
yadm
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It's small and simple ODM for use with MongoDB.

Quick start

```
import pymongo
from yadm import Database, Document, fields

# Create model
class BlogPost(Document):
    __collection__ = 'blog_posts'

    title = fields.StringField()
    body = fields.StringField()

# Create post
post = BlogPost()
post.title = 'Small post'
post.body = 'Bla-bla-bla...'

# Connect to database
client = pymongo.MongoClient("localhost", 27017)
db = Database(client, 'test')

# Insert post to database
db.insert(post)

# Query posts
qs = db.get_queryset(BlogPost).find({'title': {'$regex': '^s.*'}})
assert qs.count() > 0

for post in qs:
    assert post.title.startswith('s')

# Query one post
post = db.get_queryset(BlogPost).find_one({'title': 'Small post'})

# Change post
post.title = 'Bla-bla-bla title'

# Save changed post
db.save(post)
```

1.1 CHANGES

1.1.1 1.0 (2015-11-14)

- **Change document structure. No more bad `BaseDocument.__data__` attribute:**
 - `BaseDocument.__raw__`: raw data from mongo;
 - `BaseDocument.__cache__`: cached objects, casted with fields;
 - `BaseDocument.__changed__`: changed objects.
- **Changes api for custom fields:**
 - Not more need create field descriptors for every field;
 - `prepare_value` called only for `setattr`;
 - `to_mongo` called only for save objects to mongo;
 - `from_mongo` called only for load values from `BaseDocument.__raw__`;
 - Remove `Field.default` attribute. Use `Field.get_default` method;
 - Add `get_if_not_loaded` and `get_if_attribute_not_set` method;
 - By default raise `NotLoadedError` if field not loaded from projection;
- **Changes in `ReferenceField`:**
 - Raise `BrokenReference` if link is broken;
 - Raise `NotBindingToDatabase` if document not saved to database;
- `smart_null` keyword for `Field`;
- Fields in document must be instances (not classes!);
- Remove `ArrayContainer` and `ArrayContainerField`;
- Remove old `MapIntKeysField` and `MapObjectIdKeysField`. Use new `MapCustomKeysField`;
- Add `Database.update_one` method for run simple update query with specified document;
- Add `QuerySet.distinct`;
- `serialize.from_mongo` now accept `not_loaded` sequence with filed names who must mark as not loaded, `parent` and `name`;
- `serialize.to_mongo` do not call `FieldDescriptor.__set__`;
- Fakers! Subsystem for generate test objects;
- Tests now use pytest;
- And more, and more...

API documentation

2.1 API

API documentation

2.1.1 Database

This module for provide work with MongoDB database.

```
import pymongo
from yadm.database import Database

from mydocs import Doc

client = pymongo.MongoClient("localhost", 27017)
db = Database(self.client, 'test')

doc = Doc()
db.insert(doc)

doc.arg = 13
db.save(doc)

qs = db.get_queryset(Doc).find({'arg': {'$gt': 10}})
for doc in qs:
    print(doc)
```

class yadm.database.Database(client, name)

Main object who provide work with database

Parameters

- **client** (`pymongo.Client`) – database connection
- **name** (`str`) – database name

bulk(document_class, ordered=False, raise_on_errors=True)

Return Bulk

Parameters

- **document_class** (`MetaDocument`) – class of documents fo bulk
- **ordered** (`bool`) – create ordered bulk (default `False`)

- **raise_on_errors** (*bool*) – raise BulkWriteError exception if write errors (default *True*)

Context manager:

with db.bulk(Doc) as bulk: bulk.insert(doc_1) bulk.insert(doc_2)

get_queryset (*document_class*)

Return queryset for document class

Parameters **document_class** – *yadm.documents.Document*

This create instance of *yadm.queryset.QuerySet* with presetted document's collection information.

insert (*document*)

Insert document to database

Parameters **document** (*Document*) – document instance for insert to database

It's bind new document to database set *_id*.

reload (*document*, *new_instance=False*)

Reload document

Parameters

- **document** (*Document*) – instance for reload
- **new_instance** (*bool*) – if *True* return new instance of document, else change data in given document (default: *False*)

remove (*document*)

Remove document from database

Parameters **document** (*Document*) – instance for remove from database

save (*document*, *full=False*, *upsert=False*)

Save document to database

Parameters

- **document** (*Document*) – document instance for save
- **full** (*bool*) – fully resave document (default: *False*)
- **upsert** (*bool*) – see documentation for MongoDB's *update* (default: *False*)

If document has no *_id* *insert* new document.

update_one (*document*, *reload=True*, *, *set=None*, *unset=None*, *inc=None*, *push=None*, *pull=None*)

Update one document

Parameters

- **document** (*Document*) – document instance for update
- **reload** (*bool*) – if True, reload document

2.1.2 Documents

Basic documents classes for build models.

```
class User(Document):
    __collection__ = 'users'

    first_name = fields.StringField()
    last_name = fields.StringField()
    age = fields.IntegerField()
```

All fields placed in `yadm.fields` package.

`class yadm.documents.MetaDocument (cls, name, bases, cls_dict)`
Metaclass for documents

`class yadm.documents.BaseDocument (**kwargs)`
Base class for all documents

`__raw__`

Dict with raw data from mongo

`__cache__`

Dict with cached objects, casted with fields

`__changed__`

Dict with changed objects

`__data__`

Deprecated! For backward compatibility only!

Old way to storing data in documents. Now equal to `__raw__`.

`__debug_print__()`

Print debug information

`__fake__(values, faker, depth)`

Fake data customizer

`class yadm.documents.Document (**kwargs)`

Class for build first level documents

`__collection__`

Name of MongoDB collection

`_id`

Mongo object id (`bson.ObjectId`)

`id`

Alias for `_id` for simply use

`__db__`

Internal attribute contain instance of `yadm.database.Database` for realize `yadm.fields.references.ReferenceField`. It bind in `yadm.database.Database` or `yadm.queryset.QuerySet`.

`class yadm.documents.DocumentItemMixin`

Mixin for custom all fields values, such as `EmbeddedDocument`, `yadm.fields.containers.Container`

`__parent__`

Parent object.

```
assert doc.embedded_doc.__parent__ is doc
assert doc.list[13].__parent__ is doc.list
```

__name__

```
assert doc.list.__name__ == 'list'  
assert doc.list[13].__name__ == 13
```

__db__

Database object

```
assert doc.f.l[0].__db__ is doc.__db__
```

__document__

Root document

```
assert doc.f.l[0].__document__ is doc
```

__field_name__

Dotted field name for MongoDB opperations, like as \$set, \$push and other...

```
assert doc.f.l[0].__field_name__ == 'f.l.0'
```

__get_value__(document)

Get value from document with path to self

__path__

Path to root generator

```
assert list(doc.f.l[0].__path__) == [doc.f.l[0], doc.f.l, doc.f]
```

__path_names__

Path to root generator

```
assert list(doc.f.l[0].__path__) == [0, 'l', 'f']
```

__weakref__

list of weak references to the object (if defined)

```
class yadm.documents.EmbeddedDocument(**kwargs)  
    Class for build embedded documents
```

2.1.3 Serializers and deserializers

Functions for serialize and deserialize data.

```
yadm.serialize.from_mongo(document_class, data, not_loaded=(), parent=None, name=None)  
    Deserialize MongoDB data to document
```

Parameters

- **document_class** – document class
- **data** (*dict*) – data from MongoDB
- **not_loaded** (*list*) – fields, who marked as not loaded
- **parent** – parent for new document
- **name** (*str*) – name for new document

```
yadm.serialize.to_mongo(document, exclude=(), include=None)  
    Serialize document to MongoDB data
```

Parameters

- **document** (`BaseDocument`) – document for serializing
- **exclude** (`list`) – exclude fields
- **include** (`list`) – include only fields (all by default)

2.1.4 Queryset

```
class yadm.queryset.QuerySet(db, document_class)
    Query builder

    bulk()
        Return map {id: object}

        Returns dict

    copy(*args, **kwargs)
        Copy queryset and update it

    Parameters
        • criteria (dict) –
        • projection (dict) –
        • sort (dict) –

        Returns new yadm.queryset.QuerySet object
```

count()
Count documents in queryset

Returns int

distinct(field)
Distinct query

Parameters `field` (`str`) – field for distinct

Returns list with result data

fields(*fields)
Get only setted fields

Update projection with fields.

Parameters `fields` (`str`) –

Returns new `yadm.queryset.QuerySet`

qs('field', 'field2')

fields_all()
Clear projection

find(criteria=None, projection=None)
Return queryset copy with new criteria and projection

Parameters

- **criteria** (`dict`) – update queryset's criteria
- **projection** (`dict`) – update queryset's projection

Returns new `yadm.queryset.QuerySet`

```
qs({'field': {'$gt': 3}}, {'field': True})
```

find_and_modify (*update=None*, *upsert=False*, *full_response=False*, *new=False*, ***kwargs*)
Execute \$findAndModify query

Parameters

- **update** (*dict*) – see second argument to update()
- **upsert** (*bool*) – insert if object doesn't exist (*default False*)
- **full_response** (*bool*) – return the entire response object from the server (*default False*)
- **new** – return updated rather than original object (*default False*)
- **kwargs** – any other options the findAndModify command supports can be passed here

Returns `yadm.documents.Document` or `None`

find_one (*criteria=None*, *projection=None*)
Find and return only one document

Parameters

- **criteria** (*dict*) – update queryset's criteria
- **projection** (*dict*) – update queryset's projection

Returns `yadm.documents.Document` or `None`

```
qs({'field': {'$gt': 3}}, {'field': True})
```

join (**field_names*)
Create `yadm.Join` object, join *field_names* and return it

Parameters `fields_names` (*str*) – fields for join

Returns new `yadm.join.Join`

Next algorithm for join:

1. Get all documents from queryset;
2. Aggregate all ids from requested fields;
3. Make \$in queries for get joined documents;
4. Bind joined documents to objects from first queryset;

Join object is instance of `abc.Sequence`.

remove ()
Remove documents in queryset

sort (**sort*)
Sort query

Parameters `sort` (*tuples*) – tuples with two items: ('*field_name*', *sort_order_as_int*).

```
qs.sort(('field_1', 1), ('field_2', -1))
```

update (*update*, *multi=True*)
Update documents in queryset

Parameters

- **update** (*dict*) – update query
- **multi** (*bool*) – update all matched documents (*default True*)

Returns update result**with_id** (*_id*)

Find document with id

Parameters *_id* – id of searching document**Returns** *yadm.documents.Document* or **None**

2.1.5 Bulk queries

```
class yadm.bulk.Bulk (db, document_class, ordered=False, raise_on_errors=True)
    Bulk object
```

Parameters

- **db** (*Database*) – Database instance
- **document_class** (*MetaDocument*) – document class for collection
- **ordered** (*bool*) – create ordered bulk (*default False*)
- **raise_on_errors** (*bool*) – raise BulkWriteError exception if write errors (*default True*)

Context manager example:

```
with db.bulk(Doc) as bulk: bulk.insert(doc_1) bulk.insert(doc_2)
execute()
```

Execute the bulk query

Returns *BulkResult* instance**insert** (*document*)

Add insert document to bulk

Parameters **document** (*Document*) – document for insert**Warning:** This unlike *Database.insert*! Currently, it is not bind objects to database and set id.

```
class yadm.bulk.BulkResult (bulk, raw)
    Object who provide result of Bulk.execute()
```

n_insertedProvide *nInserted* from raw result**n_modified**Provide *nModified* from raw result**n_removed**Provide *nRemoved* from raw result**n_upserted**Provide *nUpended* from raw result**write_errors**Provide *writeErrors* from raw result

2.1.6 Join

```
class yadm.join.Join(qs)
    Helper for build client-side joins

    # Doc.ref is instance of ReferenceField
    qs = db(Doc).find({'k': 1})  # queryset filter
    join = qs.join('ref')  # create join query in this place
    for doc in join:
        print(doc.ref)  # do not create query to database
```

```
get_queryset(field_name)
    Return queryset for joined objects

join(*field_names)
    Do manual join
```

2.1.7 Fields

This package contain all fields.

Base fields

Base classes for build database fields.

```
class yadm.fields.base.NotLoadedError
    Raise if value marked as not loaded
```

```
doc = db(Doc).fields('a').find_one()
try:
    doc.b
except NotLoadedError:
    print("raised!")
```

```
class yadm.fields.base.FieldDescriptor(name, field)
    Base desctiptor for fields
```

name

Name of field

field

Field instance for this desctiptor

__delete__(instance)

Mark document's key as not set

__get__(instance, owner)

Get python value from document

1. Lookup in __changed__;

2. Lookup in __cache__;

3. Lookup in __raw__:

- if AttributeNotSet – call Field.get_if_attribute_not_set;

- if NotLoaded – call Field.get_if_not_loaded;

- call Field.from_mongo;
- set __name__ and __parent__
- save to __cache__

4. Call Field.get_default;

5. If AttributeNotSet – call Field.get_if_attribute_not_set;

6. Return value.

__set__(instance, value)
Set value to document

1. Call Field.prepare_value for cast value;
2. Save in Document.__changed__;
3. Call Field.set_parent_changed.

class yadm.fields.base.Field(smart_null=False)
Base field for all database fields

Parameters smart_null (bool) – If it *True*, access to not exists fields return *None* instead *AttributeError* exception. You will not be able to distinguish null value from not exist. Use with care.

descriptor_class
Class of desctiptor for work with field

document_class
Class of document. Set in *contribute_to_class()*.

name
Name of field in document. Set in *contribute_to_class()*.

contribute_to_class(document_class, name)
Add field for document_class

Parameters document_class (MetaDocument) – document class for add

copy()
Return copy of field

descriptor_class
alias of *FieldDescriptor*

from_mongo(document, value)
Convert mongo value to python value

Parameters

- **document** (*BaseDocument*) – document
- **value** – mongo value

Returns python value

get_default(document)
Return default value

get_fake(document, faker, deep)
Return fake data for testing

get_if_attribute_not_set(document)
Call if key not exist in document

get_if_not_loaded(document)
Call if field data marked as not loaded

prepare_value(document, value)

The method is called when value is assigned for the attribute

Parameters

- **document** ([BaseDocument](#)) – document
- **value** – raw value

Returns prepared value

It must be accept *value* argument and return processed (e.g. casted) analog. Also it is called once for the default value.

to_mongo(document, value)

Convert python value to mongo value

Parameters

- **document** ([BaseDocument](#)) – document
- **value** – python value

Returns mongo value

Simple fields

Fields for basic data types.

class [yadm.fields.simple.BooleanField](#)(*default*=<class ‘yadm.markers.AttributeNotSet’>, *,
choices=None, ***kwargs*)

Field for boolean values

type
alias of `bool`

class [yadm.fields.simple.FloatField](#)(*default*=<class ‘yadm.markers.AttributeNotSet’>, *,
choices=None, ***kwargs*)

Field for float

type
alias of `float`

class [yadm.fields.simple.IntegerField](#)(*default*=<class ‘yadm.markers.AttributeNotSet’>, *,
choices=None, ***kwargs*)

Field for integer

type
alias of `int`

class [yadm.fields.simple.ObjectIdField](#)(*default_gen*=*False*)

Field for ObjectId

Parameters **default_gen**(`bool`) – generate default value if not set

type
alias of `ObjectId`

```
class yadm.fields.simple.SimpleField(default=<class 'yadm.markers.AttributeNotSet'>, *,  
                                     choices=None, **kwargs)
```

Base field for simple types

Parameters

- **default** – default value
- **choices** (`set`) – set of possible values

```
class yadm.fields.simple.StringField(default=<class 'yadm.markers.AttributeNotSet'>, *,  
                                     choices=None, **kwargs)
```

Field for string

type
alias of `str`

Datetime field

```
class yadm.fields.datetime.DatetimeField(*, auto_now=False, **kwargs)
```

Field for time stamp

Parameters `auto_now` (`bool`) – `datetime.now` as default (default: False)

Decimal field

Field for decimal numbers

This code save to MongoDB document:

```
class yadm.fields.decimal.DecimalField(*, context=None, **kwargs)
```

Field for work with `decimal.Decimal`

Parameters

- **context** (`decimal.Context`) – context for decimal operations (default: run `decimal.getcontext()` when need)
- **default** (`decimal.Decimal`) –

TODO: context in copy()

context
Context

Returns `decimal.Context` for values

prepare_value (`document, value`)
Cast value to `decimal.Decimal`

Embedded documents fields

Work with embedded documents.

```
class EDoc(EmbeddedDocument):  
    i = fields.IntegerField()  
  
class Doc(Document):  
    __collection__ = 'docs'  
    edoc = EmbeddedDocumentField(EDoc)
```

```
doc = Doc()
doc.edoc = EDoc()
doc.edoc.i = 13
db.insert(doc)
```

```
class yadm.fields.embedded.EmbeddedDocumentField(embedded_document_class, *,  
                                                auto_create=True, **kwargs)
```

Field for embedded objects

Parameters

- **embedded_document_class** (`EmbeddedDocument`) – class for embedded document
- **auto_create** (`bool`) – automatic creation embedded document from access

```
copy()
```

Return copy of field

```
get_if_attribute_not_set(document)
```

Call if key not exist in document

If auto_create is True, create and return new embedded document. Else AttributeError is raised.

Reference field

Work with references.

```
class RDoc(Document):
    i = fields.IntegerField

class Doc(Document):
    rdoc = fields.ReferenceField(RDoc)

rdoc = RDoc()
rdoc.i = 13
db.insert(rdoc)

doc = Doc()
doc.rdoc = rdoc
db.insert(doc)

doc = db.get_queryset(Doc).with_id(doc.id)    # reload doc
assert doc.rdoc.id == rdoc.id
assert doc.rdoc.i == 13
```

```
exception yadm.fields.reference.BrokenReference
```

Raise if referenced document is not found

```
exception yadm.fields.reference.NotBindingToDatabase
```

Raise if set ObjectId insted referenced document to new document, who not binded to database.

```
class yadm.fields.reference.ReferenceField(reference_document_class, **kwargs)
```

Field for work with references

Parameters **reference_document_class** – class for refered documents

```
get_fake(document, faker, depth)
```

Try create referenced document

Containers fields

Base classes for containers.

```
class yadm.fields.containers.Container (field, parent, value)
    Base class for containers

    reload ()
        Reload all object from database

class yadm.fields.containers.ContainerField (item_field=None, *, auto_create=True, **kwargs)
    Base class for container fields

    container
        alias of Container

    from_mongo (document, value)
    get_default (document)
    get_default_value ()
    prepare_item (container, item, value)
    prepare_value (document, value)
    to_mongo (document, value)
```

List fields

List of objects

```
class Doc (Document) :
    __collection__ = 'docs'
    integers = fields.ListField(fields.IntegerField)

doc = Doc()
doc.integers.append(1)
doc.integers.append(2)
assert doc.integers == [1, 2]

db.insert(doc)
doc = db.get_queryset(Doc).with_id(doc.id)    # reload

doc.integers.append(3)  # do not save
assert doc.integers == [1, 2, 3]
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.integers == [1, 2]

doc.integers.remove(2)  # do not save too
assert doc.integers == [1]
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.integers == [1, 2]

doc.integers.push(3)  # $push query
assert doc.integers == [1, 2, 3]
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.integers == [1, 2, 3]

doc.integers.pull(2)  # $pull query
```

```
assert doc.integers == [1, 3]
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.integers == [1, 3]
```

class yadm.fields.list.**List** (*field, parent, value*)

Container for list

append (*item*)

Append item to list

Parameters **item** – item for append

This method does not save object!

insert (*index, item*)

Append item to list

Parameters

- **index** (*int*) –
- **item** – item for insert

This method does not save object!

pull (*query, reload=True*)

Pull item from database

Parameters

- **query** – query for \$pull on this field
- **reload** (*bool*) – automatically reload all values from database

See \$pull in MongoDB's update.

push (*item, reload=True*)

Push item directly to database

Parameters

- **item** – item for \$push
- **reload** (*bool*) – automatically reload all values from database

See \$push in MongoDB's update.

remove (*item*)

Remove item from list

Parameters **item** – item for remove

This method does not save object!

replace (*query, item, reload=True*)

Replace list elements

Parameters

- **query** – query for update. Keys of this query is relative.
- **item** – embedded document or dict
- **reload** (*bool*) – automatically reload all values from database

update (*query, values, reload=True*)

Update fields in embedded documents

Parameters

- **query** – query for *update*. Keys of this query is relative.
- **values** – dict of new values
- **reload** (*bool*) – automatically reload all values from database

```
class yadm.fields.list.ListField(item_field=None, *, auto_create=True, **kwargs)
    Field for list values
```

For example, document with list of integers:

```
class TestDoc(Document):
    __collection__ = 'testdoc'
    li = fields.ListField(fields.IntegerField())
```

```
container
alias of List
```

Set field

Field with sets.

Similar as `yadm.fields.list`.

```
class yadm.fields.set.Set(field, parent, value)
    Container for set
```

```
add(item)
Append item to set
```

Parameters `item` – item for add

This method does not save object!

```
add_to_set(item, reload=True)
Add item directly to database
```

Parameters

- `item` – item for `$addToSet`
- **reload** (*bool*) – automatically reload all values from database

See `$addToSet` in MongoDB's *update*.

```
discard(item)
```

Remove item from the set if it is present

Parameters `item` – item for discard

This method does not save object!

```
pull(query, reload=True)
Pull item from database
```

Parameters

- **query** – query for `$pull` on this field
- **reload** (*bool*) – automatically reload all values from database

See `$pull` in MongoDB's *update*.

remove (*item*)
Remove item from set

Parameters **item** – item for remove

This method does not save object!

class `yadm.fields.set.SetField` (*item_field=None*, *, *auto_create=True*, ***kwargs*)

Field for set values

container
alias of `Set`

Map field

Map

```
class Doc(Document):
    __collection__ = 'docs'
    map = fields.MapField(fields.IntegerField)

doc = Doc()
doc.map['a'] = 1
doc.map['b'] = 2
assert doc.map == {'a': 1, 'b': 2}

db.insert(doc)
doc = db.get_queryset(Doc).with_id(doc.id)    # reload

doc.map['c'] = 3    # do not save
assert doc.map == {'a': 1, 'b': 2, 'c': 3}
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.map == {'a': 1, 'b': 2}

del doc.map['b']    # do not save too
assert doc.map == {'a': 1}
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.map == {'a': 1, 'b': 2}

doc.map.set('d', 3)    # $set query
assert doc.map == {'a': 1, 'b': 2, 'c': 3}
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.map == {'a': 1, 'b': 2, 'c': 3}

doc.map.unset('d', 3)    # $unset query
assert doc.map == {'a': 1, 'b': 2}
doc = db.get_queryset(Doc).with_id(doc.id)    # reload
assert doc.map == {'a': 1, 'b': 2}
```

class `yadm.fields.map.Map` (*field, parent, value*)

set (*key, value, reload=True*)
Set key directly in database

Parameters

- **key** – key
- **value** – value for \$set

See `$set` in MongoDB's `set`.

unset (`key, reload=True`)
Unset key directly in database

Parameters `key` – key

See `$unset` in MongoDB's `unset`.

class `yadm.fields.map.MapCustomKeysField` (`item_field`, `key_factory`, *, `key_to_str=<class 'str'>`,
`auto_create=True`, **`kwargs`)

Field for maps with custom key type

Parameters

- `item_field` (`field`) –
- `key_factory` (`func`) – function, who return thue key from raw string key
- `key_to_str` (`func`) –
- `auto_create` (`bool`) –

class `yadm.fields.map.MapField` (`item_field=None`, *, `auto_create=True`, **`kwargs`)

Field for maps

container

alias of `Map`

Geo fields

Fields for geo data

See: <http://docs.mongodb.org/manual/applications/geospatial-indexes/>

GeoJSON: <http://geojson.org/geojson-spec.html>

class `yadm.fields.geo.Geo`
Base class for GeoJSON data

class `yadm.fields.geo.GeoCoordinates`
Base class for GeoJSON data with coordinates

class `yadm.fields.geo.GeoField` (`types=[<class 'yadm.fields.geo.Point'>, <class 'yadm.fields.geo.MultiPoint'>], **kwargs`)
Base field for GeoJSON objects

class `yadm.fields.geo.GeoOneTypeField` (**`kwargs`)
Base field for GeoJSON objects with one acceptable type

class `yadm.fields.geo.MultiPoint` (`points`)
Class for GeoJSON MultiPoint objects

See: <http://geojson.org/geojson-spec.html#id5>

class `yadm.fields.geo.MultiPointField` (**`kwargs`)
Field for MultiPoint

type
alias of `MultiPoint`

class `yadm.fields.geo.Point` (`longitude, latitude`)
Class for GeoJSON Point objects

See: <http://geojson.org/geojson-spec.html#id2>

```
class yadm.fields.geo.PointField(**kwargs)
```

Field for Point

type

alias of *Point*

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