



MongoDB Physical Model

Schema for:

Model name: voxnostra
Author: Herve Dzeudjouo
Version: 1.0
File name: voxnostra.json
File path: C:\Users\dzeud\Documents\workplace\personal\andela\voxnostra.json
Printed On: Sat May 02 2020 03:44:34 GMT+0100 (West Africa Standard Time)
Created with: [Hackolade](#) - Visual data modeling for NoSQL and multimodel databases

1. Model

2. Databases

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 - 2.1.2.1 Comment
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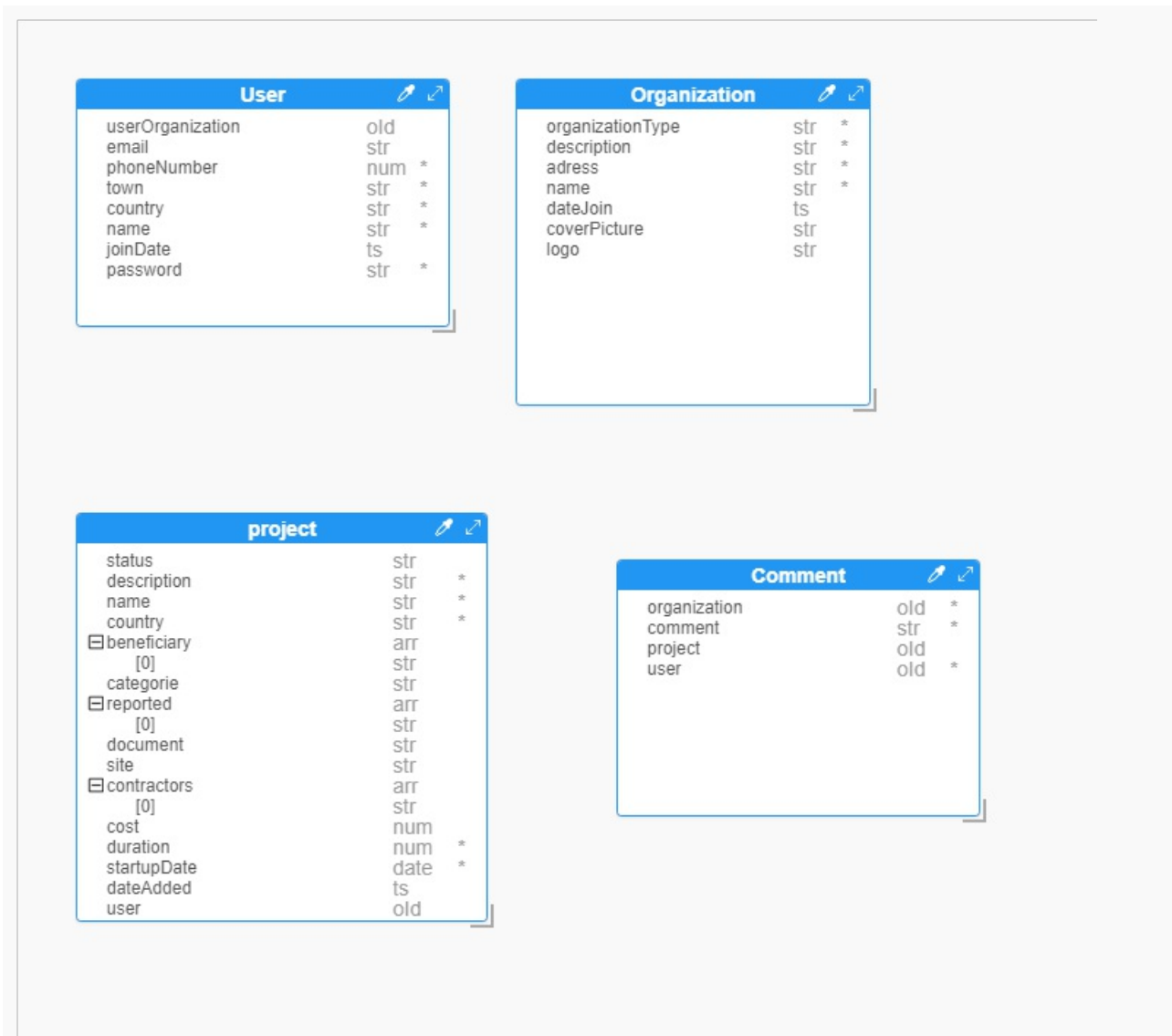
3. Relationships

- 3.1 New Relationship

1. MODEL

1.1 Model voxnostra

1.1.1 voxnostra Entity Relationship Diagram



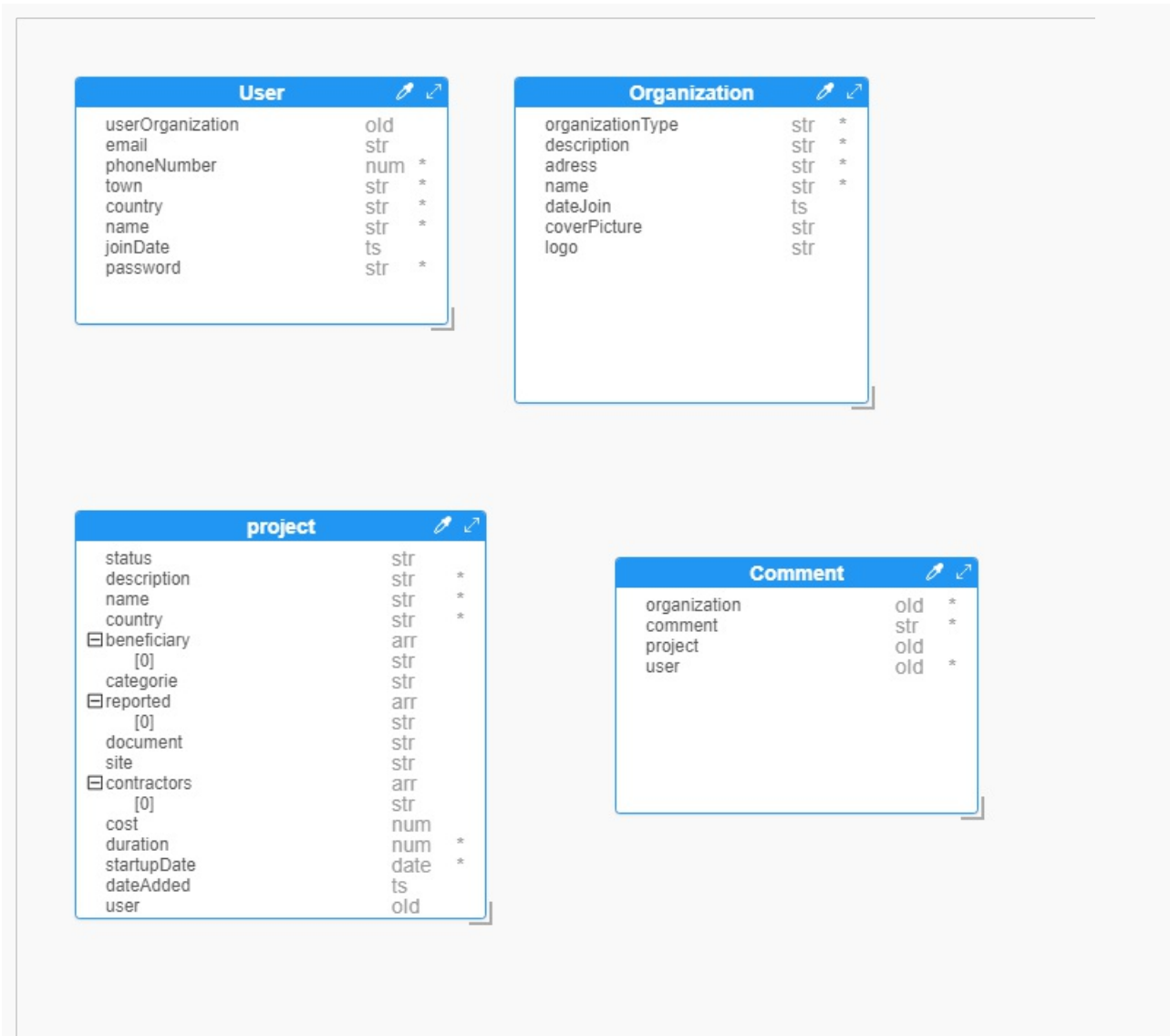
1.1.2 voxnostra Properties

PROPERTY	VALUE
Model name	voxnostra
Technical name	sdgs
Description	This is the model design for our sdgs challenge project.
Author	Herve Dzeudjouo
Version	1.0
DB vendor	MongoDB
DB version	v4.2
Comments	

1.1.3 voxnostra DB Definitions

2. DATABASES

2.1 Database Undefined Database



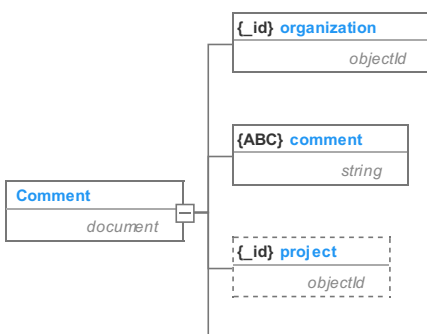
2.1.1 Undefined Database Properties

PROPERTY	VALUE
Database name	Undefined Database
Technical name	
Enable sharding	
Description	
Comments	

2.1.2 Undefined Database Collections

2.1.2.1 Collection Comment

2.1.2.1.1 Comment Tree Diagram





2.1.2.1.2 Comment Properties

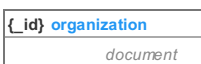
PROPERTY	VALUE
Collection name	Comment
Technical name	
Id	
Description	Users or organisations coments about the project.
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.1.3 Comment Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
organization	objectId	true			
comment	string	true		comment placed	
project	objectId	false		project on which the comment is place	
user	objectId	true		users who placed the comment	

2.1.2.1.3.1 Field organization

2.1.2.1.3.1.1 organization Tree Diagram



2.1.2.1.3.1.2 organization properties

PROPERTY	VALUE
Name	organization
Technical name	
Id	
Type	objectId
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	Organization
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.1.3.2 Field comment

2.1.2.1.3.2.1 comment Tree Diagram

{ABC} comment
document

2.1.2.1.3.2.2 comment properties

PROPERTY	VALUE
Name	comment
Technical name	
Id	
Type	string
Description	comment placed
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.3 Field project

2.1.2.1.3.3.1 project Tree Diagram

{_id} project
document

2.1.2.1.3.3.2 project properties

PROPERTY	VALUE
Name	project
Technical name	
Id	
Type	objectId
Description	project on which the comment is place
Dependencies	
Required	false
Primary key	false
Foreign collection	project
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.1.3.4 Field user

2.1.2.1.3.4.1 user Tree Diagram

{_id} user
document

2.1.2.1.3.4.2 user properties

PROPERTY	VALUE
Name	user
Technical name	
Id	
Type	objectId
Description	users who placed the comment
Dependencies	
Required	true
Primary key	false
Foreign collection	User
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.1.4 Comment JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Comment",
  "description": "Users or organisations coments about the project.",
  "additionalProperties": false,
  "properties": {
    "organization": {
      "type": "string",
      "pattern": "[a-zA-F0-9]{24}$"
    },
    "comment": {
      "type": "string",
      "description": "comment placed"
    },
    "project": {
      "type": "string",
      "description": "project on which the comment is place",
      "pattern": "[a-zA-F0-9]{24}$"
    },
    "user": {
      "type": "string",
      "description": "users who placed the comment",
      "pattern": "[a-zA-F0-9]{24}$"
    }
  },
  "required": [
    "organization",
    "comment",
    "user"
  ]
}
```

2.1.2.1.5 Comment JSON data

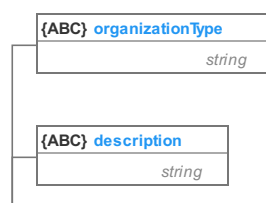
```
{
  "organization": ObjectId("507f1f77bcf86cd799439011"),
  "comment": "Lorem",
  "project": ObjectId("507f1f77bcf86cd799439011"),
  "user": ObjectId("507f1f77bcf86cd799439011")
}
```

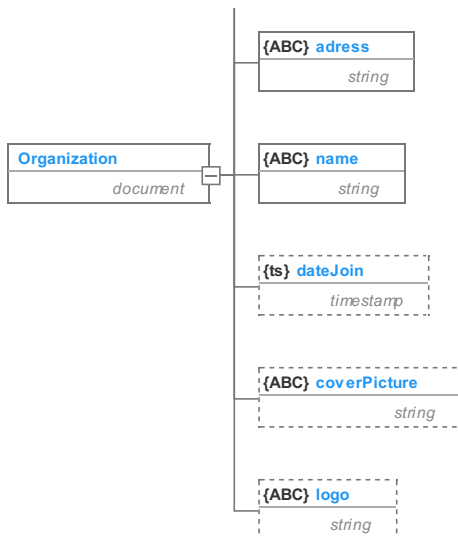
2.1.2.1.6 Comment Target Script

```
db.createCollection( "Comment",{
  "storageEngine": {
    "wiredTiger": {}
  },
  "capped": false,
  "validator": {
    "$jsonSchema": {
      "bsonType": "object",
      "title": "Comment",
      "description": "Users or organisations coments about the project.",
      "additionalProperties": false,
      "properties": {
        "_id": {
          "bsonType": "objectId"
        },
        "organization": {
          "bsonType": "objectId"
        },
        "comment": {
          "bsonType": "string",
          "description": "comment placed"
        },
        "project": {
          "bsonType": "objectId",
          "description": "project on which the comment is place"
        },
        "user": {
          "bsonType": "objectId",
          "description": "users who placed the comment"
        }
      }
    }
  },
  "required": [
    "organization",
    "comment",
    "user"
  ]
}
};
"validationLevel": "off",
"validationAction": "warn"
});
```

2.1.2.2 Collection Organization

2.1.2.2.1 Organization Tree Diagram





2.1.2.2.2 Organization Properties

PROPERTY	VALUE
Collection name	Organization
Technical name	organization
Id	
Description	this collection is set to contains the organizations details.
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.2.3 Organization Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
organizationType	string	true		Type of the organization(NGO gov etc...)	
description	string	true		Description of the organization.	
adresa	string	true		Adresa of the organization	
name	string	true		name of the organization	
dateJoin	timestamp	false			
coverPicture	string	false			
logo	string	false			

2.1.2.2.3.1 Field organizationType

2.1.2.2.3.1.1 organizationType Tree Diagram

{ABC} organizationType
document

2.1.2.2.3.1.2 organizationType properties

PROPERTY	VALUE
Name	organizationType
Technical name	
Id	
Type	string
Description	Type of the organization(NGO gov etc...)
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.2 Field description

2.1.2.2.3.2.1 description Tree Diagram

{ABC} description
document

2.1.2.2.3.2.2 description properties

PROPERTY	VALUE
Name	description
Technical name	
Id	
Type	string
Description	Description of the organization.
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.3 Field adress

2.1.2.2.3.3.1 adress Tree Diagram

{ABC} adress
<i>document</i>

2.1.2.2.3.3.2 adress properties

PROPERTY	VALUE
Name	adress
Technical name	
Id	
Type	string
Description	Adress of the organization
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.4 Field name

2.1.2.2.3.4.1 name Tree Diagram

{ABC} name
document

2.1.2.2.3.4.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Id	
Type	string
Description	name of the organization
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.5 Field dateJoin

2.1.2.2.3.5.1 dateJoin Tree Diagram

{ts} dateJoin
document

2.1.2.2.3.5.2 dateJoin properties

PROPERTY	VALUE
Name	dateJoin
Technical name	
Id	
Type	timestamp
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	Date.now()
Sample	
Comments	

2.1.2.2.3.6 Field coverPicture

2.1.2.2.3.6.1 coverPicture Tree Diagram

{ABC} coverPicture
<i>document</i>

2.1.2.2.3.6.2 coverPicture properties

PROPERTY	VALUE
Name	coverPicture
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.7 Field logo

2.1.2.2.3.7.1 logo Tree Diagram

{ABC} logo
<i>document</i>

2.1.2.2.3.7.2 logo properties

PROPERTY	VALUE
Name	logo
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.4 Organization JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Organization",
  "description": "this collection is set to contains the organizations details.",
  "additionalProperties": false,
  "properties": {
    "organizationType": {
      "type": "string",
      "description": "Type of the organization(NGO gov etc...)"
    },
    "description": {
      "type": "string",
      "description": "Description of the organization."
    },
    "adress": {
      "type": "string",
      "description": "Adress of the organization"
    },
    "name": {
      "type": "string",
      "description": "name of the organization"
    },
    "dateJoin": {
      "type": "string",
      "default": "Date.now()",
      "format": "date-time"
    },
    "coverPicture": {
      "type": "string"
    },
    "logo": {
      "type": "string"
    }
  },
  "required": [
    "organizationType",
    "description",
    "adress",
    "name"
  ]
}
```

2.1.2.2.5 Organization JSON data

```
{
  "organizationType": "Lorem",
  "description": "Lorem",
  "adress": "Lorem",
  "name": "Lorem",
  "dateJoin": "Date.now()",
  "coverPicture": "Lorem",
  "logo": "Lorem"
}
```

2.1.2.2.6 Organization Target Script

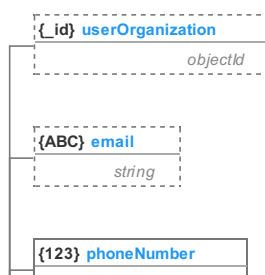
```

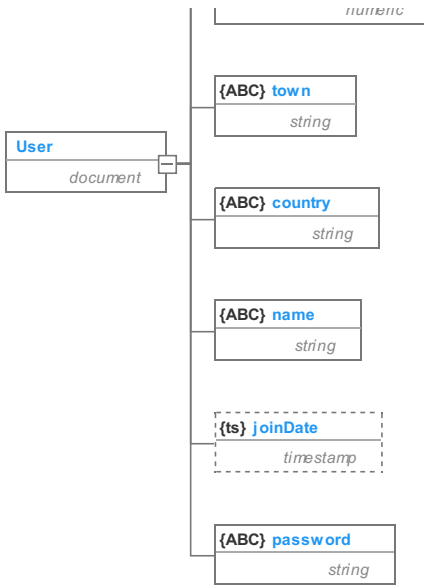
db.createCollection( "organization",{
  "storageEngine": {
    "wiredTiger": {}
  },
  "capped": false,
  "validator": {
    "$jsonSchema": {
      "bsonType": "object",
      "title": "Organization",
      "description": "this collection is set to contains the organizations details.",
      "additionalProperties": false,
      "properties": {
        "_id": {
          "bsonType": "objectId"
        },
        "organizationType": {
          "bsonType": "string",
          "description": "Type of the organization(NGO gov etc...)"
        },
        "description": {
          "bsonType": "string",
          "description": "Description of the organization."
        },
        "adress": {
          "bsonType": "string",
          "description": "Adress of the organization"
        },
        "name": {
          "bsonType": "string",
          "description": "name of the organization"
        },
        "dateJoin": {
          "bsonType": "timestamp"
        },
        "coverPicture": {
          "bsonType": "string"
        },
        "logo": {
          "bsonType": "string"
        }
      }
    },
    "required": [
      "organizationType",
      "description",
      "adress",
      "name"
    ]
  }
},
"validationLevel": "off",
"validationAction": "warn"
});

```

2.1.2.3 Collection User

2.1.2.3.1 User Tree Diagram





2.1.2.3.2 User Properties

PROPERTY	VALUE
Collection name	User
Technical name	account
Id	
Description	This collection hold users data
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.3.3 User Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
userOrganization	objectId	false		organization the user belongs to	
email	string	false		user email	
phoneNumber	numeric	true		User phone number	
town	string	true			
country	string	true			
name	string	true		name of the user	
joinDate	timestamp	false			
password	string	true			

2.1.2.3.3.1 Field userOrganization

2.1.2.3.3.1.1 userOrganization Tree Diagram

{_id} userOrganization
<i>document</i>

2.1.2.3.3.1.2 userOrganization properties

PROPERTY	VALUE
Name	userOrganization
Technical name	
Id	
Type	objectId
Description	organization the user belongs to
Dependencies	
Required	false
Primary key	false
Foreign collection	Organization
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.3.3.2 Field email

2.1.2.3.3.2.1 email Tree Diagram

{ABC} email
<i>document</i>

2.1.2.3.3.2.2 email properties

PROPERTY	VALUE
Name	email
Technical name	
Id	
Type	string
Description	user email
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.3.3.3 Field phoneNumber

2.1.2.3.3.3.1 phoneNumber Tree Diagram

{123} phoneNumber
<i>document</i>

2.1.2.3.3.3.2 phoneNumber properties

PROPERTY	VALUE
Name	phoneNumber
Technical name	
Id	
Type	numeric
Subtype	
Description	User phone number
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.3.3.4 Field town

2.1.2.3.3.4.1 town Tree Diagram

{ABC} town
<i>document</i>

2.1.2.3.3.4.2 town properties

PROPERTY	VALUE
Name	town
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.3.3.5 Field country

2.1.2.3.3.5.1 country Tree Diagram

{ABC} country
<i>document</i>

2.1.2.3.3.5.2 country properties

PROPERTY	VALUE
Name	country
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.3.3.6 Field name

2.1.2.3.3.6.1 name Tree Diagram

{ABC} name
document

2.1.2.3.3.6.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Id	
Type	string
Description	name of the user
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.3.3.7 Field joinDate

2.1.2.3.3.7.1 joinDate Tree Diagram

{ts} joinDate
document

2.1.2.3.3.7.2 joinDate properties

PROPERTY	VALUE
Name	joinDate
Technical name	
Id	
Type	timestamp
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	Date.now()
Sample	
Comments	

2.1.2.3.3.8 Field password

2.1.2.3.3.8.1 password Tree Diagram

{ABC} password
document

2.1.2.3.3.8.2 password properties

PROPERTY	VALUE
Name	password
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.3.4 User JSON Schema

```

{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "User",
  "description": "This collection hold users data",
  "additionalProperties": false,
  "properties": {
    "userOrganization": {
      "type": "string",
      "description": "organization the user belongs to",
      "pattern": "^[a-zA-F0-9]{24}$"
    },
    "email": {
      "type": "string",
      "description": "user email"
    },
    "phoneNumber": {
      "type": "number",
      "description": "User phone number"
    },
    "town": {
      "type": "string"
    },
    "country": {
      "type": "string"
    },
    "name": {
      "type": "string",
      "description": "name of the user"
    },
    "joinDate": {
      "type": "string",
      "default": "Date.now()",
      "format": "date-time"
    },
    "password": {
      "type": "string"
    }
  },
  "required": [
    "phoneNumber",
    "town",
    "country",
    "name",
    "password"
  ]
}

```

2.1.2.3.5 User JSON data

```

{
  "userOrganization": ObjectId("507f1f77bcf86cd799439011"),
  "email": "Lorem",
  "phoneNumber": -63,
  "town": "Lorem",
  "country": "Lorem",
  "name": "Lorem",
  "joinDate": "Date.now()",
  "password": "Lorem"
}

```

2.1.2.3.6 User Target Script

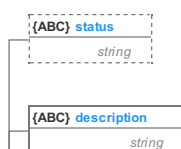
```

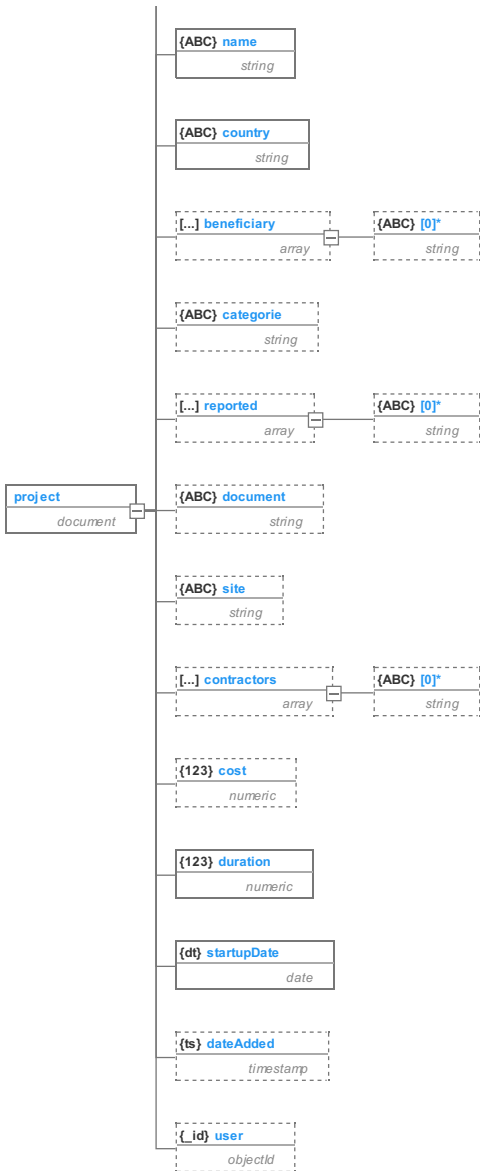
db.createCollection( "account",{
  "storageEngine": {
    "wiredTiger": {}
  },
  "capped": false,
  "validator": {
    "$jsonSchema": {
      "bsonType": "object",
      "title": "User",
      "description": "This collection hold users data",
      "additionalProperties": false,
      "properties": {
        "_id": {
          "bsonType": "objectId"
        },
        "userOrganization": {
          "bsonType": "objectId",
          "description": "organization the user belongs to"
        },
        "email": {
          "bsonType": "string",
          "description": "user email"
        },
        "phoneNumber": {
          "bsonType": "number",
          "description": "User phone number"
        },
        "town": {
          "bsonType": "string"
        },
        "country": {
          "bsonType": "string"
        },
        "name": {
          "bsonType": "string",
          "description": "name of the user"
        },
        "joinDate": {
          "bsonType": "timestamp"
        },
        "password": {
          "bsonType": "string"
        }
      }
    },
    "required": [
      "phoneNumber",
      "town",
      "country",
      "name",
      "password"
    ]
  }
},
  "validationLevel": "off",
  "validationAction": "warn"
});

```

2.1.2.4 Collection project

2.1.2.4.1 project Tree Diagram





2.1.2.4.2 project Properties

PROPERTY	VALUE
Collection name	project
Technical name	
Id	
Description	Collection to holds projects details
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.4.3 project Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
status	string	false			
description	string	true			
name	string	true		Name of the project	
country	string	true		country in which the project is to be executed	
beneficiary	array	false			
[0]	string	false			
category	string	false			
reported	array	false			
[0]	string	false			
document	string	false			
site	string	false		Where the project is to be executed for example is it in only one country or two like road that link two country.	
contractors	array	false		Companies that are supposed to execute the project.	
[0]	string	false			
cost	numeric	false		Cost of the project	
duration	numeric	true		duration of the project eg 36months	
startupDate	date	true			
dateAdded	timestamp	false			
user	objectId	false			User can suscribe a particular project

2.1.2.4.3.1 Field status

2.1.2.4.3.1.1 status Tree Diagram

{ABC} status
document

2.1.2.4.3.1.2 status properties

PROPERTY	VALUE
Name	status
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	notStarted,ongoing,completed,abandoned
Sample	
Comments	

2.1.2.4.3.2 Field description

2.1.2.4.3.2.1 description Tree Diagram

{ABC} description
<i>document</i>

2.1.2.4.3.2.2 description properties

PROPERTY	VALUE
Name	description
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.3 Field name

2.1.2.4.3.3.1 name Tree Diagram

{ABC} name
<i>document</i>

2.1.2.4.3.3.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Id	
Type	string
Description	Name of the project
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.4 Field country

2.1.2.4.3.4.1 country Tree Diagram

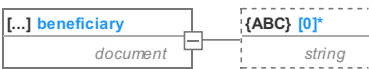
{ABC} country
<i>document</i>

2.1.2.4.3.4.2 country properties

PROPERTY	VALUE
Name	country
Technical name	
Id	
Type	string
Description	country in which the project is to be executed
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.5 Field beneficiary

2.1.2.4.3.5.1 beneficiary Tree Diagram



2.1.2.4.3.5.2 beneficiary Hierarchy

Parent field: **project**

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	string	false			

2.1.2.4.3.5.3 beneficiary properties

PROPERTY	VALUE
Name	beneficiary
Technical name	
Id	
Type	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	

2.1.2.4.3.6 Field [0]

2.1.2.4.3.6.1 [0] Tree Diagram

{ABC} [0]
<i>document</i>

2.1.2.4.3.6.2 [0] properties

PROPERTY	VALUE
Id	
Type	string
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.7 Field categorie

2.1.2.4.3.7.1 categorie Tree Diagram

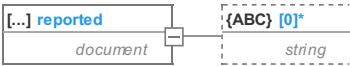
{ABC} categorie
<i>document</i>

2.1.2.4.3.7.2 categorie properties

PROPERTY	VALUE
Name	categorie
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.8 Field reported

2.1.2.4.3.8.1 reported Tree Diagram



2.1.2.4.3.8.2 reported Hierarchy

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

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	string	false			

2.1.2.4.3.8.3 reported properties

PROPERTY	VALUE
Name	reported
Technical name	
Id	
Type	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	

2.1.2.4.3.9 Field [0]

2.1.2.4.3.9.1 [0] Tree Diagram



2.1.2.4.3.9.2 [0] properties

PROPERTY	VALUE
Id	
Type	string
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.10 Field document

2.1.2.4.3.10.1 document Tree Diagram

{ABC} document
<i>document</i>

2.1.2.4.3.10.2 document properties

PROPERTY	VALUE
Name	document
Technical name	
Id	
Type	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.11 Field site

2.1.2.4.3.11.1 site Tree Diagram

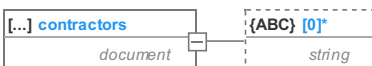
{ABC} site
<i>document</i>

2.1.2.4.3.11.2 site properties

PROPERTY	VALUE
Name	site
Technical name	
Id	
Type	string
Description	Where the project is to be executed for example is it in only one country or two like road that link two country.
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.12 Field contractors

2.1.2.4.3.12.1 contractors Tree Diagram



2.1.2.4.3.12.2 contractors Hierarchy

Parent field: **project**

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0]	string	false			

2.1.2.4.3.12.3 contractors properties

PROPERTY	VALUE
Name	contractors
Technical name	
Id	
Type	array
Description	Companies that are supposed to execute the project.
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.4.3.13 Field [0]

2.1.2.4.3.13.1 [0] Tree Diagram

{ABC} [0]
<i>document</i>

2.1.2.4.3.13.2 [0] properties

PROPERTY	VALUE
Id	
Type	string
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.14 Field cost

2.1.2.4.3.14.1 cost Tree Diagram

{123} cost
<i>document</i>

2.1.2.4.3.14.2 cost properties

PROPERTY	VALUE
Name	cost
Technical name	
Id	
Type	numeric
Subtype	
Description	Cost of the project
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.15 Field duration**2.1.2.4.3.15.1 duration Tree Diagram**

{123} duration
<i>document</i>

2.1.2.4.3.15.2 duration properties

PROPERTY	VALUE
Name	duration
Technical name	
Id	
Type	numeric
Subtype	
Description	duration of the project eg 36months
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.16 Field startupDate**2.1.2.4.3.16.1 startupDate Tree Diagram**

{dt} startupDate
<i>document</i>

2.1.2.4.3.16.2 startupDate properties

PROPERTY	VALUE
Name	startupDate
Technical name	
Id	
Type	date
Description	
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	date.now()
Sample	
Comments	

2.1.2.4.3.17 Field dateAdded

2.1.2.4.3.17.1 dateAdded Tree Diagram

{ts} dateAdded
document

2.1.2.4.3.17.2 dateAdded properties

PROPERTY	VALUE
Name	dateAdded
Technical name	
Id	
Type	timestamp
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	Date.now()
Sample	
Comments	

2.1.2.4.3.18 Field user

2.1.2.4.3.18.1 user Tree Diagram

{_id} user
document

2.1.2.4.3.18.2 user properties

PROPERTY	VALUE
Name	user
Technical name	
Id	
Type	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	User
Foreign field	
Relationship type	
Default	
Sample	
Comments	User can suscribe a particular project

2.1.2.4.4 project JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "project",
  "description": "Collection to holds projects details",
  "additionalProperties": false,
  "properties": {
```

```
"status": {
  "type": "string",
  "enum": [
    "notStarted",
    "ongoing",
    "completed",
    "abandoned"
  ]
},
"description": {
  "type": "string"
},
"name": {
  "type": "string",
  "description": "Name of the project"
},
"country": {
  "type": "string",
  "description": "country in which the project is to be executed"
},
"beneficiary": {
  "type": "array",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "type": "string"
  }
},
"categorie": {
  "type": "string"
},
"reported": {
  "type": "array",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "type": "string"
  }
},
"document": {
  "type": "string"
},
"site": {
  "type": "string",
  "description": "Where the project is to be executed for example is it in only one country or two like road that link two country."
},
"contractors": {
  "type": "array",
  "description": "Companies that are supposed to execute the project.",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "type": "string"
  }
},
"cost": {
  "type": "number",
  "description": "Cost of the project"
},
"duration": {
  "type": "number",
  "description": "duration of the project eg 36months"
},
"startupDate": {
  "type": "string",
  "default": "date.now()",
  "format": "date-time"
},
"dateAdded": {
  "type": "string",
```

```

    "default": "Date.now()",
    "format": "date-time"
  },
  "user": {
    "type": "string",
    "pattern": "^[a-zA-F0-9]{24}$"
  }
},
"required": [
  "description",
  "name",
  "country",
  "duration",
  "startupDate"
]
}

```

2.1.2.4.5 project JSON data

```

{
  "status": "abandoned",
  "description": "Lorem",
  "name": "Lorem",
  "country": "Lorem",
  "beneficiary": [
    "Lorem"
  ],
  "categorie": "Lorem",
  "reported": [
    "Lorem"
  ],
  "document": "Lorem",
  "site": "Lorem",
  "contractors": [
    "Lorem"
  ],
  "cost": 63,
  "duration": -41,
  "startupDate": "date.now()",
  "dateAdded": "Date.now()",
  "user": ObjectId("507f1f77bcf86cd799439011")
}

```

2.1.2.4.6 project Target Script

```

db.createCollection( "project",{
  "storageEngine": {
    "wiredTiger": {}
  },
  "capped": false,
  "validator": {
    "$jsonSchema": {
      "bsonType": "object",
      "title": "project",
      "description": "Collection to holds projects details",
      "additionalProperties": false,
      "properties": {
        "_id": {
          "bsonType": "objectId"
        },
        "status": {

```

```
"bsonType": "string",
"enum": [
  "notStarted",
  "ongoing",
  "completed",
  "abandoned"
]
},
"description": {
  "bsonType": "string"
},
"name": {
  "bsonType": "string",
  "description": "Name of the project"
},
"country": {
  "bsonType": "string",
  "description": "country in which the project is to be executed"
},
"beneficiary": {
  "bsonType": "array",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "bsonType": "string"
  }
},
"categorie": {
  "bsonType": "string"
},
"reported": {
  "bsonType": "array",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "bsonType": "string"
  }
},
"document": {
  "bsonType": "string"
},
"site": {
  "bsonType": "string",
  "description": "Where the project is to be executed for example is it in only one country or two like road that link two country."
},
"contractors": {
  "bsonType": "array",
  "description": "Companies that are supposed to execute the project.",
  "additionalItems": true,
  "uniqueItems": false,
  "items": {
    "bsonType": "string"
  }
},
"cost": {
  "bsonType": "number",
  "description": "Cost of the project"
},
"duration": {
  "bsonType": "number",
  "description": "duration of the project eg 36months"
},
"startupDate": {
  "bsonType": "date"
},
"dateAdded": {
  "bsonType": "timestamp"
},
"user": {
  "bsonType": "objectId"
```

```

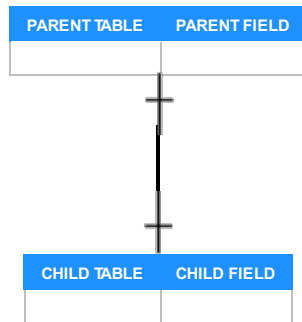
    }
  },
  "required": [
    "description",
    "name",
    "country",
    "duration",
    "startupDate"
  ]
}
},
"validationLevel": "off",
"validationAction": "warn"
});

```

3. RELATIONSHIPS

3.1 Relationship New Relationship

3.1.1 New Relationship Diagram



3.1.2 New Relationship Properties

PROPERTY	VALUE
Name	New Relationship
Description	
Parent Collection	
Parent field	
Parent Cardinality	1
Child Collection	
Child field	
Child Cardinality	1
Comments	