

























# Sommaire

- Présentation des choix techniques et répartition des rôles
- Protocoles



- Structure de données
- Implémentations
- Démonstration





# Choix technologique/ Rôles

Solution choisie:

Redis / Express / iOs / Python

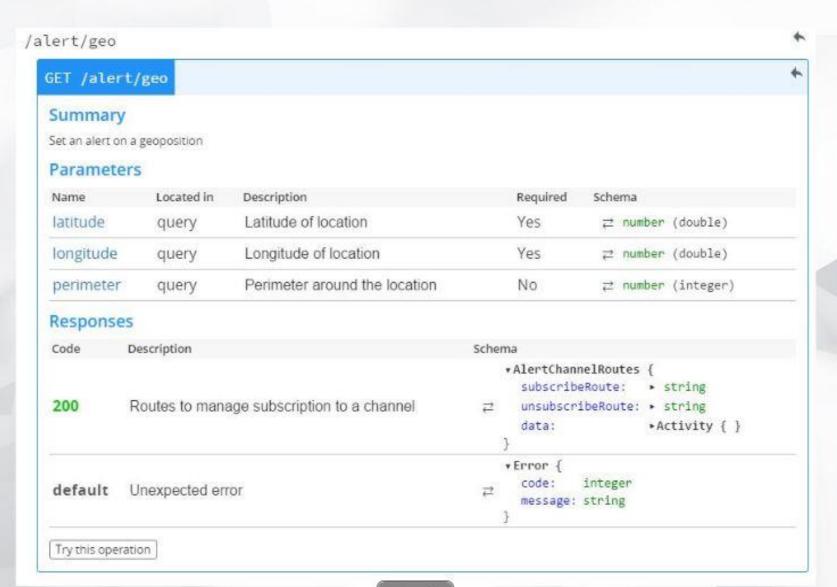
Répartition des tâches :

Bergoens Laura	Web Service - Swagger / Docker / NodeJs	
Drouaire Matthieu	iOs Application - Xcode	
Eon Antoine	Alert System - Python WebService - NodeJs	
Pujade Jean-Marie	Bases de données - Redis / Sqlite WebService - NodeJs / Swagger	
Pujolas Alex	Serveur d'authentification - Swift / Kitura	















/alert/topic •

#### GET /alert/topic

#### Summary

Set an alert on a topic, optionnally within a geolocation

#### Parameters

Name	Located in	Description	Required	Schema
topic	query	Topic to follow	Yes	
latitude	query	Latitude of location	No	⇄ number (double)
longitude	query	Longitude of location	No	<pre>72 number (double)</pre>
perimeter	query	Perimeter around the location	No	→ number (integer)

#### Responses

Code	Description	Schema
200	Routes to manage subscription to a channel	<pre></pre>
default	Unexpected error	<pre>vError {     code: integer     message: string }</pre>

Try this operation







/geo

#### GET /geo

#### Summary

Current activities near to a specific location

#### **Parameters**

Name	Located in	Description	Required	Schema
latitude	query	Latitude of location	Yes	□ number (double)
longitude	query	Longitude of location	Yes	⊋ number (double)
token	query	User's token	Yes	⊋ string
perimeter	query	Perimeter around the location	No	□ number (integer)
time	query	Ancienneté max du post en minutes	No	□ number (integer)

#### Responses

Code	Description	Schema	
200	An array of recent activities order by proximity and date	<pre></pre>	
default	Unexpected error	*Error {	

Try this operation





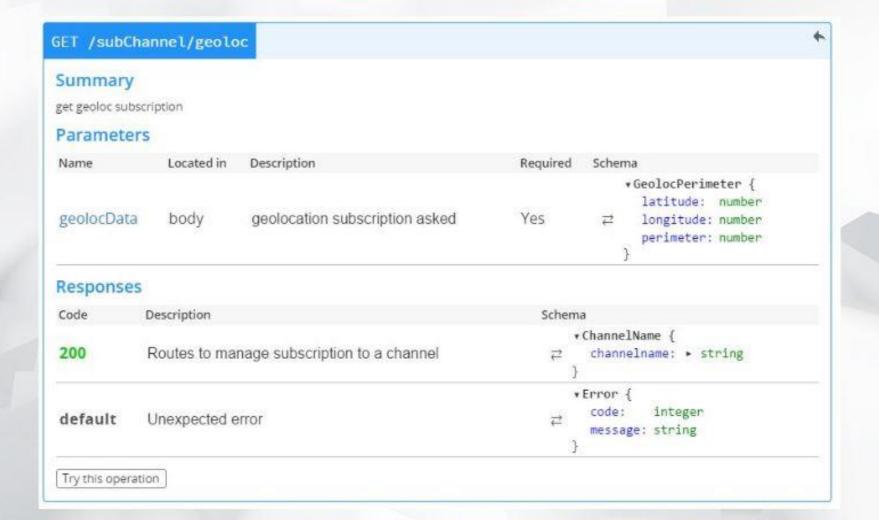


```
/newPost
  GET /newPost
   Summary
   New post
   Parameters
   Name Located in Description
                                                           Required Schema
                                                                        *Activity {
                                                                          topic:
                                                                                      string
                                                                                      ▶ string
                                                                          date:
                    new post (topic name, geopositions data) Yes
   activity body
                                                                          geolocation: •Geolocation { }
                                                                          popularity: • number
   Responses
   Code
             Description
                                                             Schema
                                                                 *AlertChannelRoutes {
                                                                   subscribeRoute: • string
             Routes to manage subscription to a channel
   200
                                                                   unsubscribeRoute: * string
                                                                                    ▶Activity { }
                                                                   data:
                                                                 * Error {
                                                                           integer
                                                                   code:
   default
             Unexpected error
                                                                   message: string
   Try this operation
```















/subChannel/topic

#### GET /subChannel/topic

#### Summary

Subscription to a channel

#### Parameters

Name	Located in	Description	Required	Schema
topicName	query	topic subsciption asked	Yes	

#### Responses

Code	Description	Schema	
200	Routes to manage subscription to a channel	<pre></pre>	
default	Unexpected error	<pre> vError {     code: integer     message: string }</pre>	

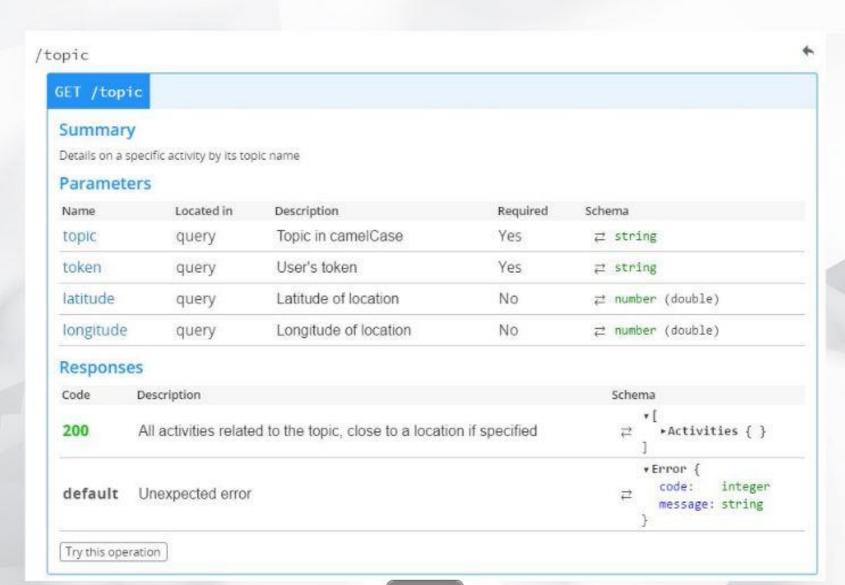
Try this operation

















/user/ GET /user/ Summary Recent activities of a specific user **Parameters** Located in Description Name Required Schema Current token of user's session token Yes Z string query Responses Description Schema Code An array of recent activities order by date ▶Activities { } 200 \* Error { integer code: default Unexpected error message: string Try this operation

























## Structures de données

# Sqlite:

Base de données divisée en deux tables "users" et "tokens".

```
CREATE TABLE "Users" ("id_user" INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  "nom_user" VARCHAR NOT NULL,
  "prenom_user" VARCHAR NOT NULL,
  "email_user" VARCHAR NOT NULL,
  "password_user" VARCHAR NOT NULL,
  "date_naiss_user" DATETIME NOT NULL);

CREATE TABLE "Tokens" ("id_token" INTEGER PRIMARY KEY AUTOINCREMENT NOT NULL,
  "id_user" INTEGER NOT NULL,
  "token" VARCHAR NOT NULL,
  "date_last_use" DATETIME NOT NULL,
  FOREIGN KEY(id_user) REFERENCES Users(id_user));
```



## Redis:

Construction des HMaps de données:

HMSET> ACTIVITY:TOKEN:<TOKEN>:<N°>:<N°>

- -> topic " "
- -> geoposition " "
- -> date " "

HMSET> ACTIVITY:GEOPOSITION:<X>:<Y>:<N°>

- -> topic " "
- -> token " "
- -> date " "

HMSET> ACTIVITY:TOPIC:<TOPIC CAMELCASE>:<N°>

- -> token " "
- -> geoposition " "
- -> date " "

GEORADIUS > calcul des distances entre deux points



# **Implémentations**

## Implémentations possibles:

- Possibilité de déplacer le marqueur de notre propre topic si on se déplace mais que le topic, lui, est inchangé.
- Tracer un itinéraire de la position de l'utilisateur à la position d'un topic.
- Regrouper les marqueurs de topics si plusieurs sont dans le même périmètre.



# Démonstration



