareApplication**: applicationCategory, applicationSubCategory, applicationSuite, countriesNotSupported, countriesSupported, device, downloadUrl, featureList, fileFormat, fileSize, installUrl, memoryRequirements, operatingSystem, permissions, processorRequirements, releaseNotes, requirements, screenshot, softwareVersion, storageRequirements**MobileApplication**: carrierRequirements**WebApplication**: browserRequirements**TVEpisode**: actor, actors, director, episodeNumber, musicBy, partOfSeason, partOfTVSeries, producer, productionCompany, trailer**TVSeason**: endDate, episode, episodes, numberOfEpisodes, partOfTVSeries, seasonNumber, startDate, trailer**TVSeries**: actor, actors, director, endDate, episode, episodes, musicBy, numberOfEpisodes, producer, productionCompany, season, seasons, startDate, trailer**WebPage**: breadcrumb, isPartOf, lastReviewed, mainContentOfPage, primaryImageOfPage, relatedLink, reviewedBy, significantLink, significantLinks, specialty**AboutPage****CheckoutPage****CollectionPage****ImageGallery****VideoGallery****ContactPage****ItemPage**

	MedicalWebPage : aspect
	ProfilePage
	SearchResultsPage
WebPageElement	
	SiteNavigationElement
	Table
	WPadBlock
	WPFooter
	WPHeader
	WPSideBar
Event : attendee , attendees , duration , endDate , location , offers , performer , performers , startDate , subEvent , subEvents , superEvent	
	BusinessEvent
	ChildrensEvent
	ComedyEvent
	DanceEvent
	EducationEvent
	Festival
	FoodEvent
	LiteraryEvent
	MusicEvent
	SaleEvent
	SocialEvent
	SportsEvent
	TheaterEvent
UserInteraction	
	UserBlocks
	UserCheckins
	UserComments : commentText , commentTime , creator , discusses , replyToUrl
	UserDownloads
	UserLikes
	UserPageVisits
	UserPlays
	UserPlusOnes
	UserTweets
VisualArtsEvent	
Intangible	
	AlignmentObject : alignmentType , educationalFramework , targetDescription , targetName , targetUrl
Audience	
	EducationalAudience : educationalRole
	MedicalAudience
	PeopleAudience : healthCondition , suggestedGender , suggestedMaxAge , suggestedMinAge
	MedicalAudience *
	ParentAudience : childMaxAge , childMinAge
Brand : logo	
Demand : acceptedPaymentMethod , advanceBookingRequirement , availability , availabilityEnds , availabilityStarts , availableAtOrFrom , availableDeliveryMethod , businessFunction ,	

deliveryLeadTime, eligibleCustomerType, eligibleDuration, eligibleQuantity, eligibleRegion, eligibleTransactionVolume, gtin13, gtin14, gtin8, includesObject, inventoryLevel, itemCondition, itemOffered, mpn, priceSpecification, seller, serialNumber, sku, validFrom, validThrough, warranty

Enumeration

BookFormatType

BusinessEntityType

BusinessFunction

DayOfWeek

DeliveryMethod

ParcelService

ItemAvailability

OfferItemCondition

PaymentMethod

CreditCard

QualitativeValue: equal, greater, greaterOrEqual, lesser, lesserOrEqual, nonEqual, valueReference

Specialty

MedicalSpecialty

WarrantyScope

JobPosting: baseSalary, benefits, datePosted, educationRequirements, employmentType, experienceRequirements, hiringOrganization, incentives, industry, jobLocation, occupationalCategory, qualifications, responsibilities, salaryCurrency, skills, specialCommitments, title, workHours

Language

Offer: acceptedPaymentMethod, addOn, advanceBookingRequirement, aggregateRating, availability, availabilityEnds, availabilityStarts, availableAtOrFrom, availableDeliveryMethod, businessFunction, category, deliveryLeadTime, eligibleCustomerType, eligibleDuration, eligibleQuantity, eligibleRegion, eligibleTransactionVolume, gtin13, gtin14, gtin8, includesObject, inventoryLevel, itemCondition, itemOffered, mpn, price, priceCurrency, priceSpecification, priceValidUntil, review, reviews, seller, serialNumber, sku, validFrom, validThrough, warranty

AggregateOffer: highPrice, lowPrice, offerCount

Quantity

Distance

Duration

Energy

Mass

Rating: bestRating, ratingValue, worstRating

AggregateRating: itemReviewed, ratingCount, reviewCount

StructuredValue

ContactPoint: contactType, email, faxNumber, telephone

PostalAddress: addressCountry, addressLocality, addressRegion, postalCode, postOfficeBoxNumber, streetAddress

GeoCoordinates: elevation, latitude, longitude

GeoShape: box, circle, elevation, line, polygon

NutritionInformation: calories, carbohydrateContent, cholesterolContent, fatContent, fiberContent, proteinContent, saturatedFatContent, servingSize, sodiumContent, sugarContent, transFatContent, unsaturatedFatContent

OpeningHoursSpecification: closes, dayOfWeek, opens, validFrom, validThrough

OwnershipInfo: acquiredFrom, ownedFrom, ownedThrough, typeOfGood
PriceSpecification: eligibleQuantity, eligibleTransactionVolume, maxPrice, minPrice, price, priceCurrency, validFrom, validThrough, valueAddedTaxIncluded
DeliveryChargeSpecification: appliesToDeliveryMethod, eligibleRegion
PaymentChargeSpecification: appliesToDeliveryMethod, appliesToPaymentMethod
UnitPriceSpecification: billingIncrement, priceType, unitCode
QuantitativeValue: maxValue, minValue, unitCode, value, valueReference
TypeAndQuantityNode: amountOfThisGood, businessFunction, typeOfGood, unitCode
WarrantyPromise: durationOfWarranty, warrantyScope
MedicalEntity: alternateName, code, guideline, medicineSystem, recognizingAuthority, relevantSpecialty, study
AnatomicalStructure: associatedPathophysiology, bodyLocation, connectedTo, diagram, function, partOfSystem, relatedCondition, relatedTherapy, subStructure
Bone
BrainStructure
Joint: biomechanicalClass, functionalClass, structuralClass
Ligament
Muscle: action, antagonist, bloodSupply, insertion, nerve, origin
Nerve: branch, nerveMotor, sensoryUnit, sourcedFrom
Vessel
Artery: arterialBranch, source, supplyTo
LymphaticVessel: originatesFrom, regionDrained, runsTo
Vein: drainsTo, regionDrained, tributary
AnatomicalSystem: associatedPathophysiology, comprisedOf, relatedCondition, relatedStructure, relatedTherapy
MedicalCause: causeOf
MedicalCondition: associatedAnatomy, cause, differentialDiagnosis, epidemiology, expectedPrognosis, naturalProgression, pathophysiology, possibleComplication, possibleTreatment, primaryPrevention, riskFactor, secondaryPrevention, signOrSymptom, stage, subtype, typicalTest
InfectiousDisease: infectiousAgent, infectiousAgentClass, transmissionMethod
MedicalContraindication
MedicalDevice: adverseOutcome, contraindication, indication, postOp, preOp, procedure, purpose, seriousAdverseOutcome
MedicalGuideline: evidenceLevel, evidenceOrigin, guidelineDate, guidelineSubject
MedicalGuidelineContraindication
MedicalGuidelineRecommendation: recommendationStrength
MedicalIndication
ApprovedIndication
PreventionIndication
TreatmentIndication
MedicalIntangible
DDxElement: diagnosis, distinguishingSign
DoseSchedule: doseUnit, doseValue, frequency, targetPopulation
MaximumDoseSchedule
RecommendedDoseSchedule
ReportedDoseSchedule
DrugCost: applicableLocation, costCategory, costCurrency, costOrigin, costPerUnit, drugUnit

[DrugLegalStatus](#): [applicableLocation](#)
[DrugStrength](#): [activeIngredient](#), [availableIn](#), [strengthUnit](#), [strengthValue](#)
[MedicalCode](#): [codeValue](#), [codingSystem](#)
[MedicalConditionStage](#): [stageAsNumber](#), [subStageSuffix](#)
[MedicalEnumeration](#)
 [DrugCostCategory](#)
 [DrugPregnancyCategory](#)
 [DrugPrescriptionStatus](#)
 [InfectiousAgentClass](#)
 [MedicalAudience](#)*
 [MedicalDevicePurpose](#)
 [MedicalEvidenceLevel](#)
 [MedicalImagingTechnique](#)
 [MedicalObservationalStudyDesign](#)
 [MedicalProcedureType](#)
 [MedicalSpecialty](#)*
 [MedicalStudyStatus](#)
 [MedicalTrialDesign](#)
 [MedicineSystem](#)
 [PhysicalActivityCategory](#)
 [PhysicalExam](#)
[MedicalProcedure](#): [followup](#), [howPerformed](#), [preparation](#), [procedureType](#)
 [DiagnosticProcedure](#)
 [PalliativeProcedure](#)
 [TherapeuticProcedure](#)
[MedicalRiskEstimator](#): [estimatesRiskOf](#), [includedRiskFactor](#)
 [MedicalRiskCalculator](#)
 [MedicalRiskScore](#): [algorithm](#)
[MedicalRiskFactor](#): [increasesRiskOf](#)
[MedicalSignOrSymptom](#): [cause](#), [possibleTreatment](#)
 [MedicalSign](#): [identifyingExam](#), [identifyingTest](#)
 [MedicalSymptom](#)
[MedicalStudy](#): [outcome](#), [population](#), [sponsor](#), [status](#), [studyLocation](#), [studySubject](#)
 [MedicalObservationalStudy](#): [studyDesign](#)
 [MedicalTrial](#): [phase](#), [trialDesign](#)
[MedicalTest](#): [affectedBy](#), [normalRange](#), [signDetected](#), [usedToDiagnose](#), [usesDevice](#)
 [BloodTest](#)
 [DiagnosticProcedure](#)*
 [ImagingTest](#): [imagingTechnique](#)
 [MedicalTestPanel](#): [subTest](#)
 [PathologyTest](#): [tissueSample](#)
[MedicalTherapy](#): [adverseOutcome](#), [contraindication](#), [duplicateTherapy](#), [indication](#),
 [seriousAdverseOutcome](#)
 [DietarySupplement](#): [activeIngredient](#), [background](#), [dosageForm](#), [isProprietary](#),
 [legalStatus](#), [manufacturer](#), [maximumIntake](#), [mechanismOfAction](#),
 [nonProprietaryName](#), [recommendedIntake](#), [safetyConsideration](#), [targetPopulation](#)
[Drug](#): [activeIngredient](#), [administrationRoute](#), [alcoholWarning](#), [availableStrength](#),
 [breastfeedingWarning](#), [clinicalPharmacology](#), [cost](#), [dosageForm](#), [doseSchedule](#),
 [drugClass](#), [foodWarning](#), [interactingDrug](#), [isAvailableGenerically](#), [isProprietary](#),

labelDetails, legalStatus, manufacturer, mechanismOfAction, nonProprietaryName, overdose, pregnancyCategory, pregnancyWarning, prescribingInfo, prescriptionStatus, relatedDrug, warning

DrugClass: drug

LifestyleModification

Diet*

PhysicalActivity: associatedAnatomy, category, epidemiology, pathophysiology

ExercisePlan*

PalliativeProcedure*

PhysicalTherapy

PsychologicalTreatment

RadiationTherapy

TherapeuticProcedure*

SuperficialAnatomy: associatedPathophysiology, relatedAnatomy, relatedCondition, relatedTherapy, significance

Organization: address, aggregateRating, brand, contactPoint, contactPoints, duns, email, employee, employees, event, events, faxNumber, founder, founders, foundingDate, globalLocationNumber, hasPOS, interactionCount, isicV4, legalName, location, logo, makesOffer, member, members, naics, owns, review, reviews, seeks, taxID, telephone, vatID

Corporation: tickerSymbol

EducationalOrganization: alumni

CollegeOrUniversity

ElementarySchool

HighSchool

MiddleSchool

Preschool

School

GovernmentOrganization

LocalBusiness: branchOf, currenciesAccepted, openingHours, paymentAccepted, priceRange

AnimalShelter

AutomotiveBusiness

AutoBodyShop

AutoDealer

AutoPartsStore

AutoRental

AutoRepair

AutoWash

GasStation

MotorcycleDealer

MotorcycleRepair

ChildCare

DryCleaningOrLaundry

EmergencyService

FireStation

Hospital: availableService, medicalSpecialty

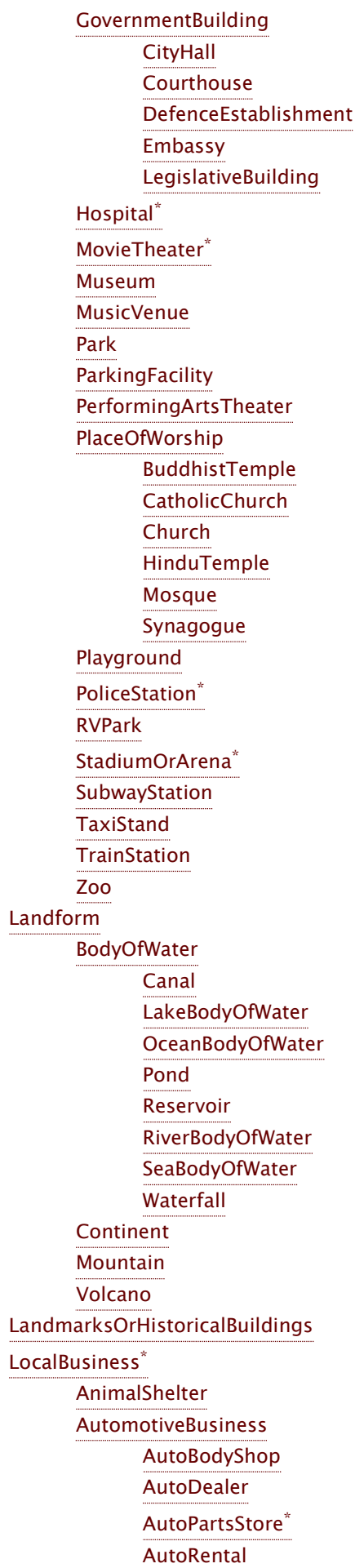
PoliceStation

EmploymentAgency

EntertainmentBusiness**AdultEntertainment****AmusementPark****ArtGallery****Casino****ComedyClub****MovieTheater****NightClub****FinancialService****AccountingService****AutomatedTeller****BankOrCreditUnion****InsuranceAgency****FoodEstablishment: acceptsReservations, menu, servesCuisine****Bakery****BarOrPub****Brewery****CafeOrCoffeeShop****FastFoodRestaurant****IceCreamShop****Restaurant****Winery****GovernmentOffice****PostOffice****HealthAndBeautyBusiness****BeautySalon****DaySpa****HairSalon****HealthClub****NailSalon****TattooParlor****HomeAndConstructionBusiness****Electrician****GeneralContractor****HVACBusiness****HousePainter****Locksmith****MovingCompany****Plumber****RoofingContractor****InternetCafe****Library****LodgingBusiness****BedAndBreakfast****Hostel****Hotel****Motel****MedicalOrganization****Dentist****DiagnosticLab: availableTest**

	Hospital*
	MedicalClinic : availableService , medicalSpecialty
	Optician
	Pharmacy
	Physician : availableService , hospitalAffiliation , medicalSpecialty
	VeterinaryCare
ProfessionalService	
	AccountingService*
	Attorney
	Dentist*
	Electrician*
	GeneralContractor*
	HousePainter*
	Locksmith*
	Notary
	Plumber*
	RoofingContractor*
RadioStation	
RealEstateAgent	
RecyclingCenter	
SelfStorage	
ShoppingCenter	
SportsActivityLocation	
	BowlingAlley
	ExerciseGym
	GolfCourse
	HealthClub*
	PublicSwimmingPool
	SkiResort
	SportsClub
	StadiumOrArena
	TennisComplex
Store	
	AutoPartsStore*
	BikeStore
	BookStore
	ClothingStore
	ComputerStore
	ConvenienceStore
	DepartmentStore
	ElectronicsStore
	Florist
	FurnitureStore
	GardenStore
	GroceryStore
	HardwareStore
	HobbyShop
	HomeGoodsStore

	JewelryStore
	LiquorStore
	MensClothingStore
	MobilePhoneStore
	MovieRentalStore
	MusicStore
	OfficeEquipmentStore
	OutletStore
	PawnShop
	PetStore
	ShoeStore
	SportingGoodsStore
	TireShop
	ToyStore
	WholesaleStore
	TelevisionStation
	TouristInformationCenter
	TravelAgency
NGO	
PerformingGroup	
	DanceGroup
	MusicGroup : album, albums, musicGroupMember, track, tracks
	TheaterGroup
SportsTeam	
Person	additionalName, address, affiliation, alumniOf, award, awards, birthDate, brand, children, colleague, colleagues, contactPoint, contactPoints, deathDate, duns, email, familyName, faxNumber, follows, gender, givenName, globalLocationNumber, hasPOS, homeLocation, honorificPrefix, honorificSuffix, interactionCount, isicV4, jobTitle, knows, makesOffer, memberOf, naics, nationality, owns, parent, parents, performerIn, relatedTo, seeks, sibling, siblings, spouse, taxID, telephone, vatID, workLocation, worksFor
Place	address, aggregateRating, containedIn, event, events, faxNumber, geo, globalLocationNumber, interactionCount, isicV4, logo, map, maps, openingHoursSpecification, photo, photos, review, reviews, telephone
AdministrativeArea	
	City
	Country
	State
CivicStructure	openingHours
	Airport
	Aquarium
	Beach
	BusStation
	BusStop
	Campground
	Cemetery
	Crematorium
	EventVenue
	FireStation *



- [AutoRepair](#)
 - [AutoWash](#)
 - [GasStation](#)
 - [MotorcycleDealer](#)
 - [MotorcycleRepair](#)
- [ChildCare](#)
- [DryCleaningOrLaundry](#)
- [EmergencyService](#)
 - [FireStation*](#)
 - [Hospital*](#)
 - [PoliceStation*](#)
- [EmploymentAgency](#)
- [EntertainmentBusiness](#)
 - [AdultEntertainment](#)
 - [AmusementPark](#)
 - [ArtGallery](#)
 - [Casino](#)
 - [ComedyClub](#)
 - [MovieTheater*](#)
 - [NightClub](#)
- [FinancialService](#)
 - [AccountingService*](#)
 - [AutomatedTeller](#)
 - [BankOrCreditUnion](#)
 - [InsuranceAgency](#)
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 - [Bakery](#)
 - [BarOrPub](#)
 - [Brewery](#)
 - [CafeOrCoffeeShop](#)
 - [FastFoodRestaurant](#)
 - [IceCreamShop](#)
 - [Restaurant](#)
 - [Winery](#)
- [GovernmentOffice](#)
 - [PostOffice](#)
- [HealthAndBeautyBusiness](#)
 - [BeautySalon](#)
 - [DaySpa](#)
 - [HairSalon](#)
 - [HealthClub*](#)
 - [NailSalon](#)
 - [TattooParlor](#)
- [HomeAndConstructionBusiness](#)
 - [Electrician*](#)
 - [GeneralContractor*](#)
 - [HVACBusiness](#)
 - [HousePainter*](#)

[illegible]

Store

[AutoPartsStore*](#)
[BikeStore](#)
[BookStore](#)
[ClothingStore](#)
[ComputerStore](#)
[ConvenienceStore](#)
[DepartmentStore](#)
[ElectronicsStore](#)
[Florist](#)
[FurnitureStore](#)
[GardenStore](#)
[GroceryStore](#)
[HardwareStore](#)
[HobbyShop](#)
[HomeGoodsStore](#)
[JewelryStore](#)
[LiquorStore](#)
[MensClothingStore](#)
[MobilePhoneStore](#)
[MovieRentalStore](#)
[MusicStore](#)
[OfficeEquipmentStore](#)
[OutletStore](#)
[PawnShop](#)
[PetStore](#)
[ShoeStore](#)
[SportingGoodsStore](#)
[TireShop](#)
[ToyStore](#)
[WholesaleStore](#)
[TelevisionStation](#)
[TouristInformationCenter](#)
[TravelAgency](#)

Residence

[ApartmentComplex](#)
[GatedResidenceCommunity](#)
[SingleFamilyResidence](#)

TouristAttraction

Product: aggregateRating, audience, brand, color, depth, gtin13, gtin14, gtin8, height, isAccessoryOrSparePartFor, isConsumableFor, isRelatedTo, isSimilarTo, itemCondition, logo, manufacturer, model, mpn, offers, productID, releaseDate, review, reviews, sku, weight, width

IndividualProduct: serialNumber

ProductModel: isVariantOf, predecessorOf, successorOf

SomeProducts: inventoryLevel

Property: domainIncludes, rangeIncludes