

Referenced Schema.org entities (Informative)

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1.1 Introduction

Some members of the IoT Big Data project group have reported difficulties in accessing <https://schema.org/>. To provide additional clarity we provide a snapshot of the <https://schema.org/> entity definitions below. This information is informative only.

1.2 Schema.org entity descriptions: Offer

Property	Expected Type	Description
Properties from Offer		
acceptedPaymentMethod	LoanOrCredit or PaymentMethod	The payment method(s) accepted by seller for this offer.
addOn	Offer	An additional offer that can only be obtained in combination with the first base offer (e.g. supplements and extensions that are available for a surcharge).
advanceBookingRequirement	QuantitativeValue	The amount of time that is required between accepting the offer and the actual usage of the resource or service.
aggregateRating	AggregateRating	The overall rating, based on a collection of reviews or ratings, of the item.

Property	Expected Type	Description
<u>areaServed</u>	<u>AdministrativeArea</u> or <u>GeoShape</u> or <u>Place</u> or <u>Text</u>	The geographic area where a service or offered item is provided. Supersedes <u>serviceArea</u> .
<u>availability</u>	<u>ItemAvailability</u>	The availability of this item—for example In stock, Out of stock, Pre-order, etc.
<u>availabilityEnds</u>	<u>DateTime</u>	The end of the availability of the product or service included in the offer.
<u>availabilityStarts</u>	<u>DateTime</u>	The beginning of the availability of the product or service included in the offer.
<u>availableAtOrFrom</u>	<u>Place</u>	The place(s) from which the offer can be obtained (e.g. store locations).
<u>availableDeliveryMethod</u>	<u>DeliveryMethod</u>	The delivery method(s) available for this offer.
<u>businessFunction</u>	<u>BusinessFunction</u>	The business function (e.g. sell, lease, repair, dispose) of the offer or component of a bundle (TypeAndQuantityNode). The default is http://purl.org/goodrelations/v1#Sell .
<u>category</u>	<u>Text</u> or <u>Thing</u>	A category for the item. Greater signs or slashes can be used to informally indicate a category hierarchy.
<u>deliveryLeadTime</u>	<u>QuantitativeValue</u>	The typical delay between the receipt of the order and the goods either leaving the warehouse or being prepared for pickup, in case the delivery method is on site pickup.
<u>eligibleCustomerType</u>	<u>BusinessEntityType</u>	The type(s) of customers for which the given offer is valid.
<u>eligibleDuration</u>	<u>QuantitativeValue</u>	The duration for which the given offer is valid.
<u>eligibleQuantity</u>	<u>QuantitativeValue</u>	The interval and unit of measurement of ordering quantities for which the offer or price specification is valid. This allows e.g.

Property	Expected Type	Description
		specifying that a certain freight charge is valid only for a certain quantity.
<u>eligibleRegion</u>	<u>GeoShape</u> or <u>Place</u> or <u>Text</u>	The ISO 3166-1 (ISO 3166-1 alpha-2) or ISO 3166-2 code, the place, or the GeoShape for the geo-political region(s) for which the offer or delivery charge specification is valid. See also <u>ineligibleRegion</u> .
<u>eligibleTransactionVolume</u>	<u>PriceSpecification</u>	The transaction volume, in a monetary unit, for which the offer or price specification is valid, e.g. for indicating a minimal purchasing volume, to express free shipping above a certain order volume, or to limit the acceptance of credit cards to purchases to a certain minimal amount.
<u>gtin12</u>	<u>Text</u>	The <u>GTIN-12</u> code of the product, or the product to which the offer refers. The GTIN-12 is the 12-digit GS1 Identification Key composed of a U.P.C. Company Prefix, Item Reference, and Check Digit used to identify trade items. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin13</u>	<u>Text</u>	The <u>GTIN-13</u> code of the product, or the product to which the offer refers. This is equivalent to 13-digit ISBN codes and EAN UCC-13. Former 12-digit UPC codes can be converted into a GTIN-13 code by simply adding a preceeding zero. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin14</u>	<u>Text</u>	The <u>GTIN-14</u> code of the product, or the product to which the offer refers. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin8</u>	<u>Text</u>	The <u>GTIN-8</u> code of the product, or the product to which the offer refers. This code is also known as EAN/UCC-8 or 8-digit EAN. See <u>GS1 GTIN Summary</u> for more details.

Property	Expected Type	Description
<u>includesObject</u>	<u>TypeAndQuantityNode</u>	This links to a node or nodes indicating the exact quantity of the products included in the offer.
<u>ineligibleRegion</u>	<u>GeoShape</u> or <u>Place</u> or <u>Text</u>	The ISO 3166-1 (ISO 3166-1 alpha-2) or ISO 3166-2 code, the place, or the GeoShape for the geo-political region(s) for which the offer or delivery charge specification is not valid, e.g. a region where the transaction is not allowed. See also <u>eligibleRegion</u> .
<u>inventoryLevel</u>	<u>QuantitativeValue</u>	The current approximate inventory level for the item or items.
<u>itemCondition</u>	<u>OfferItemCondition</u>	A predefined value from OfferItemCondition or a textual description of the condition of the product or service, or the products or services included in the offer.
<u>itemOffered</u>	<u>Product</u> or <u>Service</u>	The item being offered.
<u>mpn</u>	<u>Text</u>	The Manufacturer Part Number (MPN) of the product, or the product to which the offer refers.
<u>offeredBy</u>	<u>Organization</u> or <u>Person</u>	A pointer to the organization or person making the offer. Inverse property: <u>makesOffer</u> .
<u>price</u>	<u>Number</u> or <u>Text</u>	The offer price of a product, or of a price component when attached to PriceSpecification and its subtypes. Usage guidelines: <ul style="list-style-type: none"> Use the <u>priceCurrency</u> property (with <u>ISO 4217 codes</u> e.g. "USD") instead of including <u>ambiguous symbols</u> such as '\$' in the value. Use '.' (Unicode 'FULL STOP' (U+002E)) rather than ',' to indicate a decimal point. Avoid using these symbols as a readability separator.

Property	Expected Type	Description
		<ul style="list-style-type: none"> Note that both RDFa and Microdata syntax allow the use of a "content=" attribute for publishing simple machine-readable values alongside more human-friendly formatting. Use values from 0123456789 (Unicode 'DIGIT ZERO' (U+0030) to 'DIGIT NINE' (U+0039)) rather than superficially similar Unicode symbols.
priceCurrency	Text	The currency (in 3-letter ISO 4217 format) of the price or a price component, when attached to PriceSpecification and its subtypes.
priceSpecification	PriceSpecification	One or more detailed price specifications, indicating the unit price and delivery or payment charges.
priceValidUntil	Date	The date after which the price is no longer available.
review	Review	A review of the item. Supersedes reviews .
seller	Organization or Person	An entity which offers (sells / leases / lends / loans) the services / goods. A seller may also be a provider. Supersedes merchant , vendor .
serialNumber	Text	The serial number or any alphanumeric identifier of a particular product. When attached to an offer, it is a shortcut for the serial number of the product included in the offer.
sku	Text	The Stock Keeping Unit (SKU), i.e. a merchant-specific identifier for a product or service, or the product to which the offer refers.
validFrom	DateTime	The date when the item becomes valid.
validThrough	DateTime	The date after when the item is not valid. For example the end of an offer, salary period, or a period of opening hours.

Property	Expected Type	Description
<u>warranty</u>	<u>WarrantyPromise</u>	The warranty promise(s) included in the offer. Supersedes <u>warrantyPromise</u> .

1.3 Schema.org entity descriptions: Organisation

Property	Expected Type	Description
Properties from <u>Organization</u>		
<u>address</u>	<u>PostalAddress</u> or <u>Text</u>	Physical address of the item.
<u>aggregateRating</u>	<u>AggregateRating</u>	The overall rating, based on a collection of reviews or ratings, of the item.
<u>alumni</u>	<u>Person</u>	Alumni of an organization. Inverse property: <u>alumniOf</u> .
<u>areaServed</u>	<u>AdministrativeArea</u> or <u>GeoShape</u> or <u>Place</u> or <u>Text</u>	The geographic area where a service or offered item is provided. Supersedes <u>serviceArea</u> .
<u>award</u>	<u>Text</u>	An award won by or for this item. Supersedes <u>awards</u> .
<u>brand</u>	<u>Brand</u> or <u>Organization</u>	The brand(s) associated with a product or service, or the brand(s) maintained by an organization or business person.
<u>contactPoint</u>	<u>ContactPoint</u>	A contact point for a person or organization. Supersedes <u>contactPoints</u> .
<u>department</u>	<u>Organization</u>	A relationship between an organization and a department of that organization, also described as an organization (allowing different urls, logos, opening hours). For example: a store with a pharmacy, or a bakery with a cafe.
<u>dissolutionDate</u>	<u>Date</u>	The date that this organization was dissolved.
<u>duns</u>	<u>Text</u>	The Dun & Bradstreet DUNS number for identifying an organization or business person.
<u>email</u>	<u>Text</u>	Email address.

Property	Expected Type	Description
<u>employee</u>	<u>Person</u>	Someone working for this organization. Supersedes <u>employees</u> .
<u>event</u>	<u>Event</u>	Upcoming or past event associated with this place, organization, or action. Supersedes <u>events</u> .
<u>faxNumber</u>	<u>Text</u>	The fax number.
<u>founder</u>	<u>Person</u>	A person who founded this organization. Supersedes <u>founders</u> .
<u>foundingDate</u>	<u>Date</u>	The date that this organization was founded.
<u>foundingLocation</u>	<u>Place</u>	The place where the Organization was founded.
<u>funder</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports (sponsors) something through some kind of financial contribution.
<u>globalLocationNumber</u>	<u>Text</u>	The <u>Global Location Number</u> (GLN, sometimes also referred to as International Location Number or ILN) of the respective organization, person, or place. The GLN is a 13-digit number used to identify parties and physical locations.
<u>hasOfferCatalog</u>	<u>OfferCatalog</u>	Indicates an OfferCatalog listing for this Organization, Person, or Service.
<u>hasPOS</u>	<u>Place</u>	Points-of-Sales operated by the organization or person.
<u>isicV4</u>	<u>Text</u>	The International Standard of Industrial Classification of All Economic Activities (ISIC), Revision 4 code for a particular organization, business person, or place.
<u>legalName</u>	<u>Text</u>	The official name of the organization, e.g. the registered company name.
<u>leiCode</u>	<u>Text</u>	An organization identifier that uniquely identifies a legal entity as defined in ISO 17442.
<u>location</u>	<u>Place</u> or <u>PostalAddress</u> or <u>Text</u>	The location of for example where the event is happening, an organization is located, or where an action takes place.

Property	Expected Type	Description
<u>logo</u>	<u>ImageObject</u> or <u>URL</u>	An associated logo.
<u>makesOffer</u>	<u>Offer</u>	A pointer to products or services offered by the organization or person. Inverse property: <u>offeredBy</u> .
<u>member</u>	<u>Organization</u> or <u>Person</u>	A member of an Organization or a ProgramMembership. Organizations can be members of organizations; ProgramMembership is typically for individuals. Supersedes <u>members</u> , <u>musicGroupMember</u> . Inverse property: <u>memberOf</u> .
<u>memberOf</u>	<u>Organization</u> or <u>ProgramMembership</u>	An Organization (or ProgramMembership) to which this Person or Organization belongs. Inverse property: <u>member</u> .
<u>naics</u>	<u>Text</u>	The North American Industry Classification System (NAICS) code for a particular organization or business person.
<u>numberOfEmployees</u>	<u>QuantitativeValue</u>	The number of employees in an organization e.g. business.
<u>owns</u>	<u>OwnershipInfo</u> or <u>Product</u>	Products owned by the organization or person.
<u>parentOrganization</u>	<u>Organization</u>	The larger organization that this local business is a branch of, if any. Supersedes <u>branchOf</u> . Inverse property: <u>subOrganization</u> .
<u>review</u>	<u>Review</u>	A review of the item. Supersedes <u>reviews</u> .
<u>seeks</u>	<u>Demand</u>	A pointer to products or services sought by the organization or person (demand).
<u>sponsor</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports a thing through a pledge, promise, or financial contribution. e.g. a sponsor of a Medical Study or a corporate sponsor of an event.
<u>subOrganization</u>	<u>Organization</u>	A relationship between two organizations where the first includes the second, e.g., as a subsidiary. See also: the more specific

Property	Expected Type	Description
		'department' property. Inverse property: parentOrganization .
taxID	Text	The Tax / Fiscal ID of the organization or person, e.g. the TIN in the US or the CIF/NIF in Spain.
telephone	Text	The telephone number.
vatID	Text	The Value-added Tax ID of the organization or person.

1.4 Schema.org entity descriptions: Person

Property	Expected Type	Description
Properties from Person		
additionalName	Text	An additional name for a Person, can be used for a middle name.
address	PostalAddress or Text	Physical address of the item.
affiliation	Organization	An organization that this person is affiliated with. For example, a school/university, a club, or a team.
alumniOf	EducationalOrganization or Organization	An organization that the person is an alumni of. Inverse property: alumni .
award	Text	An award won by or for this item. Supersedes awards .
birthDate	Date	Date of birth.
birthPlace	Place	The place where the person was born.
brand	Brand or Organization	The brand(s) associated with a product or service, or the brand(s) maintained by an organization or business person.
children	Person	A child of the person.

Property	Expected Type	Description
<u>colleague</u>	<u>Person</u> or <u>URL</u>	A colleague of the person. Supersedes <u>colleagues</u> .
<u>contactPoint</u>	<u>ContactPoint</u>	A contact point for a person or organization. Supersedes <u>contactPoints</u> .
<u>deathDate</u>	<u>Date</u>	Date of death.
<u>deathPlace</u>	<u>Place</u>	The place where the person died.
<u>duns</u>	<u>Text</u>	The Dun & Bradstreet DUNS number for identifying an organization or business person.
<u>email</u>	<u>Text</u>	Email address.
<u>familyName</u>	<u>Text</u>	Family name. In the U.S., the last name of a Person. This can be used along with givenName instead of the name property.
<u>faxNumber</u>	<u>Text</u>	The fax number.
<u>follows</u>	<u>Person</u>	The most generic uni-directional social relation.
<u>funder</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports (sponsors) something through some kind of financial contribution.
<u>gender</u>	<u>GenderType</u> or <u>Text</u>	Gender of the person. While http://schema.org/Male and http://schema.org/Female may be used, text strings are also acceptable for people who do not identify as a binary gender.
<u>givenName</u>	<u>Text</u>	Given name. In the U.S., the first name of a Person. This can be used along with familyName instead of the name property.
<u>globalLocationNumber</u>	<u>Text</u>	The <u>Global Location Number</u> (GLN, sometimes also referred to as International Location Number or ILN) of the respective organization, person, or place. The GLN is a 13-digit number used to identify parties and physical locations.

Property	Expected Type	Description
<u>hasOfferCatalog</u>	<u>OfferCatalog</u>	Indicates an OfferCatalog listing for this Organization, Person, or Service.
<u>hasPOS</u>	<u>Place</u>	Points-of-Sales operated by the organization or person.
<u>height</u>	<u>Distance</u> or <u>QuantitativeValue</u>	The height of the item.
<u>homeLocation</u>	<u>ContactPoint</u> or <u>Place</u>	A contact location for a person's residence.
<u>honorificPrefix</u>	<u>Text</u>	An honorific prefix preceding a Person's name such as Dr/Mrs/Mr.
<u>honorificSuffix</u>	<u>Text</u>	An honorific suffix preceding a Person's name such as M.D. /PhD/MSCSW.
<u>isicV4</u>	<u>Text</u>	The International Standard of Industrial Classification of All Economic Activities (ISIC), Revision 4 code for a particular organization, business person, or place.
<u>jobTitle</u>	<u>Text</u>	The job title of the person (for example, Financial Manager).
<u>knows</u>	<u>Person</u>	The most generic bi-directional social/work relation.
<u>makesOffer</u>	<u>Offer</u>	A pointer to products or services offered by the organization or person. Inverse property: <u>offeredBy</u> .
<u>memberOf</u>	<u>Organization</u> or <u>ProgramMembership</u>	An Organization (or ProgramMembership) to which this Person or Organization belongs. Inverse property: <u>member</u> .
<u>naics</u>	<u>Text</u>	The North American Industry Classification System (NAICS) code for a particular organization or business person.
<u>nationality</u>	<u>Country</u>	Nationality of the person.
<u>netWorth</u>	<u>MonetaryAmount</u> or <u>PriceSpecification</u>	The total financial value of the person as calculated by subtracting assets from liabilities.

Property	Expected Type	Description
<u>owns</u>	<u>OwnershipInfo</u> or <u>Product</u>	Products owned by the organization or person.
<u>parent</u>	<u>Person</u>	A parent of this person. Supersedes <u>parents</u> .
<u>performerIn</u>	<u>Event</u>	Event that this person is a performer or participant in.
<u>relatedTo</u>	<u>Person</u>	The most generic familial relation.
<u>seeks</u>	<u>Demand</u>	A pointer to products or services sought by the organization or person (demand).
<u>sibling</u>	<u>Person</u>	A sibling of the person. Supersedes <u>siblings</u> .
<u>sponsor</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports a thing through a pledge, promise, or financial contribution. e.g. a sponsor of a Medical Study or a corporate sponsor of an event.
<u>spouse</u>	<u>Person</u>	The person's spouse.
<u>taxID</u>	<u>Text</u>	The Tax / Fiscal ID of the organization or person, e.g. the TIN in the US or the CIF/NIF in Spain.
<u>telephone</u>	<u>Text</u>	The telephone number.
<u>vatID</u>	<u>Text</u>	The Value-added Tax ID of the organization or person.
<u>weight</u>	<u>QuantitativeValue</u>	The weight of the product or person.
<u>workLocation</u>	<u>ContactPoint</u> or <u>Place</u>	A contact location for a person's place of work.
<u>worksFor</u>	<u>Organization</u>	Organizations that the person works for.

1.5 Schema.org entity descriptions: PostalAddress

Property	Expected Type	Description
Properties from PostalAddress		
addressCountry	Country or Text	The country. For example, USA. You can also provide the two-letter ISO 3166-1 alpha-2 country code .
addressLocality	Text	The locality. For example, Mountain View.
addressRegion	Text	The region. For example, CA.
postOfficeBoxNumber	Text	The post office box number for PO box addresses.
postalCode	Text	The postal code. For example, 94043.
streetAddress	Text	The street address. For example, 1600 Amphitheatre Pkwy.

1.6 Schema.org entity descriptions: Product

Property	Expected Type	Description
Properties from Product		
additionalProperty	PropertyValue	<p>A property–value pair representing an additional characteristics of the entity, e.g. a product feature or another characteristic for which there is no matching property in schema.org.</p> <p>Note: Publishers should be aware that applications designed to use specific schema.org properties (e.g. http://schema.org/width, http://schema.org/color, http://schema.org/gtin13, ...) will typically expect such data to be provided using those properties, rather than using the generic property/value mechanism.</p>
aggregateRating	AggregateRating	The overall rating, based on a collection of reviews or ratings, of the item.

Property	Expected Type	Description
<u>audience</u>	<u>Audience</u>	An intended audience, i.e. a group for whom something was created. Supersedes <u>serviceAudience</u> .
<u>award</u>	<u>Text</u>	An award won by or for this item. Supersedes <u>awards</u> .
<u>brand</u>	<u>Brand</u> or <u>Organization</u>	The brand(s) associated with a product or service, or the brand(s) maintained by an organization or business person.
<u>category</u>	<u>Text</u> or <u>Thing</u>	A category for the item. Greater signs or slashes can be used to informally indicate a category hierarchy.
<u>color</u>	<u>Text</u>	The color of the product.
<u>depth</u>	<u>Distance</u> or <u>QuantitativeValue</u>	The depth of the item.
<u>gtin12</u>	<u>Text</u>	The <u>GTIN-12</u> code of the product, or the product to which the offer refers. The GTIN-12 is the 12-digit GS1 Identification Key composed of a U.P.C. Company Prefix, Item Reference, and Check Digit used to identify trade items. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin13</u>	<u>Text</u>	The <u>GTIN-13</u> code of the product, or the product to which the offer refers. This is equivalent to 13-digit ISBN codes and EAN UCC-13. Former 12-digit UPC codes can be converted into a GTIN-13 code by simply adding a preceeding zero. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin14</u>	<u>Text</u>	The <u>GTIN-14</u> code of the product, or the product to which the offer refers. See <u>GS1 GTIN Summary</u> for more details.
<u>gtin8</u>	<u>Text</u>	The <u>GTIN-8</u> code of the product, or the product to which the offer refers. This code is also known as EAN/UCC-8 or 8-digit EAN. See <u>GS1 GTIN Summary</u> for more details.

Property	Expected Type	Description
<u>height</u>	<u>Distance</u> or <u>QuantitativeValue</u>	The height of the item.
<u>isAccessoryOrSparePartFor</u>	<u>Product</u>	A pointer to another product (or multiple products) for which this product is an accessory or spare part.
<u>isConsumableFor</u>	<u>Product</u>	A pointer to another product (or multiple products) for which this product is a consumable.
<u>isRelatedTo</u>	<u>Product</u> or <u>Service</u>	A pointer to another, somehow related product (or multiple products).
<u>isSimilarTo</u>	<u>Product</u> or <u>Service</u>	A pointer to another, functionally similar product (or multiple products).
<u>itemCondition</u>	<u>OfferItemCondition</u>	A predefined value from OfferItemCondition or a textual description of the condition of the product or service, or the products or services included in the offer.
<u>logo</u>	<u>ImageObject</u> or <u>URL</u>	An associated logo.
<u>manufacturer</u>	<u>Organization</u>	The manufacturer of the product.
<u>model</u>	<u>ProductModel</u> or <u>Text</u>	The model of the product. Use with the URL of a ProductModel or a textual representation of the model identifier. The URL of the ProductModel can be from an external source. It is recommended to additionally provide strong product identifiers via the gtin8/gtin13/gtin14 and mpn properties.
<u>mpn</u>	<u>Text</u>	The Manufacturer Part Number (MPN) of the product, or the product to which the offer refers.
<u>offers</u>	<u>Offer</u>	An offer to provide this item—for example, an offer to sell a product, rent the DVD of a movie, perform a service, or give away tickets to an event.

Property	Expected Type	Description
<u>productID</u>	<u>Text</u>	The product identifier, such as ISBN. For example: meta itemprop="productID" content="isbn:123-456-789".
<u>productionDate</u>	<u>Date</u>	The date of production of the item, e.g. vehicle.
<u>purchaseDate</u>	<u>Date</u>	The date the item e.g. vehicle was purchased by the current owner.
<u>releaseDate</u>	<u>Date</u>	The release date of a product or product model. This can be used to distinguish the exact variant of a product.
<u>review</u>	<u>Review</u>	A review of the item. Supersedes <u>reviews</u> .
<u>sku</u>	<u>Text</u>	The Stock Keeping Unit (SKU), i.e. a merchant-specific identifier for a product or service, or the product to which the offer refers.
<u>weight</u>	<u>QuantitativeValue</u>	The weight of the product or person.
<u>width</u>	<u>Distance</u> or <u>QuantitativeValue</u>	The width of the item.

1.7 Schema.org entity descriptions: PriceSpecification

Property	Expected Type	Description
Properties from <u>PriceSpecification</u>		
<u>eligibleQuantity</u>	<u>QuantitativeValue</u>	The interval and unit of measurement of ordering quantities for which the offer or price specification is valid. This allows e.g. specifying that a certain freight charge is valid only for a certain quantity.

Property	Expected Type	Description
<u>eligibleTransactionVolume</u>	<u>PriceSpecification</u>	The transaction volume, in a monetary unit, for which the offer or price specification is valid, e.g. for indicating a minimal purchasing volume, to express free shipping above a certain order volume, or to limit the acceptance of credit cards to purchases to a certain minimal amount.
<u>maxPrice</u>	<u>Number</u>	The highest price if the price is a range.
<u>minPrice</u>	<u>Number</u>	The lowest price if the price is a range.
<u>price</u>	<u>Number</u> or <u>Text</u>	<p>The offer price of a product, or of a price component when attached to PriceSpecification and its subtypes.</p> <p>Usage guidelines:</p> <ul style="list-style-type: none"> • Use the <u>priceCurrency</u> property (with <u>ISO 4217 codes</u> e.g. "USD") instead of including <u>ambiguous symbols</u> such as '\$' in the value. • Use '.' (Unicode 'FULL STOP' (U+002E)) rather than ',' to indicate a decimal point. Avoid using these symbols as a readability separator. • Note that both <u>RDFa</u> and Microdata syntax allow the use of a "content=" attribute for publishing simple machine-readable values alongside more human-friendly formatting.

Property	Expected Type	Description
		<ul style="list-style-type: none"> Use values from 0123456789 (Unicode 'DIGIT ZERO' (U+0030) to 'DIGIT NINE' (U+0039)) rather than superficially similar Unicode symbols.
<u>priceCurrency</u>	<u>Text</u>	The currency (in 3-letter ISO 4217 format) of the price or a price component, when attached to <u>PriceSpecification</u> and its subtypes.
<u>validFrom</u>	<u>DateTime</u>	The date when the item becomes valid.
<u>validThrough</u>	<u>DateTime</u>	The date after when the item is not valid. For example the end of an offer, salary period, or a period of opening hours.
<u>valueAddedTaxIncluded</u>	<u>Boolean</u>	Specifies whether the applicable value-added tax (VAT) is included in the price specification or not.
Properties from <u>Thing</u>		
<u>additionalType</u>	<u>URL</u>	<p>An additional type for the item, typically used for adding more specific types from external vocabularies in microdata syntax.</p> <p>This is a relationship between something and a class that the thing is in. In RDFa syntax, it is better to use the native RDFa syntax – the 'typeof' attribute – for multiple types. Schema.org tools may have only</p>

Property	Expected Type	Description
		weaker understanding of extra types, in particular those defined externally.
<u>alternateName</u>	<u>Text</u>	An alias for the item.
<u>description</u>	<u>Text</u>	A description of the item.
<u>disambiguatingDescription</u>	<u>Text</u>	A sub property of description. A short description of the item used to disambiguate from other, similar items. Information from other properties (in particular, name) may be necessary for the description to be useful for disambiguation.
<u>identifier</u>	<u>PropertyValue</u> or <u>Text</u> or <u>URL</u>	The identifier property represents any kind of identifier for any kind of <u>Thing</u> , such as ISBNs, GTIN codes, UUIDs etc. Schema.org provides dedicated properties for representing many of these, either as textual strings or as URL (URI) links. See <u>background notes</u> for more details.
<u>image</u>	<u>ImageObject</u> or <u>URL</u>	An image of the item. This can be a <u>URL</u> or a fully described <u>ImageObject</u> .
<u>mainEntityOfPage</u>	<u>CreativeWork</u> or <u>URL</u>	Indicates a page (or other CreativeWork) for which this thing is the main entity being described. See <u>background notes</u> for details. Inverse property: <u>mainEntity</u> .
<u>name</u>	<u>Text</u>	The name of the item.

Property	Expected Type	Description
<u>potentialAction</u>	<u>Action</u>	Indicates a potential Action, which describes an idealized action in which this thing would play an 'object' role.
<u>sameAs</u>	<u>URL</u>	URL of a reference Web page that unambiguously indicates the item's identity. E.g. the URL of the item's Wikipedia page, Wikidata entry, or official website.
<u>url</u>	<u>URL</u>	URL of the item.

1.8 Schema.org entity descriptions: QuantitativeValue

Property	Expected Type	Description
Properties from <u>QuantitativeValue</u>		
<u>additionalProperty</u>	<u>PropertyValue</u>	<p>A property–value pair representing an additional characteristics of the entity, e.g. a product feature or another characteristic for which there is no matching property in schema.org.</p> <p>Note: Publishers should be aware that applications designed to use specific schema.org properties (e.g. http://schema.org/width, http://schema.org/color, http://schema.org/gtin13, ...) will typically expect such data to be provided using those properties, rather than using the generic property/value mechanism.</p>
<u>maxValue</u>	<u>Number</u>	The upper value of some characteristic or property.
<u>minValue</u>	<u>Number</u>	The lower value of some characteristic or property.
<u>unitCode</u>	<u>Text</u> or <u>URL</u>	The unit of measurement given using the UN/CEFACT Common Code (3 characters) or a URL. Other codes than the UN/CEFACT Common Code may be used with a prefix followed by a colon.

Property	Expected Type	Description
<u>unitText</u>	<u>Text</u>	A string or text indicating the unit of measurement. Useful if you cannot provide a standard unit code for <u>unitCode</u> .
<u>value</u>	<u>Boolean</u> or <u>Number</u> or <u>StructuredValue</u> or <u>Text</u>	The value of the quantitative value or property value node. <ul style="list-style-type: none"> For <u>QuantitativeValue</u> and <u>MonetaryAmount</u>, the recommended type for values is 'Number'. For <u>PropertyValue</u>, it can be 'Text;', 'Number', 'Boolean', or 'StructuredValue'.
<u>valueReference</u>	<u>Enumeration</u> or <u>PropertyValue</u> or <u>QualitativeValue</u> or <u>QuantitativeValue</u> or <u>StructuredValue</u>	A pointer to a secondary value that provides additional information on the original value, e.g. a reference temperature.

1.9 Schema.org entity descriptions: SoftwareApplication

Property	Expected Type	Description
Properties from <u>SoftwareApplication</u>		
<u>applicationCategory</u>	<u>Text</u> or <u>URL</u>	Type of software application, e.g. 'Game, Multimedia'.
<u>applicationSubCategory</u>	<u>Text</u> or <u>URL</u>	Subcategory of the application, e.g. 'Arcade Game'.
<u>applicationSuite</u>	<u>Text</u>	The name of the application suite to which the application belongs (e.g. Excel belongs to Office).
<u>availableOnDevice</u>	<u>Text</u>	Device required to run the application. Used in cases where a specific make/model is required to run the application. Supersedes <u>device</u> .

Property	Expected Type	Description
<u>countriesNotSupported</u>	<u>Text</u>	Countries for which the application is not supported. You can also provide the two-letter ISO 3166-1 alpha-2 country code.
<u>countriesSupported</u>	<u>Text</u>	Countries for which the application is supported. You can also provide the two-letter ISO 3166-1 alpha-2 country code.
<u>downloadUrl</u>	<u>URL</u>	If the file can be downloaded, URL to download the binary.
<u>featureList</u>	<u>Text</u> or <u>URL</u>	Features or modules provided by this application (and possibly required by other applications).
<u>fileSize</u>	<u>Text</u>	Size of the application / package (e.g. 18MB). In the absence of a unit (MB, KB etc.), KB will be assumed.
<u>installUrl</u>	<u>URL</u>	URL at which the app may be installed, if different from the URL of the item.
<u>memoryRequirements</u>	<u>Text</u> or <u>URL</u>	Minimum memory requirements.
<u>operatingSystem</u>	<u>Text</u>	Operating systems supported (Windows 7, OSX 10.6, Android 1.6).
<u>permissions</u>	<u>Text</u>	Permission(s) required to run the app (for example, a mobile app may require full internet access or may run only on wifi).
<u>processorRequirements</u>	<u>Text</u>	Processor architecture required to run the application (e.g. IA64).
<u>releaseNotes</u>	<u>Text</u> or <u>URL</u>	Description of what changed in this version.
<u>screenshot</u>	<u>ImageObject</u> or <u>URL</u>	A link to a screenshot image of the app.
<u>softwareAddOn</u>	<u>SoftwareApplication</u>	Additional content for a software application.
<u>softwareHelp</u>	<u>CreativeWork</u>	Software application help.

Property	Expected Type	Description
<u>softwareRequirements</u>	<u>Text</u> or <u>URL</u>	Component dependency requirements for application. This includes runtime environments and shared libraries that are not included in the application distribution package, but required to run the application (Examples: DirectX, Java or .NET runtime). Supersedes <u>requirements</u> .
<u>softwareVersion</u>	<u>Text</u>	Version of the software instance.
<u>storageRequirements</u>	<u>Text</u> or <u>URL</u>	Storage requirements (free space required).
<u>supportingData</u>	<u>DataFeed</u>	Supporting data for a SoftwareApplication.
Properties from <u>CreativeWork</u>		
<u>about</u>	<u>Thing</u>	The subject matter of the content. Inverse property: <u>subjectOf</u> .
<u>accessMode</u>	<u>Text</u>	The human sensory perceptual system or cognitive faculty through which a person may process or perceive information. Expected values include: auditory, tactile, textual, visual, colorDependent, chartOnVisual, chemOnVisual, diagramOnVisual, mathOnVisual, musicOnVisual, textOnVisual.
<u>accessModeSufficient</u>	<u>Text</u>	A list of single or combined accessModes that are sufficient to understand all the intellectual content of a resource. Expected values include: auditory, tactile, textual, visual.
<u>accessibilityAPI</u>	<u>Text</u>	Indicates that the resource is compatible with the referenced accessibility API (<u>WebSchemas wiki lists possible values</u>).
<u>accessibilityControl</u>	<u>Text</u>	Identifies input methods that are sufficient to fully control the described resource (<u>WebSchemas wiki lists possible values</u>).

Property	Expected Type	Description
<u>accessibilityFeature</u>	<u>Text</u>	Content features of the resource, such as accessible media, alternatives and supported enhancements for accessibility (<u>WebSchemas wiki lists possible values</u>).
<u>accessibilityHazard</u>	<u>Text</u>	A characteristic of the described resource that is physiologically dangerous to some users. Related to WCAG 2.0 guideline 2.3 (<u>WebSchemas wiki lists possible values</u>).
<u>accessibilitySummary</u>	<u>Text</u>	A human-readable summary of specific accessibility features or deficiencies, consistent with the other accessibility metadata but expressing subtleties such as "short descriptions are present but long descriptions will be needed for non-visual users" or "short descriptions are present and no long descriptions are needed."
<u>accountablePerson</u>	<u>Person</u>	Specifies the Person that is legally accountable for the CreativeWork.
<u>aggregateRating</u>	<u>AggregateRating</u>	The overall rating, based on a collection of reviews or ratings, of the item.
<u>alternativeHeadline</u>	<u>Text</u>	A secondary title of the CreativeWork.
<u>associatedMedia</u>	<u>MediaObject</u>	A media object that encodes this CreativeWork. This property is a synonym for encoding.
<u>audience</u>	<u>Audience</u>	An intended audience, i.e. a group for whom something was created. Supersedes <u>serviceAudience</u> .
<u>audio</u>	<u>AudioObject</u>	An embedded audio object.
<u>author</u>	<u>Organization</u> or <u>Person</u>	The author of this content or rating. Please note that author is special in that HTML 5 provides a special mechanism for indicating authorship via the rel tag. That is equivalent to this and may be used interchangeably.

Property	Expected Type	Description
<u>award</u>	<u>Text</u>	An award won by or for this item. Supersedes <u>awards</u> .
<u>character</u>	<u>Person</u>	Fictional person connected with a creative work.
<u>citation</u>	<u>CreativeWork</u> or <u>Text</u>	A citation or reference to another creative work, such as another publication, web page, scholarly article, etc.
<u>comment</u>	<u>Comment</u>	Comments, typically from users.
<u>commentCount</u>	<u>Integer</u>	The number of comments this CreativeWork (e.g. Article, Question or Answer) has received. This is most applicable to works published in Web sites with commenting system; additional comments may exist elsewhere.
<u>contentLocation</u>	<u>Place</u>	The location depicted or described in the content. For example, the location in a photograph or painting.
<u>contentRating</u>	<u>Text</u>	Official rating of a piece of content—for example, 'MPAA PG-13'.
<u>contentReferenceTime</u>	<u>DateTime</u>	The specific time described by a creative work, for works (e.g. articles, video objects etc.) that emphasise a particular moment within an Event.
<u>contributor</u>	<u>Organization</u> or <u>Person</u>	A secondary contributor to the CreativeWork or Event.
<u>copyrightHolder</u>	<u>Organization</u> or <u>Person</u>	The party holding the legal copyright to the CreativeWork.
<u>copyrightYear</u>	<u>Number</u>	The year during which the claimed copyright for the CreativeWork was first asserted.
<u>creator</u>	<u>Organization</u> or <u>Person</u>	The creator/author of this CreativeWork. This is the same as the Author property for CreativeWork.

Property	Expected Type	Description
<u>dateCreated</u>	<u>Date</u> or <u>DateTime</u>	The date on which the CreativeWork was created or the item was added to a DataFeed.
<u>dateModified</u>	<u>Date</u> or <u>DateTime</u>	The date on which the CreativeWork was most recently modified or when the item's entry was modified within a DataFeed.
<u>datePublished</u>	<u>Date</u>	Date of first broadcast/publication.
<u>discussionUrl</u>	<u>URL</u>	A link to the page containing the comments of the CreativeWork.
<u>editor</u>	<u>Person</u>	Specifies the Person who edited the CreativeWork.
<u>educationalAlignment</u>	<u>AlignmentObject</u>	An alignment to an established educational framework.
<u>educationalUse</u>	<u>Text</u>	The purpose of a work in the context of education; for example, 'assignment', 'group work'.
<u>encoding</u>	<u>MediaObject</u>	A media object that encodes this CreativeWork. This property is a synonym for associatedMedia. Supersedes <u>encodings</u> .
<u>exampleOfWork</u>	<u>CreativeWork</u>	A creative work that this work is an example/instance/realization/derivation of. Inverse property: <u>workExample</u> .
<u>expires</u>	<u>Date</u>	Date the content expires and is no longer useful or available. For example a <u>VideoObject</u> or <u>NewsArticle</u> whose availability or relevance is time-limited, or a <u>ClaimReview</u> fact check whose publisher wants to indicate that it may no longer be relevant (or helpful to highlight) after some date.
<u>fileFormat</u>	<u>Text</u> or <u>URL</u>	Media type, typically MIME format (see <u>IANA site</u>) of the content e.g. application/zip of a SoftwareApplication

Property	Expected Type	Description
		binary. In cases where a CreativeWork has several media type representations, 'encoding' can be used to indicate each MediaObject alongside particular fileFormat information. Unregistered or niche file formats can be indicated instead via the most appropriate URL, e.g. defining Web page or a Wikipedia entry.
<u>funder</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports (sponsors) something through some kind of financial contribution.
<u>genre</u>	<u>Text</u> or <u>URL</u>	Genre of the creative work, broadcast channel or group.
<u>hasPart</u>	<u>CreativeWork</u>	Indicates a CreativeWork that is (in some sense) a part of this CreativeWork. Inverse property: <u>isPartOf</u> .
<u>headline</u>	<u>Text</u>	Headline of the article.
<u>inLanguage</u>	<u>Language</u> or <u>Text</u>	The language of the content or performance or used in an action. Please use one of the language codes from the <u>IETF BCP 47 standard</u> . See also <u>availableLanguage</u> . Supersedes <u>language</u> .
<u>interactionStatistic</u>	<u>InteractionCounter</u>	The number of interactions for the CreativeWork using the WebSite or SoftwareApplication. The most specific child type of InteractionCounter should be used. Supersedes <u>interactionCount</u> .
<u>interactivityType</u>	<u>Text</u>	The predominant mode of learning supported by the learning resource. Acceptable values are 'active', 'expositive', or 'mixed'.
<u>isAccessibleForFree</u>	<u>Boolean</u>	A flag to signal that the item, event, or place is accessible for free. Supersedes <u>free</u> .

Property	Expected Type	Description
<u>isBasedOn</u>	<u>CreativeWork</u> or <u>Product</u> or <u>URL</u>	A resource that was used in the creation of this resource. This term can be repeated for multiple sources. For example, http://example.com/great-multiplication-intro.html . Supersedes <u>isBasedOnUrl</u> .
<u>isFamilyFriendly</u>	<u>Boolean</u>	Indicates whether this content is family friendly.
<u>isPartOf</u>	<u>CreativeWork</u>	Indicates a CreativeWork that this CreativeWork is (in some sense) part of. Inverse property: <u>hasPart</u> .
<u>keywords</u>	<u>Text</u>	Keywords or tags used to describe this content. Multiple entries in a keywords list are typically delimited by commas.
<u>learningResourceType</u>	<u>Text</u>	The predominant type or kind characterizing the learning resource. For example, 'presentation', 'handout'.
<u>license</u>	<u>CreativeWork</u> or <u>URL</u>	A license document that applies to this content, typically indicated by URL.
<u>locationCreated</u>	<u>Place</u>	The location where the CreativeWork was created, which may not be the same as the location depicted in the CreativeWork.
<u>mainEntity</u>	<u>Thing</u>	Indicates the primary entity described in some page or other CreativeWork. Inverse property: <u>mainEntityOfPage</u> .
<u>material</u>	<u>Product</u> or <u>Text</u> or <u>URL</u>	A material that something is made from, e.g. leather, wool, cotton, paper.
<u>mentions</u>	<u>Thing</u>	Indicates that the CreativeWork contains a reference to, but is not necessarily about a concept.
<u>offers</u>	<u>Offer</u>	An offer to provide this item—for example, an offer to sell a product, rent the DVD of a movie, perform a service, or give away tickets to an event.

Property	Expected Type	Description
<u>position</u>	<u>Integer</u> or <u>Text</u>	The position of an item in a series or sequence of items.
<u>producer</u>	<u>Organization</u> or <u>Person</u>	The person or organization who produced the work (e.g. music album, movie, tv/radio series etc.).
<u>provider</u>	<u>Organization</u> or <u>Person</u>	The service provider, service operator, or service performer; the goods producer. Another party (a seller) may offer those services or goods on behalf of the provider. A provider may also serve as the seller. Supersedes <u>carrier</u> .
<u>publication</u>	<u>PublicationEvent</u>	A publication event associated with the item.
<u>publisher</u>	<u>Organization</u> or <u>Person</u>	The publisher of the creative work.
<u>publisherImprint</u>	<u>Organization</u>	The publishing division which published the comic.
<u>publishingPrinciples</u>	<u>CreativeWork</u> or <u>URL</u>	<p>The publishingPrinciples property indicates (typically via <u>URL</u>) a document describing the editorial principles of an <u>Organization</u> (or individual e.g. a <u>Person</u> writing a blog) that relate to their activities as a publisher, e.g. ethics or diversity policies. When applied to a <u>CreativeWork</u> (e.g. <u>NewsArticle</u>) the principles are those of the party primarily responsible for the creation of the <u>CreativeWork</u>.</p> <p>While such policies are most typically expressed in natural language, sometimes related information (e.g. indicating a <u>funder</u>) can be expressed using schema.org terminology.</p>
<u>recordedAt</u>	<u>Event</u>	<p>The Event where the CreativeWork was recorded. The CreativeWork may capture all or part of the event.</p> <p>Inverse property: <u>recordedIn</u>.</p>

Property	Expected Type	Description
<u>releasedEvent</u>	<u>PublicationEvent</u>	The place and time the release was issued, expressed as a PublicationEvent.
<u>review</u>	<u>Review</u>	A review of the item. Supersedes <u>reviews</u> .
<u>schemaVersion</u>	<u>Text</u> or <u>URL</u>	Indicates (by URL or string) a particular version of a schema used in some CreativeWork. For example, a document could declare a schemaVersion using an URL such as http://schema.org/version/2.0/ if precise indication of schema version was required by some application.
<u>sourceOrganization</u>	<u>Organization</u>	The Organization on whose behalf the creator was working.
<u>spatialCoverage</u>	<u>Place</u>	The spatialCoverage of a CreativeWork indicates the place(s) which are the focus of the content. It is a subproperty of contentLocation intended primarily for more technical and detailed materials. For example with a Dataset, it indicates areas that the dataset describes: a dataset of New York weather would have spatialCoverage which was the place: the state of New York. Supersedes <u>spatial</u> .
<u>sponsor</u>	<u>Organization</u> or <u>Person</u>	A person or organization that supports a thing through a pledge, promise, or financial contribution. e.g. a sponsor of a Medical Study or a corporate sponsor of an event.
<u>temporalCoverage</u>	<u>DateTime</u> or <u>Text</u> or <u>URL</u>	The temporalCoverage of a CreativeWork indicates the period that the content applies to, i.e. that it describes, either as a DateTime or as a textual string indicating a time period in <u>ISO 8601 time interval format</u> . In the case of a Dataset it will typically indicate the relevant time period in a precise notation (e.g. for a 2011 census dataset, the year 2011 would be written "2011/2012"). Other forms of content e.g. ScholarlyArticle,

Property	Expected Type	Description
		Book, TVSeries or TVEpisode may indicate their temporalCoverage in broader terms – textually or via well-known URL. Written works such as books may sometimes have precise temporal coverage too, e.g. a work set in 1939 – 1945 can be indicated in ISO 8601 interval format format via "1939/1945". Supersedes datasetTimeInterval , temporal .
text	Text	The textual content of this CreativeWork.
thumbnailUrl	URL	A thumbnail image relevant to the Thing.
timeRequired	Duration	Approximate or typical time it takes to work with or through this learning resource for the typical intended target audience, e.g. 'P30M', 'P1H25M'.
translationOfWork	CreativeWork	The work that this work has been translated from. e.g. 物种起源 is a translationOf “On the Origin of Species” Inverse property: workTranslation .
translator	Organization or Person	Organization or person who adapts a creative work to different languages, regional differences and technical requirements of a target market, or that translates during some event.
typicalAgeRange	Text	The typical expected age range, e.g. '7–9', '11–'.
version	Number or Text	The version of the CreativeWork embodied by a specified resource.
video	VideoObject	An embedded video object.
workExample	CreativeWork	Example/instance/realization/derivation of the concept of this creative work. eg. The paperback edition, first edition, or eBook. Inverse property: exampleOfWork .

Property	Expected Type	Description
<u>workTranslation</u>	<u>CreativeWork</u>	A work that is a translation of the content of this work. e.g. 西遊記 has an English workTranslation “Journey to the West”, a German workTranslation “Monkeys Pilgerfahrt” and a Vietnamese translation Tây du ký bình khảo. Inverse property: <u>translationOfWork</u> .
Properties from <u>Thing</u>		
<u>additionalType</u>	<u>URL</u>	An additional type for the item, typically used for adding more specific types from external vocabularies in microdata syntax. This is a relationship between something and a class that the thing is in. In RDFa syntax, it is better to use the native RDFa syntax – the ‘typeof’ attribute – for multiple types. Schema.org tools may have only weaker understanding of extra types, in particular those defined externally.
<u>alternateName</u>	<u>Text</u>	An alias for the item.
<u>description</u>	<u>Text</u>	A description of the item.
<u>disambiguatingDescription</u>	<u>Text</u>	A sub property of description. A short description of the item used to disambiguate from other, similar items. Information from other properties (in particular, name) may be necessary for the description to be useful for disambiguation.
<u>identifier</u>	<u>PropertyValue</u> or <u>Text</u> or <u>URL</u>	The identifier property represents any kind of identifier for any kind of <u>Thing</u> , such as ISBNs, GTIN codes, UUIDs etc. Schema.org provides dedicated properties for representing many of these, either as textual strings or as URL (URI) links. See <u>background notes</u> for more details.
<u>image</u>	<u>ImageObject</u> or <u>URL</u>	An image of the item. This can be a <u>URL</u> or a fully described <u>ImageObject</u> .

Property	Expected Type	Description
<u>mainEntityOfPage</u>	<u>CreativeWork</u> or <u>URL</u>	Indicates a page (or other CreativeWork) for which this thing is the main entity being described. See <u>background notes</u> for details. Inverse property: <u>mainEntity</u> .
<u>name</u>	<u>Text</u>	The name of the item.
<u>potentialAction</u>	<u>Action</u>	Indicates a potential Action, which describes an idealized action in which this thing would play an 'object' role.
<u>sameAs</u>	<u>URL</u>	URL of a reference Web page that unambiguously indicates the item's identity. E.g. the URL of the item's Wikipedia page, Wikidata entry, or official website.
<u>subjectOf</u>	<u>CreativeWork</u> or <u>Event</u>	A CreativeWork or Event about this Thing.. Inverse property: <u>about</u> .
<u>url</u>	<u>URL</u>	URL of the item.

Canonical URL: <http://schema.org/SoftwareApplication>

1.10 Schema.org entity descriptions: Vehicle

Property	Expected Type	Description
Properties from Vehicle		
cargoVolume	QuantitativeValue	<p>The available volume for cargo or luggage. For automobiles, this is usually the trunk volume.</p> <p>Typical unit code(s): LTR for liters, FTQ for cubic foot/feet</p> <p>Note: You can use minValue and maxValue to indicate ranges.</p>
dateVehicleFirstRegistered	Date	The date of the first registration of the vehicle with the respective public authorities.
driveWheelConfiguration	DriveWheelConfigurationValue or Text	The drive wheel configuration, i.e. which roadwheels will receive torque from the vehicle's engine via the drivetrain.
fuelConsumption	QuantitativeValue	<p>The amount of fuel consumed for traveling a particular distance or temporal duration with the given vehicle (e.g. litres per 100 km).</p> <ul style="list-style-type: none"> Note 1: There are unfortunately no standard unit codes for liters per 100 km. Use unitText to indicate the unit of measurement, e.g. L/100 km. Note 2: There are two ways of indicating the fuel consumption, fuelConsumption (e.g. 8 liters per 100 km) and fuelEfficiency (e.g. 30 miles per gallon). They are reciprocal. Note 3: Often, the absolute value is useful only when related to driving speed ("at 80 km/h") or usage pattern ("city traffic"). You can use valueReference to link the value for the fuel consumption to another value.

Property	Expected Type	Description
<u>fuelEfficiency</u>	<u>QuantitativeValue</u>	<p>The distance traveled per unit of fuel used; most commonly miles per gallon (mpg) or kilometers per liter (km/L).</p> <ul style="list-style-type: none"> Note 1: There are unfortunately no standard unit codes for miles per gallon or kilometers per liter. Use <u>unitText</u> to indicate the unit of measurement, e.g. mpg or km/L. Note 2: There are two ways of indicating the fuel consumption, <u>fuelConsumption</u> (e.g. 8 liters per 100 km) and <u>fuelEfficiency</u> (e.g. 30 miles per gallon). They are reciprocal. Note 3: Often, the absolute value is useful only when related to driving speed ("at 80 km/h") or usage pattern ("city traffic"). You can use <u>valueReference</u> to link the value for the fuel economy to another value.
<u>fuelType</u>	<u>QualitativeValue</u> or <u>Text</u> or <u>URL</u>	The type of fuel suitable for the engine or engines of the vehicle. If the vehicle has only one engine, this property can be attached directly to the vehicle.
<u>knownVehicleDamages</u>	<u>Text</u>	A textual description of known damages, both repaired and unrepaired.
<u>mileageFromOdometer</u>	<u>QuantitativeValue</u>	<p>The total distance travelled by the particular vehicle since its initial production, as read from its odometer.</p> <p>Typical unit code(s): KMT for kilometers, SMI for statute miles</p>
<u>numberOfAirbags</u>	<u>Number</u> or <u>Text</u>	The number or type of airbags in the vehicle.
<u>numberOfAxles</u>	<u>Number</u> or <u>QuantitativeValue</u>	<p>The number of axles.</p> <p>Typical unit code(s): C62</p>
<u>numberOfDoors</u>	<u>Number</u> or <u>QuantitativeValue</u>	<p>The number of doors.</p> <p>Typical unit code(s): C62</p>

Property	Expected Type	Description
<u>numberOfForwardGears</u>	<u>Number</u> or <u>QuantitativeValue</u>	The total number of forward gears available for the transmission system of the vehicle. Typical unit code(s): C62
<u>numberOfPreviousOwners</u>	<u>Number</u> or <u>QuantitativeValue</u>	The number of owners of the vehicle, including the current one. Typical unit code(s): C62
<u>productionDate</u>	<u>Date</u>	The date of production of the item, e.g. vehicle.
<u>purchaseDate</u>	<u>Date</u>	The date the item e.g. vehicle was purchased by the current owner.
<u>steeringPosition</u>	<u>SteeringPositionValue</u>	The position of the steering wheel or similar device (mostly for cars).
<u>vehicleConfiguration</u>	<u>Text</u>	A short text indicating the configuration of the vehicle, e.g. '5dr hatchback ST 2.5 MT 225 hp' or 'limited edition'.
<u>vehicleEngine</u>	<u>EngineSpecification</u>	Information about the engine or engines of the vehicle.
<u>vehicleIdentificationNumber</u>	<u>Text</u>	The Vehicle Identification Number (VIN) is a unique serial number used by the automotive industry to identify individual motor vehicles.
<u>vehicleInteriorColor</u>	<u>Text</u>	The color or color combination of the interior of the vehicle.
<u>vehicleInteriorType</u>	<u>Text</u>	The type or material of the interior of the vehicle (e.g. synthetic fabric, leather, wood, etc.). While most interior types are characterized by the material used, an interior type can also be based on vehicle usage or target audience.
<u>vehicleModelDate</u>	<u>Date</u>	The release date of a vehicle model (often used to differentiate versions of the same make and model).
<u>vehicleSeatingCapacity</u>	<u>Number</u> or <u>QuantitativeValue</u>	The number of passengers that can be seated in the vehicle, both in terms of the

Property	Expected Type	Description
		physical space available, and in terms of limitations set by law. Typical unit code(s): C62 for persons.
<u>vehicleSpecialUsage</u>	<u>Text</u>	Indicates whether the vehicle has been used for special purposes, like commercial rental, driving school, or as a taxi. The legislation in many countries requires this information to be revealed when offering a car for sale.
<u>vehicleTransmission</u>	<u>QualitativeValue</u> or <u>Text</u> or <u>URL</u>	The type of component used for transmitting the power from a rotating power source to the wheels or other relevant component(s) ("gearbox" for cars).