When creating Rule instances, please use the 'drl' prefix by default. Utilize it as follows: 'drk:' http://w3id.org/drk.

DONOT use of the '@prefix ex: http://example.com/' convention in your instances to maintain consistency and comply with external requirements for prefix usage.

For every property within the ODRL namespace, it is imperative to ensure accurate and consistent usage by thoroughly considering its ontology.

For using classes pleas carefully consider class properties and ontology of each property. Generate an ODRL Rule with the following details:

Guidelines for Using the ODRL Rule Class:

The Rule class is the parent of the Permission, Prohibition, and Duty classes. The Rule class represents the common characteristics of these three classes.

Guidelines for generating Rules:

- *A Rule MUST have one action property value of type Action see Guidelines for Using the ODRL action for creating type Action.*

- *The ODRL Set Class is the central container for diverse rule combinations. It serves as the primary subject for all rules within its scope, ensuring comprehensive and cohesive rule management.*

- *A Rule MUST have one uid property value of type IRI ^^xsd:anyURI to identify the Rule. Look bellow example case. When creating rules, please adhere to the following naming convention: drk:DRK_0000001 - Naming convention for the first rule.*

drk:DRK_0000002 - Naming convention for the second rule.

drk:DRK_0000003 - Naming convention for the third rule.

Increment the number for each new rule you create.

```
@prefix odrl: <http://www.w3.org/ns/odrl/2/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

drk:DRK_0000001 a odrl:Set;
    odrl:uid "urn:uuid:PrintRulenameHere"^^xsd:anyURI;
   dcterms:description "short description of rule"^^xsd:string ;
    dct:title "rule title "^^xsd:string ;
```

Guidelines for Using the ODRL Permission Class:

A Permission MUST have one 'target' property value of type Asset.

A Permission MAY have none or one assigner and assignee property values of type Party.

Not that assigner and assignee property must not have same value.

A Permission MAY have none, one, or more 'duty' property values of type Duty class.

Guidelines for Using the ODRL Prohibition Class:

A Prohibition disallows an action, with all refinements satisfied, to be exercised on an Asset if all constraints are satisfied. If the Prohibition has been infringed by the action being exercised, then all the remedies MUST be fulfilled to set the state of the Prohibition to not infringed use Guidelines for Using the ODRL action property.

- *Prohibition MUST have one target property value of type Asset.*
- *A Prohibition MAY have none or one assigner and/or assignee property values of type Party.*

Guidelines for Using the ODRL Duty Class:

A Duty MAY have none or one target property values of type Asset to indicate the Asset that is the primary subject to which the Duty.

A Duty MAY have none or one assigner and assignee property values of type Party.

Guidelines for Using the ODRL action property:

An Action class indicates an operation that can be exercised on an Asset. An Action is associated with the Asset via the action property in a Rule.

Guidelines for 'action' property Usage: if 'action' property within your ODRL Rule description 'action' Property include[file:odrl:use, odrl:transfer, odrl:acceptTracking, odrl:aggregate, odrl:annotate, odrl:anonymize, odrl:archive, odrl:attribute, odrl:compensate, odrl:concurrentUse, odrl:delete, odrl:derive, odrl:digitize, odrl:display, odrl:distribute, odrl:ensureExclusivity, odrl:execute, odrl:extract, odrl:give, odrl:grantUse, odrl:include, odrl:index, odrl:inform, odrl:install, odrl:modify, odrl:move, odrl:nextPolicy, odrl:obtainConsent, odrl:play, odrl:present, odrl:print, odrl:read, odrl:reproduce, odrl:reviewPolicy, odrl:sell, odrl:stream, odrl:synchronize, odrl:textToSpeech, odrl:transform, odrl:translate, odrl:uninstall, odrl:watermark, cc:Attribution, cc:CommercialUse, cc:DerivativeWorks, cc:Distribution, cc:Notice, cc:Reproduction, cc:ShareAlike, cc:Sharing, cc:SourceCode]

set as action property value else for the 'action' property within your TTL file. ELSE If none of the standardized values align with your rule description action requirements, it is crucial to create a custom action using odrl:Action. Illustratively:

```
        Custom Action using odrl:Action Class:

        drk:policy2 permission [

      a odrl:Permission ;

       action [

          a odrl:Action ;

          " event "^^xsd:string;

       ] ;

    ] .
```

Moreover, a paradigmatic illustration of utilizing a standardized action, such as 'display', is manifested as follows:

```
    # Standardized Action

    @prefix odrl: <http://www.w3.org/ns/odrl/2/>.

    @prefix xsd: <http://www.w3.org/2001/XMLSchema#>.

    @prefix drk: <http://w3id.org/drk>.

    drk :rule1 permission [

              a Permission ;

       odrl:action display.

    ] .
```

For creating a Rule follow this example

```
@prefix odrl: <http://www.w3.org/ns/odrl/2/>.

@prefix dct: <http://purl.org/dc/terms/>.
```

```
@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.

@prefix drk: <http://w3id.org/drk#>.


# Define the Rule
drk:DRK_0000001 a odrl:Set ;

  odrl:uid "urn:uuid:DRK_0000001  "^^xsd:anyURI;

  dcterms:description "rule description"^^xsd:string ;

  dct:title "rule title"^^xsd:string .

  odrl:permission [

    a odrl:Permission ;

    odrl:action odrl:use ;

    odrl:target :AssetTemplate ; # Use this as a placeholder for the actual target asset

    odrl:constraint [

      a odrl:Constraint ;

    odrl:uid "urn:uuid:print constrinatName"^^xsd:anyURI;


      odrl:leftOperand odrl:purpose ;

      odrl:operator odrl:isA ;

      odrl:rightOperand drk:PlaceholderForApplyingRuleOnAsset

    ]

  ] .
```

The Constraint class has the following properties:

- *A Constraint MAY have none or one uid property value of type xsd:anyURI to uniquely identify the Constraint. For each constraint, if present, include the statement odrl:uid "urn:uuid:Name_of_Constraint_here"^^xsd:anyURI to specify the unique identifier associated with that particular Constraint.*
- *Every Constraint is required to include a descriptive title using the Dublin Core Metadata Element odrl:uid"Specify uid of this constraint in clear terms."^^xsd:string.*
- *A Constraint MUST have one leftOperand property value of type LeftOperand.*

- *A Constraint MUST have one operator property value of type Operator.*

- *A Constraint MUST have one rightOperand property value. Ensure that the Constraint has one rightOperand property value.*

Guidelines for leftOperand Usage:

Consider the nuanced contexts of leftOperand by specifying tailored properties for each category consider dataType.

Temporal Information (leftOperand)

Utilize properties like odrl:delayPeriod Users who have purchased an event ticket are allowed to cancel the ticket within a specific time frame. Apply odrl:delayPeriod "P3D"^^xsd:duration, allowing users a three-day window to cancel the ticket after purchase.

odrl:absoluteTemporalPositionLim item-Time Content Access: Use odrl:absoluteTemporalPosition "2023-12-31T23:59:59Z" to specify that exclusive access ends at the specified date and time.

odrl:delayPeriod given a grace period to renew before losing access. odrl:delayPeriod "P7D"^^xsd:duration, granting a seven-day grace period for subscription renewal.

odrl:absoluteTemporalPosition Pre-Release Provide pre-release access to certain content for a limited time before its official release. Set odrl:absoluteTemporalPosition to the date and time when pre-release access begins. and odrl:timeInterval constraint for defining permissions and constraints based on specific times, durations, or intervals.

Spatial Information (leftOperand) for permissions or constraints related to geographic or virtual locations Utilize bellow values of leftOperand:

odrl:absoluteSpatialPosition, odrl:relativeSpatialPosition, odrl:spatial, odrl:spatialCoordinates, and odrl:virtualLocation

Quantitative Information (leftOperand):

Use instances such as odrl:absolutePosition, odrl:absoluteSize, odrl:count, odrl:unitOfCount, and odrl:percentage to set restrictions or permissions based on counts, sizes, delays, or percentages.

Media and Content Information (leftOperand):

Manage access or use based on file formats, media types, or resolution using properties like odrl:fileFormat, odrl:media, and odrl:resolution.

Financial and Transactional Information (leftOperand):

Define permissions related to financial transactions, industries, or specific products with instances like odrl:payAmount, odrl:industry, and odrl:product.

Purpose and Context (leftOperand):

Utilize odrl:purpose and odrl:event to specify permissions based on the purpose or context of use.

Recipient and Language Information (leftOperand):

Tailor permissions based on the recipient or language using properties like odrl:recipient and odrl:language.

Device and System Information (leftOperand):

Manage access or use based on specific devices or delivery channels with properties like odrl:systemDevice and odrl:deliveryChannel.

Versioning (leftOperand):

Handle permissions or constraints related to specific versions using the odrl:version property.

Carefully select these properties within 'leftOperand' property for a precise representation aligned with varied usage contexts.

ODRL standard 'operators' are included:

Relational operator:

Equal To (eq): Definition: Indicates that a given value of leftOperand equals the rightoperand of the Constraint.

Greater Than (gt): Definition: Indicates that a given value of leftOperand is greater than the rightOperand Constraint.

Greater Than or Equal To (gteq): Definition: Indicates that a given value of leftOperand is greater than or equal to the rightOperand of the Constraint.

Less Than (lt): Definition: Indicates that a given value of leftOperand is less than the rightOperand of the Constraint.

Less Than or Equal To (lteq): Definition: Indicates that a given value is less than or equal to the rightOperand of the Constraint.

Not Equal To (neq): Definition: Indicates that a given value is not equal to the rightOperand of the Constraint.

Set-Based Operators:

Has Part (hasPart): Definition: A set-based operator indicating that a given value of leftOperand contains the rightOperand of the Constraint.

Is A (isA): Definition: A set-based operator indicating that a given value of leftOperand is an instance of the rightOperand of the Constraint.

Is All Of (isAllOf): Definition: A set-based operator indicating that a given value of leftOperand is all of the rightOperand of the Constraint.

Is Any Of (isAnyOf): Definition: A set-based operator indicating that a given value of leftOperand is any of the rightOperand of the Constraint.

Is None Of (isNoneOf): Definition: A set-based operator indicating that a given value of leftOperand is none of the rightOperand of the Constraint.

Is Part Of (isPartOf): Definition: A set-based operator indicating that a given value of leftOperand is contained by the rightOperand of the Constraint.

Logical Operators:

And Sequence (odrl:andSequence): Definition: The relation is satisfied when each of the Constraints is satisfied in the order specified.

Or (or): Definition: The relation is satisfied when at least one of the Constraints is satisfied.

And (and): Definition: The relation is satisfied when all of the Constraints are satisfied.

Exclusive One (xone): Definition: The relation is satisfied when only one, and not more, of the Constraints is satisfied.

Carefully select these properties within "operator" for a precise representation aligned with varied usage contexts.

Guidelines for ODRL rightOperand Property Constraints:

- *A Constraint MAY have none or one ordl:dataType property value for the datatype of the rightOperand/Reference. An example :dataType xsd:integer .*
- *A Constraint MAY have none or one odrl:unit property value of type IRI to set the unit used for the value of the rightOperand.*

Full Example in TTL with Constraints with unit for rightOperand:

'rightOperand' count "1200"^^xsd:integer ;

odrl:unit <http://example.org/unit/instances/kilograms> ;

odrl:dataType xsd:integer .

Date Constraint: For a date constraint in ODRL, use the odrl:dateTime leftOperand, set the rightOperand to a specific date like "2018-01-01", and explicitly mention the datatype as xsd:date. For leftOperand odrl:delayPeriod set rightOperand to "PT2H"^^xsd:duration .

Integer Constraint: When dealing with integer constraints, utilize the odrl:count leftOperand, set the rightOperand to an integer value like "1200", and explicitly define the datatype as xsd:integer.

String Constraint: For string constraints, employ the odrl:fileFormat leftOperand, set the rightOperand to a specific string like "image/jpeg", and explicitly mention the datatype as xsd:string.

Decimal Constraint: Decimal constraints involve the odrl:percentage leftOperand. Set the rightOperand to a decimal value like "99.99" and explicitly define the datatype as xsd:decimal.

odrl:uid "value print here"^^xsd:anyURI;

Refinement property constraint with an Action

- *An Action can provide additional details about its operation by including the refinement property. This refinement property should be of type Constraint, specifically referring to one or more Constraints or Logical Constraints. To fulfill this condition of refining the semantics of the Action, all Constraints referenced by the refinement property must be utilized to generate a satisfied state.*
- *An example how to use refinement property with action.*
- *When including a refinement property block in the ODRL action definition, ensure that the entire refinement structure is properly nested under the corresponding action block. For example:*

```
@prefix odrl: <http://www.w3.org/ns/odrl/2/> .
@prefix dct: <http://purl.org/dc/terms/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix drk: <http://w3id.org/drk> .
@prefix dbpedia: <http://dbpedia.org/resource/> .

drk:DRK_00000002 a odrl:Set;
    odrl:uid "urn:uuid:DRK_00000002 "^^xsd:anyURI;
   dcterms:description "rule description"^^xsd:string ;
    dct:title "rule title "^^xsd:string ;
    odrl:permission [
        a odrl:Permission ;
        odrl:target use  ;
odrl:assigner  :PartyTemplate ; # Use this as a placeholder for the actual target Party ;
       odrl:action [
           a odrl:Action ;
           odrl:rdf:value odrl:print ;
           odrl:refinement [ a odrl:Constraint ;
          odrl:uid "urn:uuid:PrintNamehear "^^xsd:anyURI;
               odrl:leftOperand odrl:version ;
               odrl:operator odrl:eq ;
               odrl:rightOperand "3"^^xsd:integer ;
               odrl:datatype xsd:integer;
              odrl:unit odrl:versionNumber .
           ]
       ]
   ] .
```

Guidelines for using remedy property:

- *The remedy property of type Prohibition is associated with instances of the Prohibition class, indicating that it defines the types of duties that should be enforced when the specified prohibitions are violated. In this context, the domain of the remedy property is the Prohibition class, and its range is the Duty class.*