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# **datacatalogtordf**

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## REFERENCE

- *datacatalogtordf.resource*
- *datacatalogtordf.relationship*
- *datacatalogtordf.catalog*
- *datacatalogtordf.catalogrecord*
- *datacatalogtordf.dataservice*
- *datacatalogtordf.dataset*
- *datacatalogtordf.dataset\_series*
- *datacatalogtordf.distribution*
- *datacatalogtordf.uri*
- *datacatalogtordf.periodoftime*
- *datacatalogtordf.location*
- *datacatalogtordf.agent*
- *datacatalogtordf.exceptions*

### 2.1 datacatalogtordf.resource

Resource module for mapping a sub-classes to rdf.

This module contains methods for mapping a sub-class objects to rdf according to the [dcat-ap-no v.2 standard](#)

Refer to sub-class for typical usage examples.

**class** datacatalogtordf.resource.Resource

Bases: [ABC](#)

An abstract class representing a dcat:Resource.

Ref: [dcat:Resource](#).

**property** access\_rights: [str](#)

A link to information about who can access the resource or an indication of its security status.

**Type**  
*URI*

**Return type**

`str`

**property conforms\_to:** `List[str]`

A list of links to established standards to which the described resource conforms.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property contactpoint:** `Contact`

Relevant contact information for the cataloged resource.

**Type**

`Contact`

**Return type**

`Contact`

**property creator:** `str`

Link to the entity responsible for producing the resource.

**Type**

`URI`

**Return type**

`str`

**property description:** `Dict[str, str]`

A free-text account of the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

`Resource`

**property has\_policy:** `str`

A link to an ODRL conformant policy expressing the rights associated with the resource.

**Type**

`URI`

**Return type**

`str`

**property identifier: `str`**

A URI uniquely identifying the resource.

**Type**

*URI*

**Return type**

`str`

**property is\_referenced\_by: `List[Resource]`**

A list of related resources, such as a publication, that references, cites, or otherwise points to the cataloged resource.

**Type**

`List[Resource]`

**Return type**

`List[Resource]`

**property keyword: `Dict[str, str]`**

A keyword or tag describing the resource. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**property landing\_page: `List[str]`**

A list of links to web pages that can be navigated to in a Web browser to gain access to the catalog, a dataset, its distributions and/or additional information.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property language: `List[str]`**

A list of links to languages of the item.

**Type**

`List[str]`

**Return type**

`List[str]`

**property license: `str`**

A link to a legal document under which the resource is made available.

**Type**

*URI*

**Return type**

`str`

**property modification\_date: `str`**

Most recent date on which the item was changed, updated or modified.

**Type**

*Date*

**Return type***str***property prev:** *Resource*

The previous resource in an ordered collection or series of resources.

**Type***Resource***Return type***Resource***property publisher:** *Union[Agent, str]*

A URI uniquely identifying the publisher of the resource.

**Type***Union[Agent, str]***Return type***Union[Agent, str]***property qualified\_attributions:** *List[Dict]*

List of links to an Agent having some form of responsibility for the resource.

**Type***List[Dict]***Return type***List[Dict]***property qualified\_relation:** *List[Relationship]*

A list of links to a description of a relationship with another resource.

**Type***List[Relationship]***Return type***List[Relationship]***property release\_date:** *str*

Date of formal issuance (e.g., publication) of the item.

**Type***Date***Return type***str***property resource\_relation:** *List[str]*

A list of links to resources with an unspecified relationship to the cataloged item.

**Type***List[URI]***Return type***List[str]***property rights:** *str*

license or dct:accessRights, such as copyright statements.

**Returns**

The link

**Return type**`str`**Type**`URI`**Type**

A link to a statement that concerns all rights not addressed with dct

**property theme:** `List[str]`

A list of links to categories of the resource.

**Type**`List[URI]`**Return type**`List[str]`**property title:** `Dict[str, str]`

A name given to the item. key is language code.

**Type**`Dict[str, str]`**Return type**`Dict[str, str]`**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**`Dict`**to\_rdf**(*format='turtle', encoding='utf-8'*)

Maps the distribution to rdf.

**Available formats:**

- turtle (default)
- xml
- json-ld

**Parameters**

- **format** (`str`) – a valid format.
- **encoding** (`Optional[str]`) – the encoding to serialize into

**Return type**`Union[bytes, str]`**Returns**

a rdf serialization as a bytes literal according to format.

### Example

```
>>> from datacatalogtordf import Catalog
>>>
>>> catalog = Catalog()
>>> catalog.identifier = "http://example.com/catalogs/1"
>>> catalog.title = {'en': 'Title of catalog'}
>>> bool(catalog.to_rdf())
True
```

**property** `type_genre:` `str`

A link to the nature or genre of the resource.

**Type**

*URI*

**Return type**

`str`

## 2.2 datacatalogtordf.relationship

Relationship module for mapping a relationship to rdf.

This module contains methods for mapping a relationship object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import Relationship
>>>
>>> relationship = Relationship()
>>> relationship.identifier = "http://example.com/relations/1"
>>> relationship.title = {"en": "Title of relationship"}
>>>
>>> bool(relationship.to_rdf())
True
```

**class** `datacatalogtordf.relationship.Relationship(identifier=None)`

Bases: `object`

A class representing a dcat:Relationship.

Ref: [dcat:Relationship](#)

**classmethod** `from_json(json)`

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

*Relationship*

**property had\_role:** `str`

A URI identifying the role.

**Type**

`URI`

**Return type**

`str`

**property identifier:** `str`

a URI uniquely identifying the resource.

**Type**

`URI`

**Return type**

`str`

**property relation:** `Resource`

A URI uniquely identifying related resource.

**Type**

`Resource`

**Return type**

`Resource`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8'*)

Maps the relationship to rdf.

**Parameters**

- **format** (`str`) – a valid format. Default: turtle
- **encoding** (`Optional[str]`) – the encoding to serialize into

**Return type**

`Union[bytes, str]`

**Returns**

a rdf serialization as a bytes literal according to format.

## 2.3 datacatalogtordf.catalog

Catalog module for mapping a catalog to rdf.

This module contains methods for mapping a catalog object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import Catalog, Dataset
>>>
>>> catalog = Catalog()
>>> catalog.identifier = "http://example.com/catalogs/1"
>>> catalog.title = {"en": "Title of catalog"}
>>>
>>> a_dataset = Dataset()
>>> a_dataset.identifier = "http://example.com/datasets/1"
>>> catalog.datasets.append(a_dataset)
>>>
>>> bool(catalog.to_rdf())
True
```

**class** datacatalogtordf.catalog.Catalog(identifier=None)

Bases: *Dataset*

A class representing a dcat:Catalog.

Ref: [dcat:Catalog](#).

**property access\_rights:** *str*

A link to information about who can access the resource or an indication of its security status.

**Type**

*URI*

**Return type**

*str*

**property access\_rights\_comments:** *List[str]*

Referanse til hjemmel (kilde for påstand) i offentlighetsloven, sikkerhetsloven, beskyttelsesinstruksen eller annet lovverk som ligger til grunn for vurdering av tilgangsnivå.

**Type**

*List[URI]*

**Return type**

*List[str]*

**property catalogrecords:** *List[CatalogRecord]*

A list of records describing the registration of a single dataset or data service that is part of the catalog.

**Type**

*List[CatalogRecord]*

**Return type**

*List[CatalogRecord]*



**property catalogs:** `List[Catalog]`

A list of catalogs that are of interest in the context of this catalog.

**Type**

`List[Catalog]`

**Return type**

`List[Catalog]`

**property conforms\_to:** `List[str]`

A list of links to established standards to which the described resource conforms.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property contactpoint:** `Contact`

Relevant contact information for the cataloged resource.

**Type**

`Contact`

**Return type**

`Contact`

**property creator:** `str`

Link to the entity responsible for producing the resource.

**Type**

`URI`

**Return type**

`str`

**property datasets:** `List[Dataset]`

A list of datasets that is listed in the catalog.

**Type**

`List[Dataset]`

**Return type**

`List[Dataset]`

**property dct\_identifier:** `str`

the identifier for the catalog.

**Type**

`str`

**Return type**

`str`

**property description:** `Dict[str, str]`

A free-text account of the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**property distributions:** `List[Distribution]`

A list of distributions of the dataset.

**Type**

`List[Distribution]`

**Return type**

`List[Distribution]`

**property frequency:** `str`

A link to resource describing the frequency at which dataset is published.

**Type**

`[URI]`

**Return type**

`str`

**classmethod from\_json**(*json*)

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

`Resource`

**property has\_parts:** `List[Catalog]`

A list of resources that is listed in the catalog.

**Type**

`List[Catalog]`

**Return type**

`List[Catalog]`

**property has\_policy:** `str`

A link to an ODRL conformant policy expressing the rights associated with the resource.

**Type**

`URI`

**Return type**

`str`

**property homepage:** `str`

A link to a homepage for the catalog.

**Type**

`URI`

**Return type**

`str`

**property identifier:** `str`

A URI uniquely identifying the resource.

**Type**

`URI`

**Return type**`str`**property in\_series:** `DatasetSeries`

A dataset series of which the dataset is part.

**Type**`DatasetSeries`**Return type**`DatasetSeries`**property is\_referenced\_by:** `List[Resource]`

A list of related resources, such as a publication, that references, cites, or otherwise points to the cataloged resource.

**Type**`List[Resource]`**Return type**`List[Resource]`**property keyword:** `Dict[str, str]`

A keyword or tag describing the resource. key is language code.

**Type**`Dict[str, str]`**Return type**`Dict[str, str]`**property landing\_page:** `List[str]`

A list of links to web pages that can be navigated to in a Web browser to gain access to the catalog, a dataset, its distributions and/or additional information.

**Type**`List[URI]`**Return type**`List[str]`**property language:** `List[str]`

A list of links to languages of the item.

**Type**`List[str]`**Return type**`List[str]`**property license:** `str`

A link to a legal document under which the resource is made available.

**Type**`URI`**Return type**`str`**property modification\_date:** `str`

Most recent date on which the item was changed, updated or modified.

**Type**

*Date*

**Return type**

`str`

**property prev:** *Resource*

The previous resource in an ordered collection or series of resources.

**Type**

*Resource*

**Return type**

*Resource*

**property publisher:** `Union[Agent, str]`

A URI uniquely identifying the publisher of the resource.

**Type**

`Union[Agent, str]`

**Return type**

`Union[Agent, str]`

**property qualified\_attributions:** `List[Dict]`

List of links to an Agent having some form of responsibility for the resource.

**Type**

`List[Dict]`

**Return type**

`List[Dict]`

**property qualified\_relation:** `List[Relationship]`

A list of links to a description of a relationship with another resource.

**Type**

`List[Relationship]`

**Return type**

`List[Relationship]`

**property release\_date:** `str`

Date of formal issuance (e.g., publication) of the item.

**Type**

*Date*

**Return type**

`str`

**property resource\_relation:** `List[str]`

A list of links to resources with an unspecified relationship to the cataloged item.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property rights:** `str`

license or dct:accessRights, such as copyright statements.

**Returns**

The link

**Return type**

`str`

**Type**

*URI*

**Type**

A link to a statement that concerns all rights not addressed with dct

**property services:** `List[DataService]`

A list of dataservices of sites or end-points that is listed in the catalog.

**Type**

`List[DataService]`

**Return type**

`List[DataService]`

**property spatial:** `List[Union[Location, str]]`

A list of geographical areas covered by the dataset.

**Type**

`List[Location]`

**Return type**

`List[Union[Location, str]]`

**property spatial\_resolution\_in\_meters:** `List[Decimal]`

A list of minimum spatial separation resolvables in a dataset, measured in meters.

**Type**

`List[Decimal]`

**Return type**

`List[Decimal]`

**property temporal:** `List[PeriodOfTime]`

A list of temporal periods that the dataset covers.

**Type**

`List[PeriodOfTime]`

**Return type**

`List[PeriodOfTime]`

**property temporal\_resolution:** `List[str]`

A list of minimum time period resolvables in the dataset.

**Type**

`List[str]`

**Return type**

`List[str]`

**property theme:** `List[str]`

A list of links to categories of the resource.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property themes:** `List[str]`

A list of links to knowledge organization system (KOS) used to classify catalog.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property title:** `Dict[str, str]`

A name given to the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8', include\_datasets=True, include\_services=True*)

Maps the catalog to rdf.

**Available formats:**

- turtle (default)
- xml
- json-ld

**Parameters**

- **format** (*str*) – a valid format.
- **encoding** (*str*) – the encoding to serialize into
- **include\_datasets** (*bool*) – includes the dataset graphs in the catalog
- **include\_services** (*bool*) – includes the services in the catalog

**Return type**

`Union[bytes, str]`

**Returns**

a rdf serialization as a bytes literal according to format.

**property type\_genre:** `str`

A link to the nature or genre of the resource.

**Type**

`URI`

**Return type**

`str`

**property was\_generated\_by:** `str`

A link to an activity that generated, or provides the business context for, the creation of the dataset.

**Type**

`URI`

**Return type**

`str`

## 2.4 datacatalogtordf.catalogrecord

CatalogRecord module for mapping a catalogrecord to rdf.

This module contains methods for mapping a catalogrecord object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import CatalogRecord
>>>
>>> catalogrecord = CatalogRecord()
>>> catalogrecord.identifier = "http://example.com/catalogrecords/1"
>>> catalogrecord.title = {"en": "Title of catalogrecord"}
>>>
>>> bool(catalogrecord.to_rdf())
True
```

**class** datacatalogtordf.catalogrecord.CatalogRecord(*identifier=None*)

Bases: `object`

A class representing a dcat:CatalogRecord.

Ref: [https://www.w3.org/TR/vocab-dcat-2/#Class:Catalog\\_Record](https://www.w3.org/TR/vocab-dcat-2/#Class:Catalog_Record)

**Parameters**

**identifier** (`URI`) – the identifier of the dataset-series.

**property conforms\_to:** `List[str]`

An established standard to which the described resource conforms.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property description:** `Dict[str, str]`

A free-text account of the record. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**classmethod** `from_json(json)`

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

*CatalogRecord*

**property identifier:** `str`

a URI uniquely identifying the catalog record.

**Type**

*URI*

**Return type**

`str`

**property listing\_date:** `str`

The date of listing.

**Type**

*Date*

**Return type**

`str`

**property modification\_date:** `str`

Most recent date on which the catalog entry was changed.

**Type**

*Date*

**Return type**

`str`

**property primary\_topic:** *Resource*

Resource (dataset or service) described in the record.

**Type**

*Resource*

**Type**

The dcat

**Return type**

*Resource*



**property title:** `Dict[str, str]`

A name given to the record. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf(format='turtle', encoding='utf-8')**

Maps the catalogrecord to rdf.

**Return type**

`Union[bytes, str]`

## 2.5 datacatalogtordf.dataservice

DataService module for mapping a dataService to rdf.

This module contains methods for mapping a dataservice object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import DataService
>>>
>>> dataservice = DataService()
>>> dataservice.identifier = "http://example.com/dataservices/1"
>>> dataservice.title = {"en": "Title of dataservice"}
>>>
>>> bool(dataservice.to_rdf())
True
```

**class datacatalogtordf.dataservice.DataService(identifier=None)**

Bases: [Resource](#)

A class representing a dcat:DataService.

**Parameters**

**identifier** ([URI](#)) – the identifier of the datasetservice.

Ref: [dcat:DataService](#).

**property access\_rights:** `str`

A link to information about who can access the resource or an indication of its security status.

**Type**

[URI](#)

**Return type**`str`**property conforms\_to:** `List[str]`

A list of links to established standards to which the described resource conforms.

**Type**`List[URI]`**Return type**`List[str]`**property contactpoint:** `Contact`

Relevant contact information for the cataloged resource.

**Type**`Contact`**Return type**`Contact`**property creator:** `str`

Link to the entity responsible for producing the resource.

**Type**`URI`**Return type**`str`**property description:** `Dict[str, str]`

A free-text account of the item. key is language code.

**Type**`Dict[str, str]`**Return type**`Dict[str, str]`**property endpointDescription:** `str`

A description of the services available via the end-points, including their operations, parameters etc.

**Type**`URI`**Return type**`str`**property endpointURL:** `str`

The root location or primary endpoint of the service (a Web-resolvable IRI).

**Type**`URI`**Return type**`str`**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

*Resource*

**property has\_policy:** `str`

A link to an ODRL conformant policy expressing the rights associated with the resource.

**Type**

*URI*

**Return type**

`str`

**property identifier:** `str`

A URI uniquely identifying the resource.

**Type**

*URI*

**Return type**

`str`

**property is\_referenced\_by:** `List[Resource]`

A list of related resources, such as a publication, that references, cites, or otherwise points to the cataloged resource.

**Type**

`List[Resource]`

**Return type**

`List[Resource]`

**property keyword:** `Dict[str, str]`

A keyword or tag describing the resource. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**property landing\_page:** `List[str]`

A list of links to web pages that can be navigated to in a Web browser to gain access to the catalog, a dataset, its distributions and/or additional information.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property language:** `List[str]`

A list of links to languages of the item.

**Type**

`List[str]`

**Return type**

`List[str]`

**property license: `str`**

A link to a legal document under which the resource is made available.

**Type**

*URI*

**Return type**

`str`

**property media\_types: `List[str]`**

A list of media types that is offered in the responses.

**Type**

`List[src]`

**Return type**

`List[str]`

**property modification\_date: `str`**

Most recent date on which the item was changed, updated or modified.

**Type**

*Date*

**Return type**

`str`

**property prev: *Resource***

The previous resource in an ordered collection or series of resources.

**Type**

*Resource*

**Return type**

*Resource*

**property publisher: `Union[Agent, str]`**

A URI uniquely identifying the publisher of the resource.

**Type**

`Union[Agent, str]`

**Return type**

`Union[Agent, str]`

**property qualified\_attributions: `List[Dict]`**

List of links to an Agent having some form of responsibility for the resource.

**Type**

`List[Dict]`

**Return type**

`List[Dict]`

**property qualified\_relation: `List[Relationship]`**

A list of links to a description of a relationship with another resource.

**Type**

`List[Relationship]`

**Return type**

`List[Relationship]`

**property release\_date:** `str`

Date of formal issuance (e.g., publication) of the item.

**Type**

`Date`

**Return type**

`str`

**property resource\_relation:** `List[str]`

A list of links to resources with an unspecified relationship to the cataloged item.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property rights:** `str`

license or dct:accessRights, such as copyright statements.

**Returns**

The link

**Return type**

`str`

**Type**

`URI`

**Type**

A link to a statement that concerns all rights not addressed with dct

**property servesdatasets:** `List[Dataset]`

A list of datasets that this service serves.

**Type**

`List[Dataset]`

**Return type**

`List[Dataset]`

**property theme:** `List[str]`

A list of links to categories of the resource.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property title:** `Dict[str, str]`

A name given to the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

### `to_json()`

Convert the Resource to a json / dict. It will omit the non-initialized fields.

#### Returns

The json representation of this instance.

#### Return type

Dict

### `to_rdf(format='turtle', encoding='utf-8')`

Maps the distribution to rdf.

#### Available formats:

- turtle (default)
- xml
- json-ld

#### Parameters

- **format** (`str`) – a valid format.
- **encoding** (`Optional[str]`) – the encoding to serialize into

#### Return type

`Union[bytes, str]`

#### Returns

a rdf serialization as a bytes literal according to format.

### Example

```
>>> from datacatalogtordf import Catalog
>>>
>>> catalog = Catalog()
>>> catalog.identifier = "http://example.com/catalogs/1"
>>> catalog.title = {'en': 'Title of catalog'}
>>> bool(catalog.to_rdf())
True
```

### property `type_genre: str`

A link to the nature or genre of the resource.

#### Type

*URI*

#### Return type

`str`

## 2.6 datacatalogtordf.dataset

Dataset module for mapping a dataset to rdf.

This module contains methods for mapping a dataset object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import Dataset, Distribution
>>>
>>> dataset = Dataset()
>>> dataset.identifier = "http://example.com/datasets/1"
>>> dataset.title = {"en": "Title of dataset"}
>>>
>>> a_distribution = Distribution()
>>> a_distribution.identifier = "http://example.com/dataservices/1"
>>> a_distribution.title = {"en": "Title of distribution"}
>>> dataset.distributions.append(a_distribution)
>>>
>>> bool(dataset.to_rdf())
True
```

**class** datacatalogtordf.dataset.Dataset(identifier=None)

Bases: [Resource](#)

A class representing a dcat:Dataset.

#### Parameters

**identifier** ([URI](#)) – the identifier of the dataset.

Ref: [dcat:Dataset](#).

**property access\_rights:** [str](#)

A link to information about who can access the resource or an indication of its security status.

#### Type

[URI](#)

#### Return type

[str](#)

**property access\_rights\_comments:** [List\[str\]](#)

Referanse til hjemmel (kilde for påstand) i offentlighetsloven, sikkerhetsloven, beskyttelsesinstruksen eller annet lovverk som ligger til grunn for vurdering av tilgangsnivå.

#### Type

[List\[URI\]](#)

#### Return type

[List\[str\]](#)

**property conforms\_to:** [List\[str\]](#)

A list of links to established standards to which the described resource conforms.

#### Type

[List\[URI\]](#)

**Return type**`List[str]`**property contactpoint: Contact**

Relevant contact information for the cataloged resource.

**Type**`Contact`**Return type**`Contact`**property creator: str**

Link to the entity responsible for producing the resource.

**Type**`URI`**Return type**`str`**property dct\_identifier: str**

the identifier for the dataset.

**Type**`str`**Return type**`str`**property description: Dict[str, str]**

A free-text account of the item. key is language code.

**Type**`Dict[str, str]`**Return type**`Dict[str, str]`**property distributions: List[Distribution]**

A list of distributions of the dataset.

**Type**`List[Distribution]`**Return type**`List[Distribution]`**property frequency: str**

A link to resource describing the frequency at which dataset is published.

**Type**`[URI]`**Return type**`str`**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.



**Returns**

The object.

**Return type**

*Resource*

**property has\_policy:** `str`

A link to an ODRL conformant policy expressing the rights associated with the resource.

**Type**

*URI*

**Return type**

`str`

**property identifier:** `str`

A URI uniquely identifying the resource.

**Type**

*URI*

**Return type**

`str`

**property in\_series:** *DatasetSeries*

A dataset series of which the dataset is part.

**Type**

*DatasetSeries*

**Return type**

*DatasetSeries*

**property is\_referenced\_by:** `List[Resource]`

A list of related resources, such as a publication, that references, cites, or otherwise points to the cataloged resource.

**Type**

`List[Resource]`

**Return type**

`List[Resource]`

**property keyword:** `Dict[str, str]`

A keyword or tag describing the resource. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**property landing\_page:** `List[str]`

A list of links to web pages that can be navigated to in a Web browser to gain access to the catalog, a dataset, its distributions and/or additional information.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property language:** `List[str]`

A list of links to languages of the item.

**Type**

`List[str]`

**Return type**

`List[str]`

**property license:** `str`

A link to a legal document under which the resource is made available.

**Type**

*URI*

**Return type**

`str`

**property modification\_date:** `str`

Most recent date on which the item was changed, updated or modified.

**Type**

*Date*

**Return type**

`str`

**property prev:** *Resource*

The previous resource in an ordered collection or series of resources.

**Type**

*Resource*

**Return type**

*Resource*

**property publisher:** `Union[Agent, str]`

A URI uniquely identifying the publisher of the resource.

**Type**

`Union[Agent, str]`

**Return type**

`Union[Agent, str]`

**property qualified\_attributions:** `List[Dict]`

List of links to an Agent having some form of responsibility for the resource.

**Type**

`List[Dict]`

**Return type**

`List[Dict]`

**property qualified\_relation:** `List[Relationship]`

A list of links to a description of a relationship with another resource.

**Type**

`List[Relationship]`

**Return type**

`List[Relationship]`

**property release\_date: str**

Date of formal issuance (e.g., publication) of the item.

**Type**

*Date*

**Return type**

str

**property resource\_relation: List[str]**

A list of links to resources with an unspecified relationship to the cataloged item.

**Type**

List[*URI*]

**Return type**

List[str]

**property rights: str**

license or dct:accessRights, such as copyright statements.

**Returns**

The link

**Return type**

str

**Type**

*URI*

**Type**

A link to a statement that concerns all rights not addressed with dct

**property spatial: List[Union[Location, str]]**

A list of geographical areas covered by the dataset.

**Type**

List[*Location*]

**Return type**

List[Union[*Location*, str]]

**property spatial\_resolution\_in\_meters: List[Decimal]**

A list of minimum spatial separation resolvables in a dataset, measured in meters.

**Type**

List[Decimal]

**Return type**

List[Decimal]

**property temporal: List[PeriodOfTime]**

A list of temporal periods that the dataset covers.

**Type**

List[*PeriodOfTime*]

**Return type**

List[*PeriodOfTime*]

**property temporal\_resolution:** `List[str]`

A list of minimum time period resolvables in the dataset.

**Type**

`List[str]`

**Return type**

`List[str]`

**property theme:** `List[str]`

A list of links to categories of the resource.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property title:** `Dict[str, str]`

A name given to the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8', include\_distributions=True*)

Maps the catalog to rdf.

**Available formats:**

- turtle (default)
- xml
- json-ld

**Parameters**

- **format** (*str*) – a valid format.
- **encoding** (*str*) – the encoding to serialize into
- **include\_distributions** (*bool*) – includes the distributions in the graph

**Return type**

`Union[bytes, str]`

**Returns**

a rdf serialization as a bytes literal according to format.

**property type\_genre:** `str`

A link to the nature or genre of the resource.

Type

`URI`

Return type

`str`

**property was\_generated\_by:** `str`

A link to an activity that generated, or provides the business context for, the creation of the dataset.

Type

`URI`

Return type

`str`

## 2.7 datacatalogtordf.dataset\_series

DatasetSeries module for mapping a dataset\_series to rdf.

This module contains methods for mapping a dataset\_series object to rdf according to the `dcap-ap-no v.2` standard

### Example

```
>>> from datacatalogtordf import Catalog, DatasetSeries, Dataset
>>>
>>> dataset_series = DatasetSeries("http://example.com/dataset_series/1")
>>> dataset_series.title = {"en": "Title of dataset_series"}
>>>
>>> catalog = Catalog("http://example.com/catalog/1")
>>> catalog.datasets.append(dataset_series)
>>>
>>> first_dataset = Dataset()
>>> first_dataset.identifier = "http://example.com/datasets/1"
>>> first_dataset.in_series = dataset_series
>>>
>>> second_dataset = Dataset()
>>> second_dataset.identifier = "http://example.com/datasets/2"
>>> second_dataset.in_series = dataset_series
>>> second_dataset.prev = first_dataset
>>>
>>> dataset_series.first = first_dataset
>>> dataset_series.last = second_dataset
>>>
>>> bool(catalog.to_rdf())
True
```

**class** datacatalogtordf.dataset\_series.DatasetSeries(*identifier=None*)

Bases: `Dataset`

A class representing a dcat:DatasetSeries.

Ref: `dcap:DatasetSeries`.

**Parameters**

**identifier** (*URI*) – the identifier of the dataset-series.

**property access\_rights:** *str*

A link to information about who can access the resource or an indication of its security status.

**Type**

*URI*

**Return type**

*str*

**property access\_rights\_comments:** *List[str]*

Referanse til hjemmel (kilde for påstand) i offentlighetsloven, sikkerhetsloven, beskyttelsesinstruksen eller annet lovverk som ligger til grunn for vurdering av tilgangsnivå.

**Type**

*List[URI]*

**Return type**

*List[str]*

**property conforms\_to:** *List[str]*

A list of links to established standards to which the described resource conforms.

**Type**

*List[URI]*

**Return type**

*List[str]*

**property contactpoint:** *Contact*

Relevant contact information for the cataloged resource.

**Type**

*Contact*

**Return type**

*Contact*

**property creator:** *str*

Link to the entity responsible for producing the resource.

**Type**

*URI*

**Return type**

*str*

**property dct\_identifier:** *str*

the identifier for the dataset.

**Type**

*str*

**Return type**

*str*

**property description:** *Dict[str, str]*

A free-text account of the item. key is language code.

**Type**`Dict[str, str]`**Return type**`Dict[str, str]`**property distributions:** `List[Distribution]`

A list of distributions of the dataset.

**Type**`List[Distribution]`**Return type**`List[Distribution]`**property first:** `Dataset`

The first resource in an ordered collection or series of resources, to which the current resource belongs.

**Type**`Dataset`**Return type**`Dataset`**property frequency:** `str`

A link to resource describing the frequency at which dataset is published.

**Type**`[URI]`**Return type**`str`**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters****json** (`Dict`) – A dict representing this class.**Returns**

The object.

**Return type**`Resource`**property has\_policy:** `str`

A link to an ODRL conformant policy expressing the rights associated with the resource.

**Type**`URI`**Return type**`str`**property identifier:** `str`

A URI uniquely identifying the resource.

**Type**`URI`**Return type**`str`

**property in\_series:** *DatasetSeries*

A dataset series of which the dataset is part.

**Type**

*DatasetSeries*

**Return type**

*DatasetSeries*

**property is\_referenced\_by:** *List[Resource]*

A list of related resources, such as a publication, that references, cites, or otherwise points to the cataloged resource.

**Type**

*List[Resource]*

**Return type**

*List[Resource]*

**property keyword:** *Dict[str, str]*

A keyword or tag describing the resource. key is language code.

**Type**

*Dict[str, str]*

**Return type**

*Dict[str, str]*

**property landing\_page:** *List[str]*

A list of links to web pages that can be navigated to in a Web browser to gain access to the catalog, a dataset, its distributions and/or additional information.

**Type**

*List[URI]*

**Return type**

*List[str]*

**property language:** *List[str]*

A list of links to languages of the item.

**Type**

*List[str]*

**Return type**

*List[str]*

**property last:** *Dataset*

The last resource in an ordered collection or series of resources, to which the current resource belongs.

**Type**

*Dataset*

**Return type**

*Dataset*

**property license:** *str*

A link to a legal document under which the resource is made available.

**Type**

*URI*



**Return type***str***property modification\_date:** *str*

Most recent date on which the item was changed, updated or modified.

**Type***Date***Return type***str***property prev:** *Resource*

The previous resource in an ordered collection or series of resources.

**Type***Resource***Return type***Resource***property publisher:** *Union[Agent, str]*

A URI uniquely identifying the publisher of the resource.

**Type***Union[Agent, str]***Return type***Union[Agent, str]***property qualified\_attributions:** *List[Dict]*

List of links to an Agent having some form of responsibility for the resource.

**Type***List[Dict]***Return type***List[Dict]***property qualified\_relation:** *List[Relationship]*

A list of links to a description of a relationship with another resource.

**Type***List[Relationship]***Return type***List[Relationship]***property release\_date:** *str*

Date of formal issuance (e.g., publication) of the item.

**Type***Date***Return type***str***property resource\_relation:** *List[str]*

A list of links to resources with an unspecified relationship to the cataloged item.

**Type***List[URI]*

**Return type**`List[str]`**property rights:** `str`

license or dct:accessRights, such as copyright statements.

**Returns**

The link

**Return type**`str`**Type**`URI`**Type**

A link to a statement that concerns all rights not addressed with dct

**property spatial:** `List[Union[Location, str]]`

A list of geographical areas covered by the dataset.

**Type**`List[Location]`**Return type**`List[Union[Location, str]]`**property spatial\_resolution\_in\_meters:** `List[Decimal]`

A list of minimum spatial separation resolvables in a dataset, measured in meters.

**Type**`List[Decimal]`**Return type**`List[Decimal]`**property temporal:** `List[PeriodOfTime]`

A list of temporal periods that the dataset covers.

**Type**`List[PeriodOfTime]`**Return type**`List[PeriodOfTime]`**property temporal\_resolution:** `List[str]`

A list of minimum time period resolvables in the dataset.

**Type**`List[str]`**Return type**`List[str]`**property theme:** `List[str]`

A list of links to categories of the resource.

**Type**`List[URI]`**Return type**`List[str]`

**property title:** `Dict[str, str]`

A name given to the item. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8', include\_datasets=True, include\_services=True, include\_models=True, include\_contains\_services=True*)

Maps the catalog to rdf.

**Available formats:**

- turtle (default)
- xml
- json-ld

**Parameters**

- **format** (*str*) – a valid format.
- **encoding** (*str*) – the encoding to serialize into
- **include\_datasets** (*bool*) – includes the dataset graphs in the catalog
- **include\_services** (*bool*) – includes the services in the catalog
- **include\_models** (*bool*) – includes the models in the catalog
- **include\_contains\_services** (*bool*) – includes the services (cpsvno) in the catalog

**Return type**

`Union[bytes, str]`

**Returns**

a rdf serialization as a bytes literal according to format.

**property type\_genre:** `str`

A link to the nature or genre of the resource.

**Type**

`URI`

**Return type**

`str`

**property was\_generated\_by:** `str`

A link to an activity that generated, or provides the business context for, the creation of the dataset.

**Type**

`URI`

**Return type**`str`

## 2.8 datacatalogtordf.distribution

Distribution module for mapping a distribution to rdf.

This module contains methods for mapping a distribution object to rdf according to the `dcap-ap-no v.2` standard

### Example

```
>>> from datacatalogtordf import Distribution
>>>
>>> distribution = Distribution()
>>> distribution.identifier = "http://example.com/dataservices/1"
>>> distribution.title = {"en": "Title of distribution"}
>>>
>>> bool(distribution.to_rdf())
True
```

**class** `datacatalogtordf.distribution.Distribution(identifier=None)`

Bases: `object`

A class representing a `dcap:Distribution`.

Ref: `dcap:Distribution`

**Parameters**

**identifier** (`URI`) – the identifier of the dataset-series.

**property access\_URL:** `str`

A URL of the resource that gives access to a distribution of the dataset. E.g. landing page, feed, SPARQL endpoint.

**Type**

`URI`

**Return type**

`str`

**property access\_rights:** `str`

A link to rights statement that concerns how the distribution is accessed.

**Type**

`URI`

**Return type**

`str`

**property access\_service:** `DataService`

A data service that gives access to the distribution of the dataset.

**Type**

`DataService`

**Return type**

`DataService`

**property byte\_size:** `Decimal`

The size of a distribution in bytes.

**Type**

`Decimal`

**Return type**

`Decimal`

**property compression\_format:** `str`

Link to the compression format of the distribution in which the data is contained in a compressed form, e.g. to reduce the size of the downloadable file.

**Type**

`URI`

**Return type**

`str`

**property conforms\_to:** `List[str]`

A list of links to established standards to which the distribution conforms.

**Type**

`List[URI]`

**Return type**

`List[str]`

**property description:** `Dict[str, str]`

A free-text account of the distribution.

**Type**

`Dict[str]`

**Return type**

`Dict[str, str]`

**property download\_URL:** `str`

format and/or dcat:mediaType.

**Type**

`URI`

**Type**

The URL of the downloadable file in a given format. E.g. CSV file or RDF file. The format is indicated by the distribution's dct

**Return type**

`str`

**property formats:** `List[str]`

A list of file formats of the distribution.

**Type**

`List[URI]`

**Return type**

`List[str]`

**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters**

**json** (*Dict*) – A dict representing this class.

**Returns**

The object.

**Return type**

*Distribution*

**property has\_policy:** *str*

A link to an ODRL conformant policy expressing the rights associated with the distribution.

**Type**

*URI*

**Return type**

*str*

**property identifier:** *str*

A URI uniquely identifying the resource.

**Type**

*URI*

**Return type**

*str*

**property license:** *str*

A link to legal document under which the distribution is made available.

**Type**

*URI*

**Return type**

*str*

**property media\_types:** *List[str]*

A list of media types of the distribution as defined by IANA.

**Type**

*List[URI]*

**Return type**

*List[str]*

**property modification\_date:** *str*

Most recent date on which the distribution was changed, updated or modified.

**Type**

*Date*

**Return type**

*str*

**property package\_format:** *str*

Link to the package format of the distribution in which one or more data files are grouped together, e.g. to enable a set of related files to be downloaded together.

**Type**

*URI*

**Return type**

*str*

**property release\_date:** `str`

Date of formal issuance (e.g., publication) of the distribution.

**Type**

`Date`

**Return type**

`str`

**property rights:** `str`

A link to information about rights held in and over the distribution.

**Type**

`URI`

**Return type**

`str`

**property spatial\_resolution\_in\_meters:** `List[Decimal]`

A list of minimum spatial separation resolvables in a dataset distribution, measured in meters.

**Type**

`List[Decimal]`

**Return type**

`List[Decimal]`

**property temporal\_resolution:** `List[str]`

A list of minimum time period resolvables in the dataset distribution.

**Type**

`List[str]`

**Return type**

`List[str]`

**property title:** `Dict[str, str]`

A dict with title in multiple languages.

**Type**

`Dict[str]`

**Return type**

`Dict[str, str]`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8'*)

Maps the distribution to rdf.

**Return type**

`Union[bytes, str]`

## 2.9 datacatalogtordf.uri

URI helper module for very basic validation of a uri.

**class** datacatalogtordf.uri.**URI**(link)

Bases: `str`

A helper class to validate a URI.

If the string is serializable as an `rdflib.URIRef`, it is valid. Otherwise not.

Essentially it is serializable if none of the following chars occurs:

```
_invalid_uri_chars = '<>" {}|\\^`'
```

### Parameters

**link** (`str`) – The string to validate as URI.

### Raises

**InvalidURIError** – If the string is not a valid URI.

Ref: <https://github.com/RDFLib/rdflib/blob/master/rdflib/term.py#L75>

### Example

```
>>> from datacatalogtordf import Dataset, URI
>>>
>>> dataset = Dataset()
>>> dataset.identifier = URI("http://example.com/datasets/1")
>>> dataset.identifier
'http://example.com/datasets/1'
```

## 2.10 datacatalogtordf.periodoftime

PeriodOfTime module for mapping a `period_of_time` to rdf.

This module contains methods for mapping a `period_of_time` object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import PeriodOfTime
>>>
>>> period_of_time = PeriodOfTime()
>>> period_of_time.start_date = "2019-12-31"
>>> period_of_time.end_date = "2020-12-31"
>>>
>>> bool(period_of_time.to_rdf())
True
```



**class** datacatalogtordf.periodoftime.Date(*link*)

Bases: `str`

A helper class to validate a Date.

If the string is a valid of the format “%Y-%m-%d”, it is valid. Otherwise not.

**Raises**

*InvalidDateError* – If the str does not represent a valid date

**class** datacatalogtordf.periodoftime.PeriodOfTime

Bases: `object`

A class representing a dcat:PeriodOfTime.

Ref: `dcat:PeriodOfTime`

**Raises**

*InvalidDateIntervalError* – If the interval is “negative”, i.e. start date is after the end date

**property** end\_date: `str`

date signfying the end of the period.

**Type**

`str`

**Return type**

`str`

**classmethod** from\_json(*json*)

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

*PeriodOfTime*

**property** start\_date: `str`

date signfying the start of the period.

**Type**

`str`

**Return type**

`str`

**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**

`Dict`

**to\_rdf**(*format='turtle', encoding='utf-8'*)

Maps the period\_of\_time to rdf.

**Return type**

`Union[bytes, str]`

## 2.11 datacatalogtordf.location

Location module for mapping a location to rdf.

This module contains methods for mapping a location object to rdf according to the [dcat-ap-no v.2 standard](#)

### Example

```
>>> from datacatalogtordf import Location
>>>
>>> location = Location()
>>> location.identifier = "http://example.com/relations/1"
>>> location.centroid = "POINT(4.88412 52.37509)"
>>>
>>> bool(location.to_rdf())
True
```

**class** datacatalogtordf.location.Location(identifier=None)

Bases: `object`

A class representing a dcat:Location.

Ref: `dcat:Location`

**property bounding\_box:** `str`

The geographic bounding box of a resource.

**Type**

`str`

**Return type**

`str`

**property centroid:** `str`

The geographic center (centroid) of a resource.

**Type**

`str`

**Return type**

`str`

**classmethod from\_json(json)**

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class.

**Returns**

The object.

**Return type**

`Location`

**property geometry:** `str`

Associates any resource with the corresponding geometry.

**Type**

`str`

**Return type**`str`**property identifier:** `str`

an URI uniquely identifying the resource.

**Type**`URI`**Return type**`str`**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**`Dict`**to\_rdf**(*format='turtle', encoding='utf-8'*)

Maps the location to rdf.

**Parameters**

- **format** (`str`) – a valid format. Default: turtle
- **encoding** (`Optional[str]`) – the encoding to serialize into

**Return type**`Union[bytes, str]`**Returns**

a rdf serialization as a bytes literal according to format.

## 2.12 datacatalogtordf.agent

Agent module for mapping a agent to rdf.

This module contains methods for mapping a agent object to rdf according to the `dcap-ap-no v.2` standard

### Example

```
>>> from datacatalogtordf import Agent, Dataset
>>> dataset = Dataset()
>>> dataset.identifier = "http://example.com/datasets/1"
>>> # Create an agent:
>>> agent = Agent()
>>> agent.identifier = "http://example.com/agents/1"
>>> agent.name = {"en": "James Bond", "nb": "Djeims Bånd"}
>>> # Assign the agent to the publisher property:
>>> dataset.publisher = agent
>>> bool(dataset.to_rdf())
True
```

**class** datacatalogtordf.agent.**Agent**(*identifier=None*)

Bases: `object`

A class representing a foaf:Agent.

**Parameters**

**identifier** (`URI`) – the identifier of the dataset.

**classmethod** **from\_json**(*json*)

Convert a JSON (dict).

**Parameters**

**json** (`Dict`) – A dict representing this class

**Returns**

The object

**Return type**

`Agent`

**property** **identifier**: `str`

A URI uniquely identifying the agent.

**Type**

`URI`

**Return type**

`str`

**property** **name**: `Dict[str, str]`

A name given to the agent. key is language code.

**Type**

`Dict[str, str]`

**Return type**

`Dict[str, str]`

**property** **organization\_id**: `str`

The organization's identifier.

**Type**

`str`

**Return type**

`str`

**property** **organization\_type**: `str`

Link to a concept designating the type of the agent.

**Type**

`URI`

**Return type**

`str`

**property** **same\_as**: `str`

Link to another resource that is the same as this one.

**Type**

`URI`

**Return type**`str`**to\_json()**

Convert the Resource to a json / dict. It will omit the non-initialized fields.

**Returns**

The json representation of this instance.

**Return type**`Dict`**to\_rdf(*format='turtle', encoding='utf-8'*)**

Maps the agent to rdf.

**Parameters**

- **format** (`str`) – a valid format. Default: turtle
- **encoding** (`Optional[str]`) – the encoding to serialize into

**Return type**`Union[bytes, str]`**Returns**

a rdf serialization as a bytes literal according to format.

## 2.13 datacatalogtordf.exceptions

Exceptions module for datacatalogtordf.

**exception** datacatalogtordf.exceptions.**Error**(*msg=None*)

Bases: `Exception`

Base class for exceptions.

**with\_traceback()**

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

**exception** datacatalogtordf.exceptions.**InvalidDateError**(*date, msg*)

Bases: `Error`

Exception raised for errors in the input.

**str** -- input str in which the error occurred

**message** -- explanation of the error

**with\_traceback()**

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

**exception** datacatalogtordf.exceptions.**InvalidDateIntervalError**(*start\_date, end\_date, msg*)

Bases: `Error`

Exception raised for errors in the input.

**str** -- input str in which the error occurred

**message** -- explanation of the error

**with\_traceback()**

Exception.with\_traceback(tb) – set self.\_\_traceback\_\_ to tb and return self.

A small Python library for mapping a data catalog to rdf

The library contains helper classes for the following dcat classes:

- [Catalog](#)
- [Dataset](#)
- [Distribution](#)
- [Data Service](#)

Other relevant classes are also supported, such as:

- [Contact](#) ([vcard:Kind](#))

The library will map to the [Norwegian Application Profile of the DCAT standard](#).

## INSTALLATION

To install the `datacatalogtordf` package, run this command in your terminal:

```
$ pip install datacatalogtordf
```





## USAGE

This package can be used like this:

```
from datacatalogtordf import Catalog, Dataset

# Create catalog object
catalog = Catalog()
catalog.identifier = "http://example.com/catalogs/1"
catalog.title = {"en": "A dataset catalog"}
catalog.publisher = "https://example.com/publishers/1"

# Create a dataset:
dataset = Dataset()
dataset.identifier = "http://example.com/datasets/1"
dataset.title = {"nb": "inntektsAPI", "en": "incomeAPI"}
#
# Add concept to catalog:
catalog.datasets.append(dataset)

# get rdf representation in turtle (default)
rdf = catalog.to_rdf(format="turtle")
print(rdf.decode())
```

Will produce the following output:

```
@prefix dcat: <http://www.w3.org/ns/dcat#> .
@prefix dct: <http://purl.org/dc/terms/> .

<http://example.com/catalogs/1> a dcat:Catalog ;
    dct:publisher <https://example.com/publishers/1> ;
    dct:title "A dataset catalog"@en ;
    dcat:dataset <http://example.com/datasets/1> .

<http://example.com/datasets/1> a dcat:Dataset ;
    dct:title "incomeAPI"@en,
        "inntekstAPI"@nb .
```



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