

MongoDB Physical Model

Schema for:

Model name: New Model

Author: Version:

File name: HNDIR.json

File path: C:\Users\musul\Documents\HNDIR.json

Printed On: Sun Apr 01 2018 14:58:30 GMT+0100 (Morocco Daylight Time)

Created with: Hackolade - Visual data modeling for NoSQL and multimodel databases

1. Model

2. Databases

- 2.1 HNDIR
 - 2.1.2 Admins
 - 2.1.3 Items
 - 2.1.4 Lists
 - 2.1.5 Users

3. Relationships

- 3.1 ADMIN to List
- 3.2 Item to List
- 3.3 User to List

1. MODEL

1.1 Model New Model

1.1.1 New Model Entity Relationship Diagram



1.1.2 New Model Properties

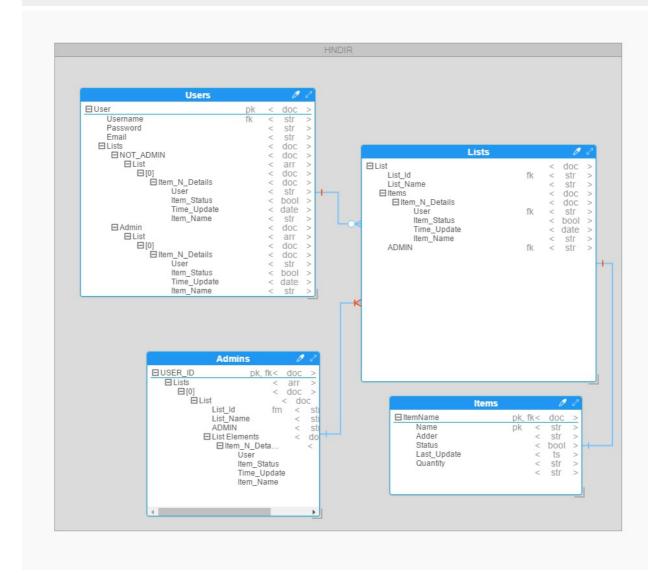
PROPERTY	VALUE
Model name	New Model
Description	
Author	
Version	
DB vendor	MongoDB
DB version	v3.6
Enable sharding	
Comments	

1.1.3 New Model Database Users

1.1.4 New Model DB Definitions

2. DATABASES

2.1 Database HNDIR



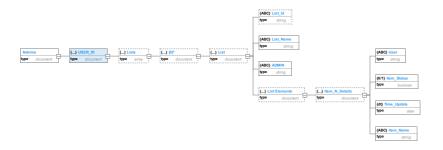
2.1.2 HNDIR Properties

PROPERTY	VALUE
Database name	HNDIR
Description	
Comments	

2.1.3 HNDIR Collections

2.1.3.1 Collection Admins

2.1.3.1.1 Admins Tree Diagram



2.1.3.1.2 Admins Properties

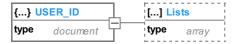
PROPERTY	VALUE
Collection name	Admins
ld	ADMINS
Description	Collection of List ADMINS
Database	HNDIR
Capped	false
Size	
Max	
Storage engine	WiredTiger
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.3.1.3 Admins Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
USER_ID	document	true			
Lists	array	false		List is an Array of Documents	
[0]	document	false			
List	document	false		Will Have as ID the admin ID and the list name	
List_ld	string	false			
List_Name	string	true			
ADMIN	string	true			
List Elements	document	false		Items Document	
Item_N_Details	document	false			
User	string	true		User Who added the item	
ltem_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
ltem_Name	string	true			

2.1.3.1.3.1 Field USER_ID

2.1.3.1.3.1.1 USER_ID Tree Diagram



2.1.3.1.3.1.2 **USER_ID** Hierarchy

Parent field: Admins

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Lists	array	false		List is an Array of Documents	

USER_ID properties

PROPERTY	VALUE
Name	USER_ID
ld	
Туре	document
Description	
Dependencies	
Required	true
Primary key	true
Foreign collection	Lists
Foreign field	ADMIN
Relationship type	Foreign Key
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.1.3.2 Field Lists

2.1.3.1.3.2.1 Lists Tree Diagram



2.1.3.1.3.2.2 Lists Hierarchy

Parent field: USER_ID

Child field(s):

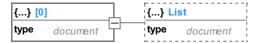
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

Lists properties

PROPERTY	VALUE
Name	Lists
ld	
Туре	array
Description	List is an Array of Documents
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.3.1.3.3 Field New Field

2.1.3.1.3.3.1 New Field Tree Diagram



2.1.3.1.3.3.2 New Field Hierarchy

Parent field: **Lists** Child field(s):

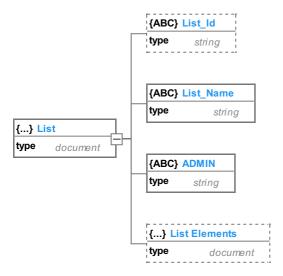
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List	document	false		Will Have as ID the admin ID and the list name	

New Field properties

PROPERTY	VALUE
Name	New Field
ld	
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.1.3.4 Field List

2.1.3.1.3.4.1 List Tree Diagram



2.1.3.1.3.4.2 List Hierarchy

Parent field: New Field

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List_ld	string	false	fm		
List_Name	string	true			
ADMIN	string	true			
List Elements	document	false		Items Document	

List properties

PROPERTY	VALUE
Name	List
ld	Adminid_ListNale
Туре	document
Description	Will Have as ID the admin ID and the list name
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.1.3.5 Field List_ld

2.1.3.1.3.5.1 List_ld Tree Diagram



List_ld properties

PROPERTY	VALUE
Name	List_ld
ld	Adminid_ListName
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	Lists
Foreign field	List_ld
Relationship type	Foreign Master
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.1.3.6 Field List_Name

2.1.3.1.3.6.1 List_Name Tree Diagram



List_Name properties

PROPERTY	VALUE
Name	List_Name
ld	LN
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.1.3.7 Field ADMIN

2.1.3.1.3.7.1 ADMIN Tree Diagram

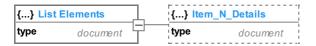


ADMIN properties

PROPERTY	VALUE
Name	ADMIN
ld	_Admin
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.1.3.8 Field List Elements

2.1.3.1.3.8.1 List Elements Tree Diagram



2.1.3.1.3.8.2 List Elements Hierarchy

Parent field: **List** Child field(s):

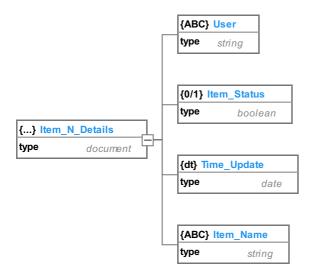
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Item_N_Details	document	false			

List Elements properties

PROPERTY	VALUE
Name	List Elements
ld	List_ID
Туре	document
Description	Items Document
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.1.3.9 Field Item_N_Details

2.1.3.1.3.9.1 Item_N_Details Tree Diagram



2.1.3.1.3.9.2 Item_N_Details Hierarchy

Parent field: List Elements

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
User	string	true		User Who added the item	
Item_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
Item_Name	string	true			

Item_N_Details properties

PROPERTY	VALUE
Name	Item_N_Details
ld	User_List_Item
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.1.3.10 Field User

2.1.3.1.3.10.1 User Tree Diagram



User properties

PROPERTY	VALUE
Name	User
ld	
Туре	string
Description	User Who added the item
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.1.3.11 Field Item_Status

2.1.3.1.3.11.1 Item_Status Tree Diagram



Item_Status properties

PROPERTY	VALUE
Name	Item_Status
ld	Item_Name
Туре	boolean
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.1.3.12 Field Time_Update

2.1.3.1.3.12.1 Time_Update Tree Diagram



Time_Update properties

PROPERTY	VALUE
Name	Time_Update
ld	_time
Туре	date
Description	Time of Last Update of the element
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.1.3.13 Field Item_Name

2.1.3.1.3.13.1 Item_Name Tree Diagram



Item_Name properties

PROPERTY	VALUE
Name	Item_Name
ld	Item_Name
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.1.4 Admins Users (TBD)

2.1.3.1.5 Admins Indexes

2.1.3.1.6 Admins Sharding

PROPERTY	SHARDING
Key	
Hashed	
Unique	true
Number of initial chunks	
Collation	null
Zone (Tag)	
Comments	

2.1.3.1.7 Admins Definitions

2.1.3.1.8 Admins JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "id": "ADMINS",
  "type": "object",
  "description": "Collection of List ADMINS",
  "additionalProperties": false,
  "capped": false,
  "properties": {
    "USER_ID": {
       "type": "object",
       "additionalProperties": false,
       "primaryKey": true,
       "properties": {
         "Lists": {
            "type": "array",
           "description": "List is an Array of Documents",
           "additionalItems": true,
           "primaryKey": false,
           "uniqueltems": false,
           "GUID": "d2902140-3053-11e8-b935-cbb7c5ca28bd",
           "items": {
              "type": "object",
              "additionalProperties": false,
              "arrayltem": true,
              "primaryKey": false,
              "properties": {
                "List": {
                  "id": "Adminid ListNale",
                  "type": "object",
                  "description": "Will Have as ID the admin ID and the list name",
                  "additionalProperties": false,
                  "primaryKey": false,
                  "properties": {
                     "List Id": {
                       "id": "Adminid_ListName",
                       "type": "string",
                       "primaryKey": false,
                       "GUID": "6f4aadc1-312b-11e8-a329-3bdc69dee379"
                     "List Name": {
                       "id": "LN",
                       "type": "string",
                       "primaryKey": false,
                       "GUID": "6f4aadc3-312b-11e8-a329-3bdc69dee379"
                     "ADMIN": {
                       "id": " Admin",
                       "type": "string",
                       "primaryKey": false,
                       "GUID": "6f4aadc5-312b-11e8-a329-3bdc69dee379"
                    },
                     "List Elements": {
                       "id": "List ID",
                       "type": "object",
                       "description": "Items Document",
```

```
"additionalProperties": false,
        "primaryKey": false,
        "properties": {
          "Item_N_Details": {
            "id": "User List Item",
            "type": "object",
            "additionalProperties": false,
            "primaryKey": false,
             "properties": {
               "User": {
                 "type": "string",
                 "description": "User Who added the item",
                 "primaryKey": false,
                 "GUID": "6f4aadc8-312b-11e8-a329-3bdc69dee379"
               "Item Status": {
                 "id": "Item_Name",
                 "type": "boolean",
                 "primaryKey": false,
                 "GUID": "6f4aadca-312b-11e8-a329-3bdc69dee379"
               "Time Update": {
                 "id": "_time",
                 "type": "date",
                 "description": "Time of Last Update of the element",
                 "primaryKey": false,
                 "GUID": "6f4aadcb-312b-11e8-a329-3bdc69dee379"
               "Item Name": {
                 "id": "Item_Name",
                 "type": "string",
                 "primaryKey": false,
                 "GUID": "6f4aadcc-312b-11e8-a329-3bdc69dee379"
              }
            },
            "GUID": "6f4aadc7-312b-11e8-a329-3bdc69dee379",
            "required": [
               "User",
              "Item_Status",
              "Time Update",
               "Item_Name"
            ]
          }
        "GUID": "6f4aadc6-312b-11e8-a329-3bdc69dee379"
      }
    "GUID": "6f4aadc0-312b-11e8-a329-3bdc69dee379",
    "required": [
      "List_Name",
      "ADMIN"
    ]
"GUID": "dd71a450-3105-11e8-8481-9d220933f326"
```

```
}
},
"GUID": "5ad4c2d0-3050-11e8-b935-cbb7c5ca28bd"
}

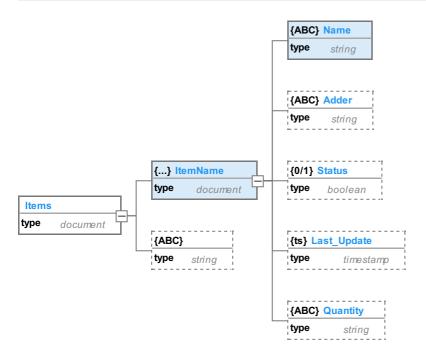
},
"validationAction": "Warn",
"validationLevel": "Off",
"required": [
"USER_ID"
]
}
```

2.1.3.1.9 Admins JSON data

```
{
    "USER_ID": {
        "Lists": {
            "List_Id": "Lorem",
            "List_Name": "Lorem",
            "ADMIN": "Lorem",
            "List Elements": {
            "Item_N_Details": {
            "User": "Lorem",
            "Item_Status": true,
            "Time_Update": ISODate("2016-04-08T15:06:21.595Z"),
            "Item_Name": "Lorem"
            }
        }
        }
     }
     }
}
```

2.1.3.2 Collection Items

2.1.3.2.1 Items Tree Diagram



2.1.3.2.2 Items Properties

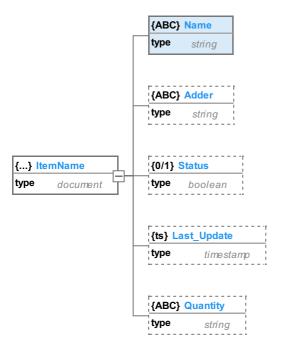
PROPERTY	VALUE
Collection name	Items
ld	_item
Description	
Database	HNDIR
Capped	false
Size	
Max	
Storage engine	WiredTiger
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.3.2.3 Items Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
ItemName	document	true			
Name	string	true			
Adder	string	false			
Status	boolean	false			
Last_Update	timestamp	false			
Quantity	string	false			
	string	false			

2.1.3.2.3.1 Field ItemName

2.1.3.2.3.1.1 ItemName Tree Diagram



2.1.3.2.3.1.2 ItemName Hierarchy

Parent field: **Items** Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Name	string	true	pk		
Adder	string	false			
Status	boolean	false			
Last_Update	timestamp	false			
Quantity	string	false			

ItemName properties

PROPERTY	VALUE
Name	ItemName
ld	_itemN
Туре	document
Description	
Dependencies	
Required	true
Primary key	true
Foreign collection	Lists
Foreign field	Item_N_Details
Relationship type	Foreign Key
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.2.3.2 Field Name

2.1.3.2.3.2.1 Name Tree Diagram



Name properties

PROPERTY	VALUE
Name	Name
ld	_name
Туре	string
Description	
Dependencies	
Required	true
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.2.3.3 Field Adder

2.1.3.2.3.3.1 Adder Tree Diagram



Adder properties

PROPERTY	VALUE
Name	Adder
ld	_un
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.2.3.4 Field Status

2.1.3.2.3.4.1 Status Tree Diagram



Status properties

PROPERTY	VALUE
Name	Status
ld	_st
Туре	boolean
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	false
Sample	
Comments	

2.1.3.2.3.5 Field Last_Update

2.1.3.2.3.5.1 Last_Update Tree Diagram



Last_Update properties

PROPERTY	VALUE
Name	Last_Update
ld	
Туре	timestamp
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.2.3.6 Field Quantity

2.1.3.2.3.6.1 Quantity Tree Diagram



Quantity properties

PROPERTY	VALUE
Name	Quantity
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.2.3.7 Field

2.1.3.2.3.7.1 Tree Diagram

{ABC}	
type	string

properties

PROPERTY	VALUE
Name	
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.2.4 Items Users (TBD)

2.1.3.2.5 Items Indexes

2.1.3.2.6 Items Sharding

PROPERTY	SHARDING
Key	
Hashed	
Unique	true
Number of initial chunks	
Collation	null
Zone (Tag)	
Comments	

2.1.3.2.7 Items Definitions

2.1.3.2.8 Items JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "id": " item",
  "type": "object",
  "additionalProperties": false,
  "capped": false,
  "properties": {
    "ItemName": {
      "id": "_itemN",
      "type": "object",
      "additionalProperties": false,
      "primaryKey": true,
      "properties": {
         "Name": {
           "id": "_name",
           "type": "string",
           "primaryKey": true,
           "GUID": "228bc1d0-35b4-11e8-b226-bd0adb2bd6cd"
        },
         "Adder": {
           "id": "_un",
           "type": "string",
           "primaryKey": false,
           "GUID": "2fc4c450-35b4-11e8-b226-bd0adb2bd6cd"
        },
         "Status": {
           "id": "_st",
           "type": "boolean",
           "default": false,
           "primaryKey": false,
           "GUID": "3f94c560-35b4-11e8-b226-bd0adb2bd6cd"
        },
         "Last_Update": {
           "type": "timestamp",
           "primaryKey": false,
           "GUID": "4f19b3b0-35b4-11e8-b226-bd0adb2bd6cd"
         "Quantity": {
           "type": "string",
           "primaryKey": false,
           "GUID": "5d5f6b40-35b4-11e8-b226-bd0adb2bd6cd"
        }
      },
      "GUID": "11aa02a0-35b4-11e8-b226-bd0adb2bd6cd",
      "required": [
         "Name"
      1
      "type": "string",
      "primaryKey": false,
      "GUID": "5a5e8750-35b4-11e8-b226-bd0adb2bd6cd"
    }
  "validationAction": "Warn",
```

```
"validationLevel": "Off",

"required": [

"ItemName"

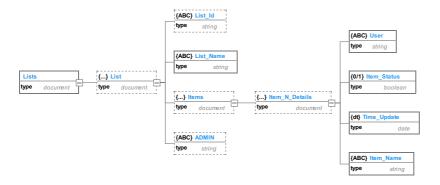
]
}
```

2.1.3.2.9 Items JSON data

```
{
  "ItemName": {
    "Name": "Lorem",
    "Adder": "Lorem",
    "Status": false,
    "Last_Update": Timestamp(1460127718,1),
    "Quantity": "Lorem"
},
  "undefined": "Lorem"
}
```

2.1.3.3 Collection Lists

2.1.3.3.1 Lists Tree Diagram



2.1.3.3.2 Lists Properties

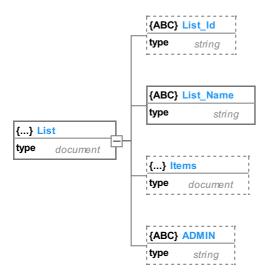
PROPERTY	VALUE
Collection name	Lists
ld	Lists
Description	
Database	HNDIR
Capped	false
Size	
Max	
Storage engine	WiredTiger
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.3.3.3 Lists Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List	document	false		Will Have as ID the admin ID and the list name	
List_ld	string	false			
List_Name	string	true			
Items	document	false		Items Document	
Item_N_Details	document	false			
User	string	true		User Who added the item	
Item_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
Item_Name	string	true			
ADMIN	string	false			

2.1.3.3.3.1 Field List

2.1.3.3.3.1.1 List Tree Diagram



2.1.3.3.3.1.2 List Hierarchy

Parent field: **Lists** Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List_ld	string	false	fk		
List_Name	string	true			
Items	document	false		Items Document	
ADMIN	string	false	fk		

List properties

PROPERTY	VALUE
Name	List
ld	Adminid_ListNale
Туре	document
Description	Will Have as ID the admin ID and the list name
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.3.3.2 Field List_ld

2.1.3.3.3.2.1 List_ld Tree Diagram



List_ld properties

PROPERTY	VALUE
Name	List_ld
ld	Adminid_ListName
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	Foreign Key
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.3.3 Field List_Name

2.1.3.3.3.1 List_Name Tree Diagram

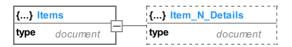


List_Name properties

PROPERTY	VALUE
Name	List_Name
ld	LN
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.3.3.4 Field Items

2.1.3.3.3.4.1 Items Tree Diagram



2.1.3.3.3.4.2 Items Hierarchy

Parent field: **List** Child field(s):

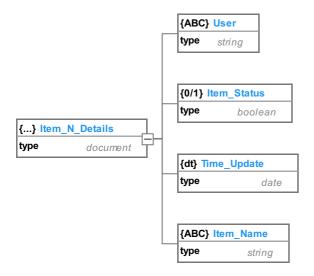
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Item_N_Details	document	false			

Items properties

PROPERTY	VALUE
Name	Items
ld	List_ID
Туре	document
Description	Items Document
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.3.3.5 Field Item_N_Details

2.1.3.3.3.5.1 Item_N_Details Tree Diagram



2.1.3.3.3.5.2 Item_N_Details Hierarchy

Parent field: **Items** Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
User	string	true	fk	User Who added the item	
Item_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
Item_Name	string	true			

Item_N_Details properties

PROPERTY	VALUE
Name	Item_N_Details
ld	User_List_Item
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.3.3.6 Field User

2.1.3.3.3.6.1 User Tree Diagram



User properties

PROPERTY	VALUE
Name	User
ld	
Туре	string
Description	User Who added the item
Dependencies	
Required	true
Primary key	false
Foreign collection	Users
Foreign field	User
Relationship type	Foreign Key
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.3.3.7 Field Item_Status

2.1.3.3.3.7.1 Item_Status Tree Diagram



Item_Status properties

PROPERTY	VALUE
Name	Item_Status
ld	Item_Name
Туре	boolean
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.3.3.8 Field Time_Update

2.1.3.3.3.8.1 Time_Update Tree Diagram



Time_Update properties

PROPERTY	VALUE
Name	Time_Update
ld	_time
Туре	date
Description	Time of Last Update of the element
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.3.3.9 Field Item_Name

2.1.3.3.3.9.1 Item_Name Tree Diagram



Item_Name properties

PROPERTY	VALUE
Name	Item_Name
ld	Item_Name
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.3.3.10 Field ADMIN

2.1.3.3.3.10.1 ADMIN Tree Diagram



ADMIN properties

PROPERTY	VALUE
Name	ADMIN
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	Admins
Foreign field	USER_ID
Relationship type	Foreign Key
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.3.4 Lists Users (TBD)

2.1.3.3.5 Lists Indexes

2.1.3.3.6 Lists Sharding

PROPERTY	SHARDING
Key	
Hashed	
Unique	true
Number of initial chunks	
Collation	null
Zone (Tag)	
Comments	

2.1.3.3.7 Lists Definitions

2.1.3.3.8 Lists JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
"id": "Lists",
"type": "object",
"additionalProperties": false,
"capped": false,
"properties": {
  "List": {
    "id": "Adminid_ListNale",
    "type": "object",
    "description": "Will Have as ID the admin ID and the list name",
    "additionalProperties": false,
    "primaryKey": false,
    "properties": {
      "List_ld": {
         "id": "Adminid ListName",
        "type": "string",
         "primaryKey": false,
         "GUID": "22c3b140-304f-11e8-b935-cbb7c5ca28bd"
      },
       "List_Name": {
        "id": "LN",
         "type": "string",
        "primaryKey": false,
        "GUID": "9cb542e0-304d-11e8-b935-cbb7c5ca28bd"
      },
       "Items": {
        "id": "List ID",
        "type": "object",
         "description": "Items Document",
         "additionalProperties": false,
         "primaryKey": false,
         "properties": {
           "Item N Details": {
             "id": "User_List_Item",
             "type": "object",
             "additionalProperties": false,
             "primaryKey": false,
             "properties": {
                "User": {
                  "type": "string",
                  "description": "User Who added the item",
                  "primaryKey": false,
                  "GUID": "8b92e652-304f-11e8-b935-cbb7c5ca28bd"
                },
                "Item_Status": {
                  "id": "Item Name",
                  "type": "boolean",
                  "primaryKey": false,
                  "GUID": "8b92e653-304f-11e8-b935-cbb7c5ca28bd"
                },
                "Time_Update": {
                  "id": "_time",
                  "type": "date",
                  "description": "Time of Last Update of the element",
```

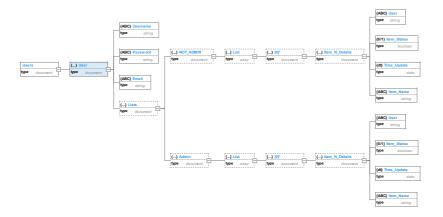
```
"primaryKey": false,
                "GUID": "8b92e654-304f-11e8-b935-cbb7c5ca28bd"
              "Item_Name": {
                "id": "Item Name",
                "type": "string",
                "primaryKey": false,
                "GUID": "8b92e655-304f-11e8-b935-cbb7c5ca28bd"
              }
            },
            "GUID": "8b92e651-304f-11e8-b935-cbb7c5ca28bd",
            "required": [
              "User",
              "Item_Status",
              "Time_Update",
              "Item Name"
          }
        "GUID": "8b92e650-304f-11e8-b935-cbb7c5ca28bd"
      "ADMIN": {
        "type": "string",
        "primaryKey": false,
        "GUID": "6fe55a00-35b3-11e8-b226-bd0adb2bd6cd"
      }
    },
    "GUID": "ed1a6d60-304c-11e8-b935-cbb7c5ca28bd",
    "required": [
      "List_Name"
 }
"validationAction": "Warn",
"validationLevel": "Off"
```

2.1.3.3.9 Lists JSON data

```
{
  "List": {
    "List_Id": "Lorem",
    "List_Name": "Lorem",
    "Item_N_Details": {
        "User": "Lorem",
        "Item_Status": true,
        "Time_Update": ISODate("2016-04-08T15:06:21.595Z"),
        "Item_Name": "Lorem"
        }
    },
    "ADMIN": "Lorem"
}
```

2.1.3.4 Collection Users

2.1.3.4.1 Users Tree Diagram



2.1.3.4.2 Users Properties

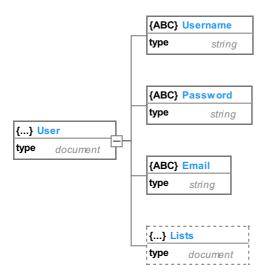
PROPERTY	VALUE
Collection name	Users
ld	
Description	
Database	HNDIR
Capped	false
Size	
Max	
Storage engine	WiredTiger
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.3.4.3 Users Fields

FIELD	ТҮРЕ	REQ	KEY	DESCRIPTION	COMMENTS
User	document	true			
Username	string	true			
Password	string	true			
Email	string	true			
Lists	document	false			
NOT_ADMIN	document	false		Items Document	
List	array	false			
[0]	document	false			
ltem_N_Details	document	false			
User	string	true		User Who added the item	
ltem_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
ltem_Name	string	true			
Admin	document	false			
List	array	false			
[0]	document	false		Instance of the List doc content: List [0]	
Item_N_Details	document	false			
User	string	true		User Who added the item	
ltem_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
ltem_Name	string	true			

2.1.3.4.3.1 Field User

2.1.3.4.3.1.1 User Tree Diagram



2.1.3.4.3.1.2 User Hierarchy

Parent field: **Users** Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Username	string	true	fk		
Password	string	true			
Email	string	true			
Lists	document	false			

User properties

PROPERTY	VALUE
Name	User
ld	_ObjectId
Туре	document
Description	
Dependencies	
Required	true
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.2 Field Username

2.1.3.4.3.2.1 Username Tree Diagram



Username properties

PROPERTY	VALUE
Name	Username
ld	_un
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	Lists
Foreign field	User
Relationship type	Foreign Key
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.3.3 Field Password

2.1.3.4.3.3.1 Password Tree Diagram



Password properties

PROPERTY	VALUE
Name	Password
ld	_PW
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.3.4 Field Email

2.1.3.4.3.4.1 Email Tree Diagram

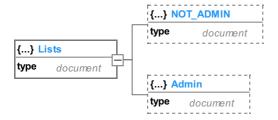


Email properties

PROPERTY	VALUE
Name	Email
ld	_e
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	email
Enum	
Sample	
Comments	

2.1.3.4.3.5 Field Lists

2.1.3.4.3.5.1 Lists Tree Diagram



2.1.3.4.3.5.2 Lists Hierarchy

Parent field: **User** Child field(s):

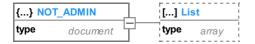
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
NOT_ADMIN	document	false		Items Document	
Admin	document	false			

Lists properties

PROPERTY	VALUE
Name	Lists
ld	
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.6 Field NOT_ADMIN

2.1.3.4.3.6.1 NOT_ADMIN Tree Diagram



2.1.3.4.3.6.2 NOT_ADMIN Hierarchy

Parent field: **Lists** Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List	array	false			

NOT_ADMIN properties

PROPERTY	VALUE
Name	NOT_ADMIN
ld	List_ID
Туре	document
Description	Items Document
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.7 Field List

2.1.3.4.3.7.1 List Tree Diagram



2.1.3.4.3.7.2 List Hierarchy

Parent field: NOT_ADMIN

Child field(s):

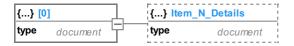
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false			

List properties

PROPERTY	VALUE
Name	List
ld	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.3.4.3.8 Field New Field

2.1.3.4.3.8.1 New Field Tree Diagram



2.1.3.4.3.8.2 New Field Hierarchy

Parent field: **List** Child field(s):

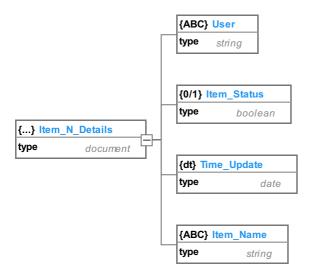
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Item_N_Details	document	false			

New Field properties

PROPERTY	VALUE
Name	New Field
ld	
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.9 Field Item_N_Details

2.1.3.4.3.9.1 Item_N_Details Tree Diagram



2.1.3.4.3.9.2 Item_N_Details Hierarchy

Parent field: New Field

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
User	string	true		User Who added the item	
Item_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
Item_Name	string	true			

Item_N_Details properties

PROPERTY	VALUE
Name	Item_N_Details
ld	User_List_Item
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.10 Field User

2.1.3.4.3.10.1 User Tree Diagram



User properties

PROPERTY	VALUE
Name	User
ld	_id
Туре	string
Description	User Who added the item
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.3.11 Field Item_Status

2.1.3.4.3.11.1 Item_Status Tree Diagram



Item_Status properties

PROPERTY	VALUE
Name	Item_Status
ld	Item_Name
Туре	boolean
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.4.3.12 Field Time_Update

2.1.3.4.3.12.1 Time_Update Tree Diagram



Time_Update properties

PROPERTY	VALUE
Name	Time_Update
ld	_time
Туре	date
Description	Time of Last Update of the element
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.4.3.13 Field Item_Name

2.1.3.4.3.13.1 Item_Name Tree Diagram

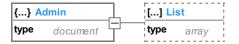


Item_Name properties

PROPERTY	VALUE
Name	Item_Name
ld	Item_Name
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.3.14 Field Admin

2.1.3.4.3.14.1 Admin Tree Diagram



2.1.3.4.3.14.2 Admin Hierarchy

Parent field: **Lists** Child field(s):

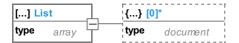
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
List	array	false			

Admin properties

PROPERTY	VALUE
Name	Admin
ld	
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.15 Field List

2.1.3.4.3.15.1 List Tree Diagram



2.1.3.4.3.15.2 List Hierarchy

Parent field: **Admin** Child field(s):

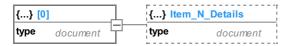
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	document	false		Instance of the List doc content: List [0]	

List properties

PROPERTY	VALUE
Name	List
ld	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.3.4.3.16 Field New Field

2.1.3.4.3.16.1 New Field Tree Diagram



2.1.3.4.3.16.2 New Field Hierarchy

Parent field: **List** Child field(s):

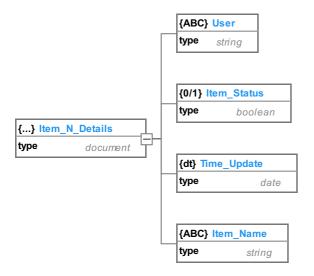
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
Item_N_Details	document	false			

New Field properties

PROPERTY	VALUE
Name	New Field
ld	
Туре	document
Description	Instance of the List doc content: List [0]
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.17 Field Item_N_Details

2.1.3.4.3.17.1 Item_N_Details Tree Diagram



2.1.3.4.3.17.2 Item_N_Details Hierarchy

Parent field: New Field

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
User	string	true		User Who added the item	
Item_Status	boolean	true			
Time_Update	date	true		Time of Last Update of the element	
Item_Name	string	true			

Item_N_Details properties

PROPERTY	VALUE
Name	Item_N_Details
ld	User_List_Item
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.3.4.3.18 Field User

2.1.3.4.3.18.1 User Tree Diagram



User properties

PROPERTY	VALUE
Name	User
ld	_id
Туре	string
Description	User Who added the item
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.3.19 Field Item_Status

2.1.3.4.3.19.1 Item_Status Tree Diagram



Item_Status properties

PROPERTY	VALUE
Name	Item_Status
ld	Item_Name
Туре	boolean
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.4.3.20 Field Time_Update

2.1.3.4.3.20.1 Time_Update Tree Diagram



Time_Update properties

PROPERTY	VALUE
Name	Time_Update
ld	_time
Туре	date
Description	Time of Last Update of the element
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.3.4.3.21 Field Item_Name

2.1.3.4.3.21.1 Item_Name Tree Diagram



Item_Name properties

PROPERTY	VALUE
Name	Item_Name
ld	Item_Name
Туре	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.3.4.4 Users Users (TBD)

2.1.3.4.5 Users Indexes

2.1.3.4.6 Users Sharding

PROPERTY	SHARDING
Key	
Hashed	
Unique	true
Number of initial chunks	
Collation	null
Zone (Tag)	
Comments	

2.1.3.4.7 Users Definitions

2.1.3.4.8 Users JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "additionalProperties": false,
  "capped": false,
  "properties": {
    "User": {
       "id": "_ObjectId",
       "type": "object",
       "additionalProperties": false,
       "primaryKey": true,
       "properties": {
         "Username": {
           "id": " un",
           "type": "string",
           "primaryKey": false,
           "GUID": "da21f230-3107-11e8-8481-9d220933f326"
         },
         "Password": {
           "id": "_PW",
           "type": "string",
           "primaryKey": false,
           "GUID": "e2b33e90-3107-11e8-8481-9d220933f326"
         },
         "Email": {
           "id": "_e",
           "type": "string",
           "format": "email",
           "primaryKey": false,
           "GUID": "ef7ae1a0-3107-11e8-8481-9d220933f326"
         },
         "Lists": {
           "type": "object",
           "additionalProperties": false,
           "primaryKey": false,
           "properties": {
              "NOT_ADMIN": {
                "id": "List ID",
                "type": "object",
                "description": "Items Document",
                "additionalProperties": false,
                "primaryKey": false,
                "properties": {
                  "List": {
                     "type": "array",
                     "additionalItems": true,
                     "primaryKey": false,
                     "uniqueltems": false,
                     "GUID": "4967a9f0-3108-11e8-8481-9d220933f326",
                     "items": {
                       "type": "object",
                       "additionalProperties": false,
                       "arrayltem": true,
                       "primaryKey": false,
                       "properties": {
```

```
"Item_N_Details": {
             "id": "User_List_Item",
             "type": "object",
             "additionalProperties": false,
             "primaryKey": false,
             "properties": {
               "User": {
                 "id": "_id",
                 "type": "string",
                 "description": "User Who added the item",
                 "primaryKey": false,
                 "GUID": "7c63ba11-3108-11e8-8481-9d220933f326"
               },
               "Item_Status": {
                 "id": "Item_Name",
                 "type": "boolean",
                 "primaryKey": false,
                 "GUID": "7c63ba13-3108-11e8-8481-9d220933f326"
               "Time_Update": {
                 "id": "_time",
                 "type": "date",
                 "description": "Time of Last Update of the element",
                 "primaryKey": false,
                 "GUID": "7c63ba14-3108-11e8-8481-9d220933f326"
               "Item_Name": {
                 "id": "Item_Name",
                 "type": "string",
                 "primaryKey": false,
                 "GUID": "7c63ba15-3108-11e8-8481-9d220933f326"
              }
            },
             "GUID": "7c63ba10-3108-11e8-8481-9d220933f326",
             "required": [
               "User",
               "Item_Status",
               "Time_Update",
               "Item_Name"
            1
          }
        "GUID": "4dd05b40-3108-11e8-8481-9d220933f326"
      }
    }
  "GUID": "28b26740-3108-11e8-8481-9d220933f326"
"Admin": {
  "type": "object",
  "additionalProperties": false,
  "primaryKey": false,
  "properties": {
    "List": {
      "type": "array",
      "additionalItems": true,
```

```
"primaryKey": false,
    "uniqueltems": false,
    "GUID": "df6ca9a0-3108-11e8-8481-9d220933f326",
    "items": {
      "type": "object",
      "description": "Instance of the List doc content: List [0]",
      "additionalProperties": false,
      "arrayltem": true,
      "primaryKey": false,
      "properties": {
         "Item N Details": {
           "id": "User_List_Item",
           "type": "object",
           "additionalProperties": false,
           "primaryKey": false,
           "properties": {
             "User": {
               "id": " id",
               "type": "string",
               "description": "User Who added the item",
               "primaryKey": false,
               "GUID": "df6ca9a3-3108-11e8-8481-9d220933f326"
             "Item_Status": {
               "id": "Item_Name",
               "type": "boolean",
               "primaryKey": false,
               "GUID": "df6ca9a5-3108-11e8-8481-9d220933f326"
             "Time_Update": {
               "id": "_time",
               "type": "date",
               "description": "Time of Last Update of the element",
               "primaryKey": false,
               "GUID": "df6ca9a6-3108-11e8-8481-9d220933f326"
             "Item_Name": {
               "id": "Item_Name",
               "type": "string",
               "primaryKey": false,
               "GUID": "df6ca9a7-3108-11e8-8481-9d220933f326"
           },
           "GUID": "df6ca9a2-3108-11e8-8481-9d220933f326",
           "required": [
             "User",
             "Item_Status",
             "Time_Update",
             "Item_Name"
           ]
        }
      },
       "GUID": "df6ca9a1-3108-11e8-8481-9d220933f326"
    }
  }
},
```

```
"GUID": "32aae4c0-3108-11e8-8481-9d220933f326"
            }
          },
          "GUID": "0320f0f0-3108-11e8-8481-9d220933f326"
      },
      "GUID": "9b866b50-3107-11e8-8481-9d220933f326",
      "required": [
        "Username",
        "Password",
        "Email"
    }
  "validationAction": "Warn",
  "validationLevel": "Off",
  "required": [
    "User"
}
```

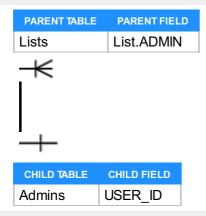
2.1.3.4.9 Users JSON data

```
"User": {
  "Username": "Lorem",
  "Password": "Lorem",
  "Email": "sample@email.com",
  "Lists": {
    "NOT_ADMIN": {
      "List": [
        {
           "Item_N_Details": {
            "User": "Lorem",
            "Item_Status": true,
            "Time_Update": ISODate("2016-04-08T15:06:21.595Z"),
            "Item_Name": "Lorem"
        }
      ]
    },
    "Admin": {
      "List": [
        {
           "Item_N_Details": {
            "User": "Lorem",
            "Item_Status": true,
            "Time_Update": ISODate("2016-04-08T15:06:21.595Z"),
            "Item_Name": "Lorem"
        }
      ]
    }
 }
}
```

3. RELATIONSHIPS

3.1 Relationship ADMIN to List

3.1.1 ADMIN to List Diagram

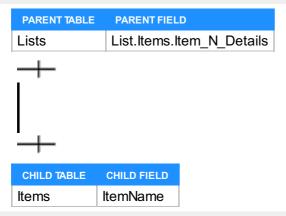


3.1.2 ADMIN to List Properties

PROPERTY	VALUE
Name	ADMIN to List
Description	
Parent Collection	Lists
Parent field	ADMIN
Parent Cardinality	1n
Child Collection	Admins
Child field	USER_ID
Child Cardinality	1
Comments	

3.2 Relationship Item to List

3.2.1 Item to List Diagram

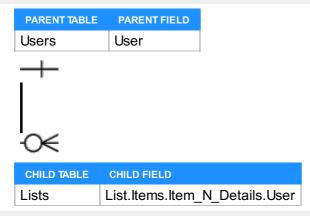


3.2.2 Item to List Properties

PROPERTY	VALUE
Name	Item to List
Description	
Parent Collection	Lists
Parent field	Item_N_Details
Parent Cardinality	1
Child Collection	Items
Child field	ItemName
Child Cardinality	1
Comments	

3.3 Relationship User to List

3.3.1 User to List Diagram



3.3.2 User to List Properties

PROPERTY	VALUE
Name	User to List
Description	
Parent Collection	Users
Parent field	User
Parent Cardinality	1
Child Collection	Lists
Child field	User
Child Cardinality	0n
Comments	