

# **MongoDB Physical Model**

#### Schema for:

Model name: Alub Author: Pedro Bernardi

Version: 1.0

File name: alub.json

File path: C:\Users\pedro\Downloads\alub.json

Printed On: Fri Nov 02 2018 18:27:15 GMT-0300 (Hora oficial do Brasil)

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

#### 1. Model

#### 2. Databases

2.1 alub

2.1.1 post 2.1.2 profile 2.1.3 user

#### 3. Relationships

3.1 fk user.\_id to post.likes.0.user

3.2 fk user.\_id to post.user

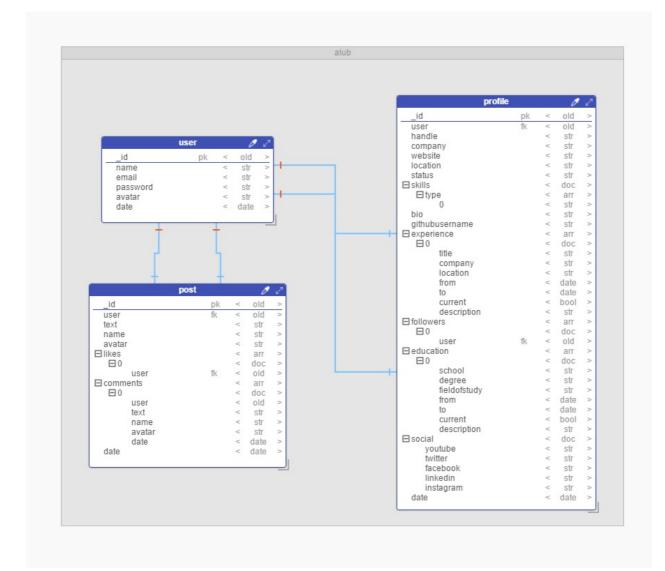
3.3 fk user.\_id to profile.followers.0.user

3.4 fk user.\_id to profile.user

#### 1. MODEL

#### 1.1 Model Alub

#### 1.1.1 Alub Entity Relationship Diagram



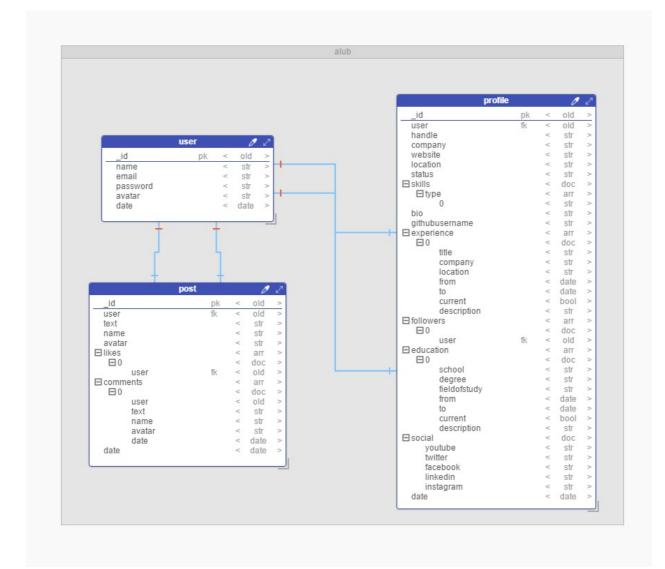
#### 1.1.2 Alub Properties

PROPERTY	VALUE
Model name	Alub
Description	Database for Social Network
Author	Pedro Bernardi
Version	1.0
DB vendor	MongoDB
DB version	v4.0
Enable sharding	
Comments	

#### 1.1.3 Alub DB Definitions

### 2. DATABASES

#### 2.1 Database alub



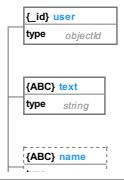
#### 2.1.1 alub Properties

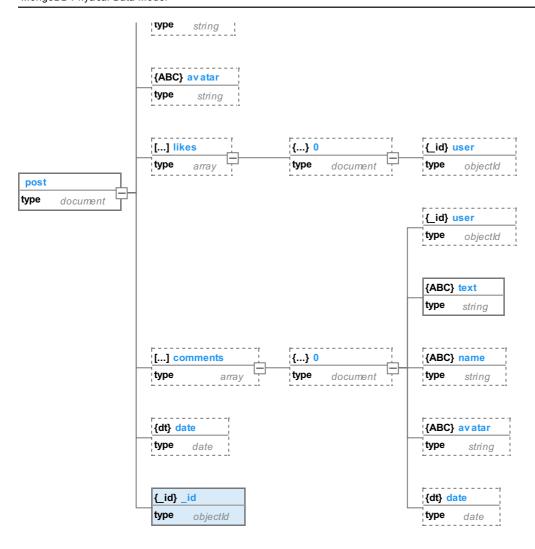
PROPERTY	VALUE
Database name	alub
Description	
Comments	

#### 2.1.2 alub Collections

#### 2.1.2.1 Collection post

#### 2.1.2.1.1 post Tree Diagram





### 2.1.2.1.2 post Properties

PROPERTY	VALUE
Collection name	post
ld	
Description	Coleção de postagens
Database	alub
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

#### 2.1.2.1.3 post Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
user	objectld	true		Usuário correspondente a postagem	
text	string	true		Texto da postagem	
name	string	false		Nome de usário da postagem	
avatar	string	false		Avatar de usuário da postagem	
likes	array	false		Lista de curtidas da postagem	
0	document	false			
user	objectld	false		Usuário da curtida	
comments	array	false		Lista de comentários da postagem	
0	document	false			
user	objectld	false		Usuário correspondente ao comentário postado	
text	string	true		Texto do comentário	
name	string	false		Nome de usuário do comentário	
avatar	string	false		Avatar do usário do comentário	
date	date	false			
date	date	false			
_id	objectld	true		Identificação de postagem	

#### 2.1.2.1.3.1 Field user

### 2.1.2.1.3.1.1 user Tree Diagram



### **2.1.2.1.3.1.2 user properties**

PROPERTY	VALUE
Name	user
ld	
Туре	objectld
Description	Usuário correspondente a postagem
Dependencies	
Required	true
Primary key	false
Foreign collection	user
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

### 2.1.2.1.3.2 Field text

### 2.1.2.1.3.2.1 text Tree Diagram



### 2.1.2.1.3.2.2 text properties

PROPERTY	VALUE
Name	text
ld	
Туре	string
Description	Texto da postagem
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	10
Maxlength	300
Pattern	
Format	
Enum	
Sample	Exemplo de postagem
Comments	

#### 2.1.2.1.3.3 Field name

# 2.1.2.1.3.3.1 name Tree Diagram



### 2.1.2.1.3.3.2 name properties

PROPERTY	VALUE
Name	name
ld	
Туре	string
Description	Nome de usário da postagem
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Pedro
Comments	

### 2.1.2.1.3.4 Field avatar

# 2.1.2.1.3.4.1 avatar Tree Diagram

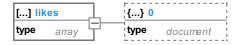


### 2.1.2.1.3.4.2 avatar properties

PROPERTY	VALUE
Name	avatar
ld	
Туре	string
Description	Avatar de usuário da postagem
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	http://www.linkavatar.com
Comments	

#### 2.1.2.1.3.5 Field likes

### 2.1.2.1.3.5.1 likes Tree Diagram



# 2.1.2.1.3.5.2 likes Hierarchy

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

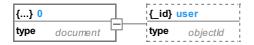
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	document	false			

### **2.1.2.1.3.5.3 likes properties**

PROPERTY	VALUE
Name	likes
ld	
Туре	array
Description	Lista de curtidas da postagem
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Maxitems	
Unique items	false
Additional items	true
Comments	

#### 2.1.2.1.3.6 Field 0

# 2.1.2.1.3.6.1 0 Tree Diagram



### 2.1.2.1.3.6.2 0 Hierarchy

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

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
user	objectld	false	fk	Usuário da curtida	

### 2.1.2.1.3.6.3 0 properties

PROPERTY	VALUE
Name	0
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	

### 2.1.2.1.3.7 Field user

# 2.1.2.1.3.7.1 user Tree Diagram

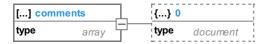


### 2.1.2.1.3.7.2 user properties

PROPERTY	VALUE
Name	user
ld	
Туре	objectId
Description	Usuário da curtida
Dependencies	
Required	false
Primary key	false
Foreign collection	user
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

#### **2.1.2.1.3.8 Field comments**

### 2.1.2.1.3.8.1 comments Tree Diagram



### 2.1.2.1.3.8.2 comments Hierarchy

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

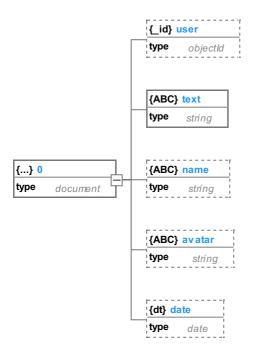
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	document	false			

#### 2.1.2.1.3.8.3 comments properties

PROPERTY	VALUE
Name	comments
ld	
Туре	array
Description	Lista de comentários da postagem
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Maxitems	
Unique items	false
Additional items	true
Comments	

#### 2.1.2.1.3.9 Field 0

### 2.1.2.1.3.9.1 0 Tree Diagram



### 2.1.2.1.3.9.2 0 Hierarchy

### Parent field: comments

Child field(s):

- ( - /					
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
user	objectld	false		Usuário correspondente ao comentário postado	
text	string	true		Texto do comentário	
name	string	false		Nome de usuário do comentário	
avatar	string	false		Avatar do usário do comentário	
date	date	false			

### 2.1.2.1.3.9.3 0 properties

PROPERTY	VALUE
Name	0
Id	
Туре	document
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

#### 2.1.2.1.3.10 Field user

### 2.1.2.1.3.10.1 user Tree Diagram



### 2.1.2.1.3.10.2 user properties

PROPERTY	VALUE
Name	user
ld	
Туре	objectId
Description	Usuário correspondente ao comentário postado
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

#### 2.1.2.1.3.11 Field text

### 2.1.2.1.3.11.1 text Tree Diagram



### 2.1.2.1.3.11.2 text properties

PROPERTY	VALUE
Name	text
ld	
Туре	string
Description	Texto do comentário
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Exemplo de comentário
Comments	

#### 2.1.2.1.3.12 Field name

# 2.1.2.1.3.12.1 name Tree Diagram



### 2.1.2.1.3.12.2 name properties

PROPERTY	VALUE
Name	name
ld	
Туре	string
Description	Nome de usuário do comentário
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Nome
Comments	

#### 2.1.2.1.3.13 Field avatar

# 2.1.2.1.3.13.1 avatar Tree Diagram



### 2.1.2.1.3.13.2 avatar properties

PROPERTY	VALUE
Name	avatar
ld	
Туре	string
Description	Avatar do usário do comentário
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	http://www.linkavatar.com
Comments	

### 2.1.2.1.3.14 Field date

# 2.1.2.1.3.14.1 date Tree Diagram



### 2.1.2.1.3.14.2 date properties

PROPERTY	VALUE
Name	date
Id	
Туре	date
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

### 2.1.2.1.3.15 Field date

### 2.1.2.1.3.15.1 date Tree Diagram



# 2.1.2.1.3.15.2 date properties

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

### 2.1.2.1.3.16 Field \_id

### 2.1.2.1.3.16.1 \_id Tree Diagram



### 2.1.2.1.3.16.2 \_id properties

PROPERTY	VALUE
Name	_id
ld	
Туре	objectld
Description	Identificação de postagem
Dependencies	
Required	true
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

### 2.1.2.1.4 post JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "description": "Coleção de postagens",
  "additionalProperties": false,
  "capped": false,
  "properties": {
    "user": {
      "type": "string",
      "description": "Usuário correspondente a postagem",
      "pattern": "^[a-fA-F0-9]{24}$"
    "text": {
      "type": "string",
      "description": "Texto da postagem",
      "maxLength": 300,
      "minLength": 10,
      "sample": "Exemplo de postagem"
    },
    "name": {
      "type": "string",
      "description": "Nome de usário da postagem",
      "sample": "Pedro"
    },
    "avatar": {
      "type": "string",
      "description": "Avatar de usuário da postagem",
      "sample": "http://www.linkavatar.com"
    },
    "likes": {
      "type": "array",
      "description": "Lista de curtidas da postagem",
      "additionalItems": true,
      "uniqueltems": false,
      "items": {
         "type": "object",
         "additionalProperties": false,
         "properties": {
           "user": {
              "type": "string",
             "description": "Usuário da curtida",
             "pattern": "^[a-fA-F0-9]{24}$"
         }
      }
    },
    "comments": {
      "type": "array",
      "description": "Lista de comentários da postagem",
      "additionalItems": true,
      "uniqueltems": false,
      "items": {
         "type": "object",
         "additionalProperties": false,
         "properties": {
```

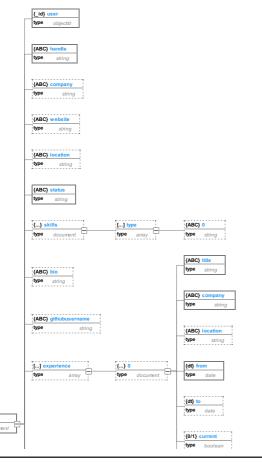
```
"user": {
            "type": "string",
            "description": "Usuário correspondente ao comentário postado",
            "pattern": "^[a-fA-F0-9]{24}$"
         },
         "text": {
            "type": "string",
            "description": "Texto do comentário",
            "sample": "Exemplo de comentário"
         },
         "name": {
            "type": "string",
            "description": "Nome de usuário do comentário",
            "sample": "Nome"
         },
         "avatar": {
            "type": "string",
            "description": "Avatar do usário do comentário",
            "sample": "http://www.linkavatar.com"
         },
         "date": {
            "type": "string",
            "format": "date-time"
       "required": [
         "text"
  "date": {
    "type": "string",
    "format": "date-time"
  " id": {
    "type": "string",
    "description": "Identificação de postagem",
    "primaryKey": true,
    "pattern": "^[a-fA-F0-9]{24}$"
},
"validationAction": "Warn",
"validationLevel": "Off",
"required": [
  "user",
  "text",
  " id"
]
```

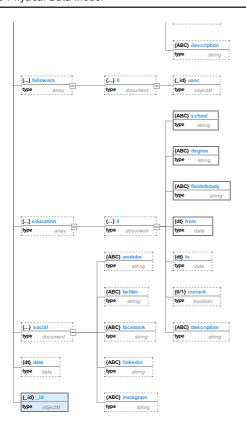
#### 2.1.2.1.5 post JSON data

```
"user": Objectld("507f1f77bcf86cd799439011"),
"text": "Exemplo de postagem",
"name": "Pedro",
"avatar": "http://www.linkavatar.com",
"likes": [
  {
    "user": ObjectId("507f1f77bcf86cd799439011")
],
"comments": [
    "user": ObjectId("507f1f77bcf86cd799439011"),
    "text": "Exemplo de comentário",
    "name": "Nome",
    "avatar": "http://www.linkavatar.com",
    "date": ISODate("2016-04-08T15:06:21.595Z")
],
"date": ISODate("2016-04-08T15:06:21.595Z"),
"_id": ObjectId("507f1f77bcf86cd799439011")
```

#### 2.1.2.2 Collection profile

#### 2.1.2.2.1 profile Tree Diagram





# 2.1.2.2.2 profile Properties

PROPERTY	VALUE
Collection name	profile
ld	
Description	Coleção de perfis
Database	alub
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

### 2.1.2.2.3 profile Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
user	objectld	true		Usuário correspondente ao perfil	
handle	string	true		Nome único de perfil	
company	string	false		Companhia do usuário do perfil	
website	string	false		Site do usuário do perfil	
location	string	false		Localidade do usuário do perfil	
status	string	true		Ocupação atual do usuário do perfil	
skills	document	false		Lista de habilidades	
type	array	false			
0	string	false		Nome de habilidade	
bio	string	false		Biografia do usuário do perfil	
githubusername	string	false		Username do github do usuário	
experience	array	false		Lista de experiências do usuário	
0	document	false			
title	string	true		Título da experiência	
company	string	true		Nome da empresa	
location	string	false		Localidade da empresa	
from	date	true		Data de inicio	
to	date	false		Data final	
current	boolean	false		Emprego atual	
description	string	false		Descrição de trabalho	
followers	array	false		Lista de seguidores do perfil	
0	document	false			
user	objectld	false		Usuário correspondente a seguida	
education	array	false		Lista de educações do perfil	
0	document	false			
school	string	true		Nome do instituição	
degree	string	true		Periodo da educação	
fieldofstudy	string	true		Local da instituição	
from	date	true		Data de inicio	
to	date	false		Data final	
current	boolean	false		Educação atual	
description	string	false		Descrição da educação	
social	document	false		Lista de midias sociais	
youtube	string	false		Link do youtube	
twitter	string	false		Link do twitter	
facebook	string	false		Link do facebook	
linkedin	string	false		Link do linkedin	
instagram	string	false		Link do instagram	
date	date	false			
_id	objectld	true		Identificação do perfil	

### 2.1.2.2.3.1 Field user

### 2.1.2.2.3.1.1 user Tree Diagram



# 2.1.2.2.3.1.2 user properties

PROPERTY	VALUE
Name	user
ld	
Туре	objectld
Description	Usuário correspondente ao perfil
Dependencies	
Required	true
Primary key	false
Foreign collection	user
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

#### 2.1.2.2.3.2 Field handle

# 2.1.2.2.3.2.1 handle Tree Diagram



### 2.1.2.2.3.2.2 handle properties

PROPERTY	VALUE
Name	handle
ld	
Туре	string
Description	Nome único de perfil
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Pedro B
Comments	

# 2.1.2.2.3.3 Field company

# 2.1.2.2.3.3.1 company Tree Diagram



### 2.1.2.2.3.3.2 company properties

PROPERTY	VALUE
Name	company
ld	
Туре	string
Description	Companhia do usuário do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Comp
Comments	

### 2.1.2.2.3.4 Field website

# 2.1.2.2.3.4.1 website Tree Diagram



### 2.1.2.2.3.4.2 website properties

PROPERTY	VALUE
Name	website
ld	
Туре	string
Description	Site do usuário do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	www.site.com
Comments	

#### 2.1.2.2.3.5 Field location

# 2.1.2.2.3.5.1 location Tree Diagram



### 2.1.2.2.3.5.2 location properties

PROPERTY	VALUE
Name	location
ld	
Туре	string
Description	Localidade do usuário do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Cornélio Procópio
Comments	

#### 2.1.2.2.3.6 Field status

# 2.1.2.2.3.6.1 status Tree Diagram

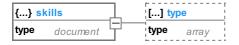


### 2.1.2.2.3.6.2 status properties

PROPERTY	VALUE
Name	status
ld	
Туре	string
Description	Ocupação atual do usuário do perfil
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Estudante
Comments	

#### 2.1.2.2.3.7 Field skills

### 2.1.2.2.3.7.1 skills Tree Diagram



# 2.1.2.2.3.7.2 skills Hierarchy

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

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
type	array	false			

### 2.1.2.2.3.7.3 skills properties

PROPERTY	VALUE
Name	skills
Id	
Туре	document
Description	Lista de habilidades
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

### 2.1.2.2.3.8 Field type

# 2.1.2.2.3.8.1 type Tree Diagram



### 2.1.2.2.3.8.2 type Hierarchy

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

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	string	false		Nome de habilidade	

### 2.1.2.2.3.8.3 type properties

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

#### 2.1.2.2.3.9 Field 0

### 2.1.2.2.3.9.1 0 Tree Diagram



### 2.1.2.2.3.9.2 0 properties

VALUE
0
string
Nome de habilidade
false
false
Python

### 2.1.2.2.3.10 Field bio

### 2.1.2.2.3.10.1 bio Tree Diagram



### 2.1.2.2.3.10.2 bio properties

PROPERTY	VALUE
Name	bio
ld	
Туре	string
Description	Biografia do usuário do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Meu nome
Comments	

### 2.1.2.2.3.11 Field githubusername

# 2.1.2.2.3.11.1 githubusername Tree Diagram

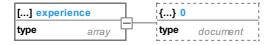


### 2.1.2.2.3.11.2 githubusername properties

PROPERTY	VALUE
Name	githubusername
ld	
Туре	string
Description	Username do github do usuário
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	pedrotreck
Comments	

### 2.1.2.2.3.12 Field experience

### 2.1.2.2.3.12.1 experience Tree Diagram



### 2.1.2.2.3.12.2 experience Hierarchy

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

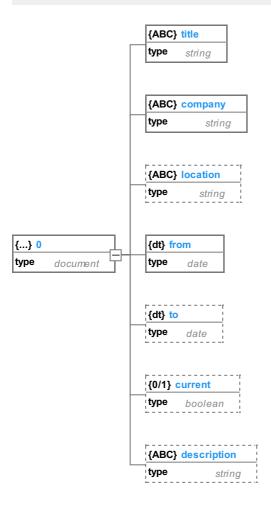
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	document	false			

### 2.1.2.2.3.12.3 experience properties

PROPERTY	VALUE
Name	experience
ld	
Туре	array
Description	Lista de experiências do usuário
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Maxitems	
Unique items	false
Additional items	true
Comments	

### 2.1.2.2.3.13 Field 0

### 2.1.2.2.3.13.1 0 Tree Diagram



### 2.1.2.2.3.13.2 0 Hierarchy

Parent field: experience

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
title	string	true		Título da experiência	
company	string	true		Nome da empresa	
location	string	false		Localidade da empresa	
from	date	true		Data de inicio	
to	date	false		Data final	
current	boolean	false		Emprego atual	
description	string	false		Descrição de trabalho	

### 2.1.2.2.3.13.3 0 properties

PROPERTY	VALUE
Name	0
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	

#### 2.1.2.2.3.14 Field title

# 2.1.2.2.3.14.1 title Tree Diagram



### 2.1.2.2.3.14.2 title properties

PROPERTY	VALUE
Name	title
ld	
Туре	string
Description	Título da experiência
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Developer
Comments	

### 2.1.2.2.3.15 Field company

# 2.1.2.2.3.15.1 company Tree Diagram



### 2.1.2.2.3.15.2 company properties

PROPERTY	VALUE
Name	company
ld	
Туре	string
Description	Nome da empresa
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Google
Comments	

#### 2.1.2.2.3.16 Field location

### 2.1.2.2.3.16.1 location Tree Diagram



## 2.1.2.2.3.16.2 location properties

PROPERTY	VALUE
Name	location
ld	
Туре	string
Description	Localidade da empresa
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Califórnia, Estados Unidos
Comments	

#### 2.1.2.2.3.17 Field from

# 2.1.2.2.3.17.1 from Tree Diagram



## 2.1.2.2.3.17.2 from properties

PROPERTY	VALUE
Name	from
ld	
Туре	date
Description	Data de inicio
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

## 2.1.2.2.3.18 Field to

## 2.1.2.2.3.18.1 to Tree Diagram



## 2.1.2.2.3.18.2 to properties

PROPERTY	VALUE
Name	to
ld	
Туре	date
Description	Data final
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

#### 2.1.2.2.3.19 Field current

## 2.1.2.2.3.19.1 current Tree Diagram



## 2.1.2.2.3.19.2 current properties

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

## 2.1.2.2.3.20 Field description

## 2.1.2.2.3.20.1 description Tree Diagram

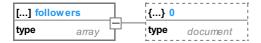


#### 2.1.2.2.3.20.2 description properties

PROPERTY	VALUE
Name	description
ld	
Туре	string
Description	Descrição de trabalho
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Dev google
Comments	

#### **2.1.2.2.3.21 Field followers**

## 2.1.2.2.3.21.1 followers Tree Diagram



## 2.1.2.2.3.21.2 followers Hierarchy

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

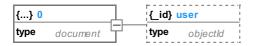
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	document	false			

## 2.1.2.2.3.21.3 followers properties

PROPERTY	VALUE
Name	followers
Id	
Туре	array
Description	Lista de seguidores do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Maxitems	
Unique items	false
Additional items	true
Comments	

## 2.1.2.2.3.22 Field 0

## 2.1.2.2.3.22.1 0 Tree Diagram



## 2.1.2.2.3.22.2 0 Hierarchy

Parent field: followers

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
user	objectld	false	fk	Usuário correspondente a seguida	

## 2.1.2.2.3.22.3 0 properties

PROPERTY	VALUE
Name	0
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	

#### 2.1.2.2.3.23 Field user

## 2.1.2.2.3.23.1 user Tree Diagram

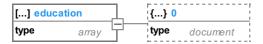


## 2.1.2.2.3.23.2 user properties

PROPERTY	VALUE
Name	user
ld	
Туре	objectld
Description	Usuário correspondente a seguida
Dependencies	
Required	false
Primary key	false
Foreign collection	user
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

#### 2.1.2.2.3.24 Field education

## 2.1.2.2.3.24.1 education Tree Diagram



## 2.1.2.2.3.24.2 education Hierarchy

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

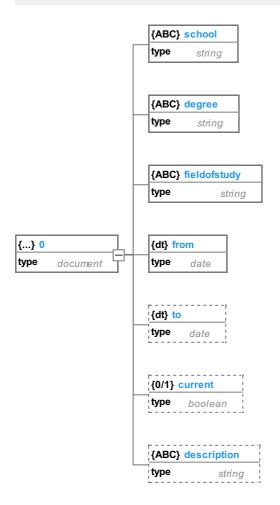
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
0	document	false			

#### 2.1.2.2.3.24.3 education properties

PROPERTY	VALUE
Name	education
ld	
Туре	array
Description	Lista de educações do perfil
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Maxitems	
Unique items	false
Additional items	true
Comments	

#### 2.1.2.2.3.25 Field 0

## 2.1.2.2.3.25.1 0 Tree Diagram



## 2.1.2.2.3.25.2 0 Hierarchy

Parent field: education

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
school	string	true		Nome do instituição	
degree	string	true		Periodo da educação	
fieldofstudy	string	true		Local da instituição	
from	date	true		Data de inicio	
to	date	false		Data final	
current	boolean	false		Educação atual	
description	string	false		Descrição da educação	

## 2.1.2.2.3.25.3 0 properties

PROPERTY	VALUE
Name	0
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	

#### 2.1.2.2.3.26 Field school

## 2.1.2.2.3.26.1 school Tree Diagram



## **2.1.2.3.26.2 school properties**

PROPERTY	VALUE
Name	school
ld	
Туре	string
Description	Nome do instituição
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	UTFPR
Comments	

## 2.1.2.2.3.27 Field degree

## 2.1.2.2.3.27.1 degree Tree Diagram



## 2.1.2.2.3.27.2 degree properties

PROPERTY	VALUE
Name	degree
ld	
Туре	string
Description	Periodo da educação
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	7
Comments	

## 2.1.2.2.3.28 Field fieldofstudy

## 2.1.2.2.3.28.1 fieldofstudy Tree Diagram



## 2.1.2.2.3.28.2 fieldofstudy properties

PROPERTY	VALUE
Name	fieldofstudy
ld	
Type	string
Description	Local da instituição
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Cornélio Procópio
Comments	

#### 2.1.2.2.3.29 Field from

## 2.1.2.2.3.29.1 from Tree Diagram



## 2.1.2.2.3.29.2 from properties

PROPERTY	VALUE
Name	from
ld	
Туре	date
Description	Data de inicio
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

## 2.1.2.2.3.30 Field to

## 2.1.2.2.3.30.1 to Tree Diagram



## 2.1.2.2.3.30.2 to properties

PROPERTY	VALUE
Name	to
ld	
Туре	date
Description	Data final
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

#### 2.1.2.2.3.31 Field current

## 2.1.2.2.3.31.1 current Tree Diagram



## 2.1.2.2.3.31.2 current properties

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

## 2.1.2.2.3.32 Field description

## 2.1.2.2.3.32.1 description Tree Diagram

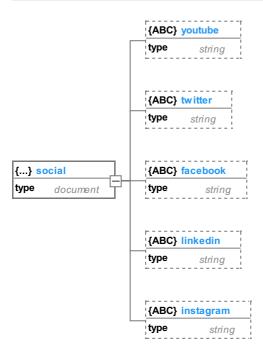
{ABC} description type string

## 2.1.2.2.3.32.2 description properties

PROPERTY	VALUE
Name	description
ld	
Туре	string
Description	Descrição da educação
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	Estudante em
Comments	

## 2.1.2.2.3.33 Field social

## 2.1.2.2.3.33.1 social Tree Diagram



#### 2.1.2.2.3.33.2 social Hierarchy

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

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
youtube	string	false		Link do youtube	
twitter	string	false		Link do twitter	
facebook	string	false		Link do facebook	
linkedin	string	false		Link do linkedin	
instagram	string	false		Link do instagram	

## **2.1.2.2.3.33.3 social properties**

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

## 2.1.2.2.3.34 Field youtube

#### 2.1.2.2.3.34.1 youtube Tree Diagram



## 2.1.2.2.3.34.2 youtube properties

PROPERTY	VALUE
Name	youtube
ld	
Туре	string
Description	Link do youtube
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	https://link.com
Comments	

#### 2.1.2.2.3.35 Field twitter

## 2.1.2.2.3.35.1 twitter Tree Diagram



# **2.1.2.2.3.35.2** twitter properties

PROPERTY	VALUE
Name	twitter
ld	
Туре	string
Description	Link do twitter
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	https://link.com
Comments	

## 2.1.2.2.3.36 Field facebook

## 2.1.2.2.3.36.1 facebook Tree Diagram



## 2.1.2.2.3.36.2 facebook properties

PROPERTY	VALUE
Name	facebook
ld	
Туре	string
Description	Link do facebook
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	https://link.com
Comments	

## 2.1.2.2.3.37 Field linkedin

# 2.1.2.2.3.37.1 linkedin Tree Diagram



## 2.1.2.2.3.37.2 linkedin properties

PROPERTY	VALUE
Name	linkedin
ld	
Туре	string
Description	Link do linkedin
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	https://link.com
Comments	

## 2.1.2.2.3.38 Field instagram

# 2.1.2.2.3.38.1 instagram Tree Diagram



## 2.1.2.2.3.38.2 instagram properties

PROPERTY	VALUE
Name	instagram
ld	
Туре	string
Description	Link do instagram
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	https://link.com
Comments	

#### 2.1.2.2.3.39 Field date

# 2.1.2.2.3.39.1 date Tree Diagram



## 2.1.2.2.3.39.2 date properties

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

## 2.1.2.2.3.40 Field \_id

#### 2.1.2.2.3.40.1 \_id Tree Diagram



#### 2.1.2.2.3.40.2 \_id properties

PROPERTY	VALUE
Name	_id
ld	
Туре	objectId
Description	Identificação do perfil
Dependencies	
Required	true
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

#### 2.1.2.2.4 profile JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
"type": "object",
"description": "Coleção de perfis",
"additionalProperties": false,
"capped": false,
"properties": {
  "user": {
    "type": "string",
    "description": "Usuário correspondente ao perfil",
    "pattern": "^[a-fA-F0-9]{24}$"
  "handle": {
    "type": "string",
    "description": "Nome único de perfil",
    "sample": "Pedro B"
  "company": {
    "type": "string",
    "description": "Companhia do usuário do perfil",
    "sample": "Comp"
 },
  "website": {
    "type": "string",
    "description": "Site do usuário do perfil",
    "sample": "www.site.com"
```

```
"location": {
  "type": "string",
  "description": "Localidade do usuário do perfil",
  "sample": "Cornélio Procópio"
},
"status": {
  "type": "string",
  "description": "Ocupação atual do usuário do perfil",
  "sample": "Estudante"
},
"skills": {
  "type": "object",
  "description": "Lista de habilidades ",
  "additionalProperties": false,
  "properties": {
     "type": {
       "type": "array",
       "additionalItems": true,
       "uniqueltems": false,
       "items": {
         "type": "string",
         "description": "Nome de habilidade",
         "sample": "Python"
    }
},
"bio": {
  "type": "string",
  "description": "Biografia do usuário do perfil",
  "sample": "Meu nome..."
"githubusername": {
  "type": "string",
  "description": "Username do github do usuário",
  "sample": "pedrotreck"
"experience": {
  "type": "array",
  "description": "Lista de experiências do usuário",
  "additionalItems": true,
  "uniqueltems": false,
  "items": {
     "type": "object",
     "additionalProperties": false,
     "properties": {
       "title": {
          "type": "string",
         "description": "Título da experiência",
         "sample": "Developer"
       },
       "company": {
          "type": "string",
         "description": "Nome da empresa",
          "sample": "Google"
```

```
"location": {
         "type": "string",
         "description": "Localidade da empresa",
         "sample": "Califórnia, Estados Unidos"
       },
       "from": {
         "type": "string",
         "description": "Data de inicio",
         "format": "date-time"
       },
       "to": {
         "type": "string",
         "description": "Data final",
         "format": "date-time"
       },
       "current": {
         "type": "boolean",
         "description": "Emprego atual",
         "default": false,
         "sample": false
       },
       "description": {
         "type": "string",
         "description": "Descrição de trabalho",
         "sample": "Dev google..."
       }
    },
     "required": [
       "title",
       "company",
       "from"
},
"followers": {
  "type": "array",
  "description": "Lista de seguidores do perfil",
  "additionalItems": true,
  "uniqueltems": false,
  "items": {
     "type": "object",
    "additionalProperties": false,
    "properties": {
       "user": {
         "type": "string",
         "description": "Usuário correspondente a seguida",
         "pattern": "^[a-fA-F0-9]{24}$"
    }
  }
"education": {
  "type": "array",
  "description": "Lista de educações do perfil",
  "additionalItems": true,
```

```
"uniqueltems": false,
  "items": {
    "type": "object",
    "additionalProperties": false,
     "properties": {
       "school": {
         "type": "string",
         "description": "Nome do instituição",
         "sample": "UTFPR"
       },
       "degree": {
         "type": "string",
         "description": "Periodo da educação",
         "sample": "7"
       },
       "fieldofstudy": {
         "type": "string",
         "description": "Local da instituição",
         "sample": "Cornélio Procópio"
       },
       "from": {
         "type": "string",
         "description": "Data de inicio",
         "format": "date-time"
       },
       "to": {
         "type": "string",
         "description": "Data final",
         "format": "date-time"
       },
       "current": {
         "type": "boolean",
         "description": "Educação atual",
         "default": false,
         "sample": true
       },
       "description": {
         "type": "string",
         "description": "Descrição da educação",
         "sample": "Estudante em ..."
       }
    },
     "required": [
       "school",
       "degree",
       "fieldofstudy",
       "from"
    ]
},
"social": {
  "type": "object",
  "description": "Lista de midias sociais",
  "additionalProperties": false,
  "properties": {
     "youtube": {
```

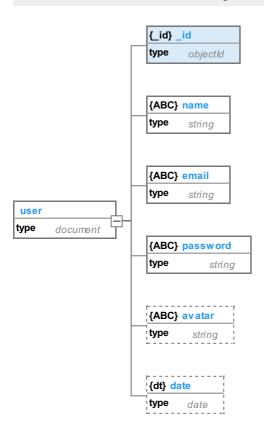
```
"type": "string",
            "description": "Link do youtube",
            "sample": "https://link.com"
         },
          "twitter": {
            "type": "string",
            "description": "Link do twitter",
            "sample": "https://link.com"
         },
          "facebook": {
            "type": "string",
            "description": "Link do facebook",
            "sample": "https://link.com"
          "linkedin": {
            "type": "string",
            "description": "Link do linkedin",
            "sample": "https://link.com"
          "instagram": {
            "type": "string",
            "description": "Link do instagram",
            "sample": "https://link.com"
         }
       }
     "date": {
       "type": "string",
       "format": "date-time"
     "_id": {
       "type": "string",
       "description": "Identificação do perfil",
       "primaryKey": true,
       "pattern": "^[a-fA-F0-9]{24}$"
    }
  "validationAction": "Warn",
  "validationLevel": "Off",
  "required": [
     "user",
     "handle",
     "status",
     " id"
}
```

#### 2.1.2.2.5 profile JSON data

```
"user": ObjectId("507f1f77bcf86cd799439011"),
"handle": "Pedro B",
"company": "Comp",
"website": "www.site.com",
"location": "Cornélio Procópio",
"status": "Estudante",
"skills": {
  "type": [
    "Python"
"bio": "Meu nome...",
"githubusername": "pedrotreck",
"experience": [
  {
    "title": "Developer",
    "company": "Google",
    "location": "Califórnia, Estados Unidos",
    "from": ISODate("2016-04-08T15:06:21.595Z"),
    "to": ISODate("2016-04-08T15:06:21.595Z"),
    "current": false,
    "description": "Dev google..."
  }
],
"followers": [
    "user": Objectld("507f1f77bcf86cd799439011")
],
"education": [
    "school": "UTFPR",
    "degree": "7",
    "fieldofstudy": "Cornélio Procópio",
    "from": ISODate("2016-04-08T15:06:21.595Z"),
    "to": ISODate("2016-04-08T15:06:21.595Z"),
    "current": true,
    "description": "Estudante em ..."
  }
],
"social": {
  "youtube": "https://link.com",
  "twitter": "https://link.com",
  "facebook": "https://link.com",
  "linkedin": "https://link.com",
  "instagram": "https://link.com"
"date": ISODate("2016-04-08T15:06:21.595Z"),
"_id": Objectld("507f1f77bcf86cd799439011")
```

#### 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
ld	
Description	Coleção de Usuários
Database	alub
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Strict
Validation action	Warn
Additional properties	false
Comments	

#### 2.1.2.3.3 user Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectld	true		Identificação de usuário	
name	string	true		Nome de usário	
email	string	true		Email de usário	
password	string	true		Senha de usário	
avatar	string	false		Avatar de usuário	
date	date	false			

## 2.1.2.3.3.1 Field \_id

## 2.1.2.3.3.1.1 \_id Tree Diagram



## 2.1.2.3.3.1.2 \_id properties

PROPERTY	VALUE
Name	_id
ld	
Туре	objectId
Description	Identificação de usuário
Dependencies	
Required	true
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

#### 2.1.2.3.3.2 Field name

## **2.1.2.3.3.2.1** name Tree Diagram



## 2.1.2.3.3.2.2 name properties

PROPERTY	VALUE
Name	name
ld	
Туре	string
Description	Nome de usário
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	2
Max length	30
Pattern	
Format	
Enum	
Sample	Pedro
Comments	

#### 2.1.2.3.3.3 Field email

# 2.1.2.3.3.3.1 email Tree Diagram



## 2.1.2.3.3.3.2 email properties

PROPERTY	VALUE
Name	email
ld	
Туре	string
Description	Email de usário
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	email
Enum	
Sample	user@mail.com
Comments	

## 2.1.2.3.3.4 Field password

# 2.1.2.3.3.4.1 password Tree Diagram



## 2.1.2.3.3.4.2 password properties

PROPERTY	VALUE
Name	password
ld	
Туре	string
Description	Senha de usário
Dependencies	
Required	true
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	6
Maxlength	30
Pattern	
Format	
Enum	
Sample	1234567
Comments	

#### 2.1.2.3.3.5 Field avatar

# 2.1.2.3.3.5.1 avatar Tree Diagram



## 2.1.2.3.3.5.2 avatar properties

PROPERTY	VALUE
Name	avatar
ld	
Туре	string
Description	Avatar de usuário
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Maxlength	
Pattern	
Format	
Enum	
Sample	http://www.linkavatar.com
Comments	

#### 2.1.2.3.3.6 Field date

## 2.1.2.3.3.6.1 date Tree Diagram



## 2.1.2.3.3.6.2 date properties

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

## 2.1.2.3.4 user JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
"type": "object",
"description": "Coleção de Usuários",
"additionalProperties": false,
"capped": false,
"properties": {
  "_id": {
    "type": "string",
    "description": "Identificação de usuário",
    "primaryKey": true,
    "pattern": "^[a-fA-F0-9]{24}$"
 },
  "name": {
    "type": "string",
    "description": "Nome de usário",
    "maxLength": 30,
    "minLength": 2,
    "sample": "Pedro"
 },
  "email": {
    "type": "string",
    "description": "Email de usário",
    "format": "email",
    "sample": "user@mail.com"
  },
  "password": {
    "type": "string",
    "description": "Senha de usário",
    "maxLength": 30,
    "minLength": 6,
    "sample": "1234567"
  },
  "avatar": {
    "type": "string",
    "description": "Avatar de usuário",
    "sample": "http://www.linkavatar.com"
  },
  "date": {
    "type": "string",
    "format": "date-time"
 }
"validationAction": "Warn",
"validationLevel": "Strict",
"required": [
  "_id",
  "name",
  "email",
  "password"
```

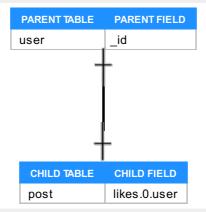
#### 2.1.2.3.5 user JSON data

```
{
    "_id": Objectld("507f1f77bcf86cd799439011"),
    "name": "Pedro",
    "email": "user@mail.com",
    "password": "1234567",
    "avatar": "http://www.linkavatar.com",
    "date": ISODate("2016-04-08T15:06:21.595Z")
}
```

#### 3. RELATIONSHIPS

#### 3.1 Relationship fk user.\_id to post.likes.0.user

#### 3.1.1 fk user.\_id to post.likes.0.user Diagram

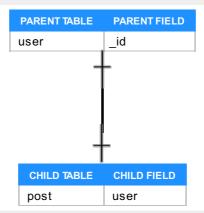


#### 3.1.2 fk user.\_id to post.likes.0.user Properties

PROPERTY	VALUE
Name	fk userid to post.likes.0.user
Description	Comentários de postagem deve conter usuário
Parent Collection	user
Parent field	_id
Parent Cardinality	1
Child Collection	post
Child field	user
Child Cardinality	1
Comments	

## 3.2 Relationship fk user.\_id to post.user

#### 3.2.1 fk user.\_id to post.user Diagram

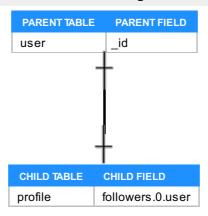


## 3.2.2 fk user.\_id to post.user Properties

PROPERTY	VALUE
Name	fk userid to post.user
Description	Postagem obrigatoriamente contém usuário
Parent Collection	user
Parent field	_id
Parent Cardinality	1
Child Collection	post
Child field	user
Child Cardinality	1
Comments	

## 3.3 Relationship fk user.\_id to profile.followers.0.user

## 3.3.1 fk user.\_id to profile.followers.0.user Diagram

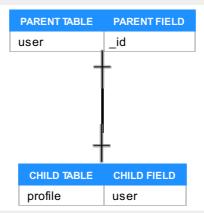


## 3.3.2 fk user.\_id to profile.followers.0.user Properties

PROPERTY	VALUE
Name	fk userid to profile.followers.0.user
Description	Lista de seguidores contém usuário
Parent Collection	user
Parent field	_id
Parent Cardinality	1
Child Collection	profile
Child field	user
Child Cardinality	1
Comments	

## 3.4 Relationship fk user.\_id to profile.user

## 3.4.1 fk user.\_id to profile.user Diagram



## 3.4.2 fk user.\_id to profile.user Properties

PROPERTY	VALUE
Name	fk userid to profile.user
Description	Perfil obrigatóriamente contém um usuário
Parent Collection	user
Parent field	_id
Parent Cardinality	1
Child Collection	profile
Child field	user
Child Cardinality	1
Comments	