Desgenetez Clément
MMI 2015/2016

Online Image Annotation

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LIRMM - MARBEC

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Sommaire

Le projet - Cahier des charges

- Être multi-utilisateurs

- Traçabilité facile de toutes les opérations

- Être utilisable par une personne ayant un niveau en informatique moyen

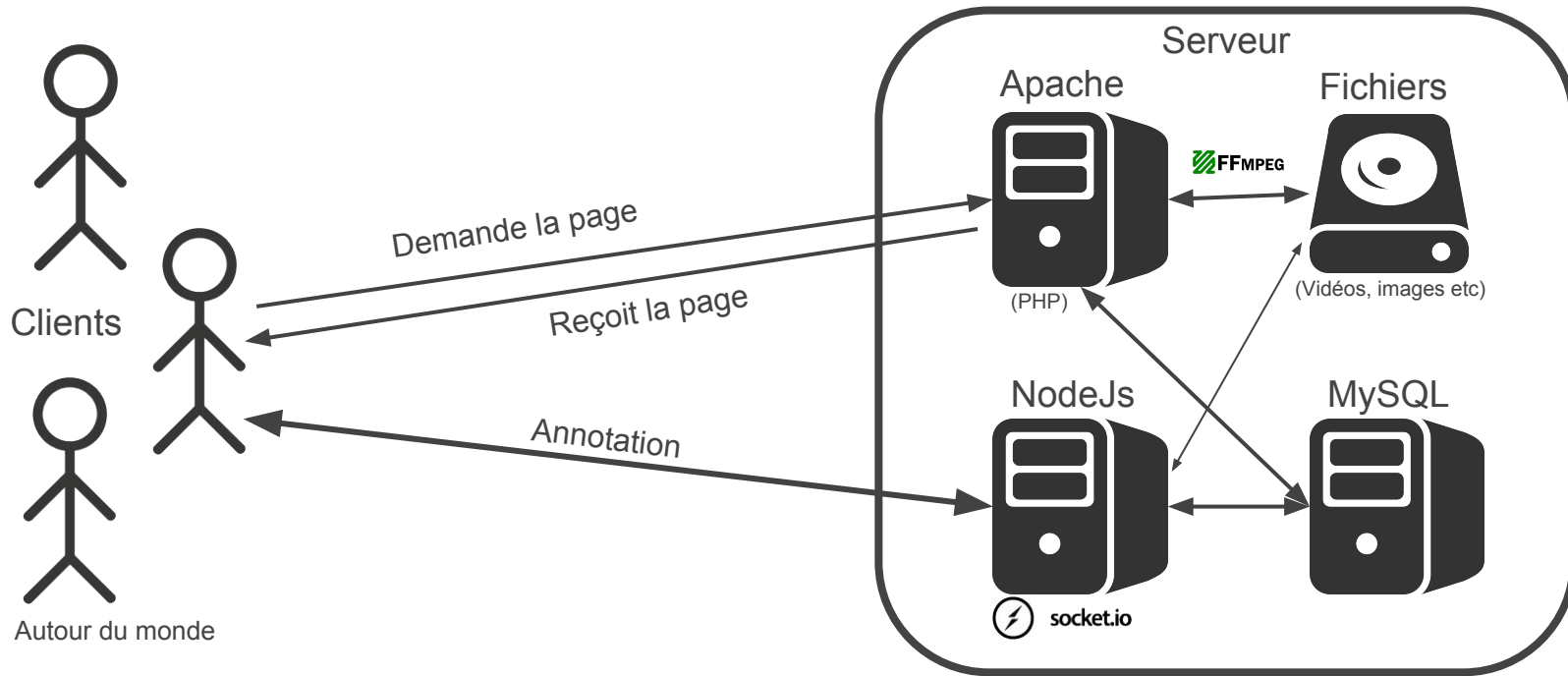- Être utilisable par une personne ne connaissant pas bien les poissons

Le projet - Proposition

Plate-forme Web

- Navigateur web uniquement pour le client

- Windows, Mac, Linux ...

- Gestion utilisateur simple

- Tout est géré par le serveur

Le projet - Architecture

Clients

Autour du monde

Demande la page

Reçoit la page

Annotation

Serveur

Apache

(PHP)

Fichiers

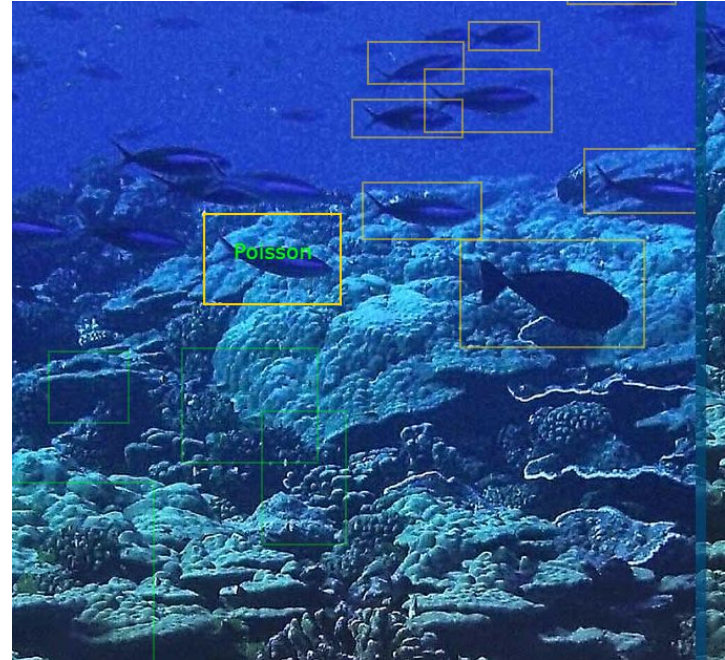(Vidéos, images etc)

FFMPEG

NodeJs

socket.io

MySQL

MARBEC Montpellier

L'application - Interface

- Image taille réelle
  - Aucune déformation
  - Scrollbar
- Balise HTML5 (canvas)
- JavaScript exclusivement

L'application - Interface

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L'application - Interface

Name:	MVI_0606.MP4
Frame per second (video):	25
Time (Second):	17.84
Extraction frequency (n/sec):	2
NbFrame extract:	37
Demo	No

Enable as a test

Get simplified files

Id species	Number of annotation
Dascyllus_trimaculatus_juv	338
Archamia_fucata	97
Thalassoma_lunare	44
Dascyllus_trimaculatus	11
Amphiprion_akallopisos	65
Caesio_varilineata	1
Chromis_nigroanalis	2
unknown_fish	1
Total	559

L'application - Gestion

Ajout d'espèces

L'application - Gestion

L'application - Démonstration

L'application - Serveur

- Indépendant du serveur Apache
- Crée des liens continus avec les clients
- Enregistre les fichiers à chaque action
- Vérifie les droits par jetons temporaires
- Fichier de logs journalier

Server launch...
Client connected. Client(s) : 1
Valid Token
changeFrame
add
Valid Token
{"type":"data","idFrame":2,"bigData":[{"defineItem":"Inconus","data":{"p1":{"x":5,"y":450},"p2":{"x":750,"y":607}}},{"defineItem":"Inconus","data":{"p1":{"x":255,"y":428},"p2":{"x":421,"y":561}}},{"defineItem":"Inconus","data":{"p1":{"x":601,"y":167},"p2":{"x":767,"y":301}}},{"defineItem":"Bonjour","data":{"p1":{"x":257,"y":18,"p2":{"x":555,"y":375}}},{"defineItem":"Inconus","data":{"p1":{"x":470,"y":300},"p2":{"x":637,"y":433}}},{"data":{"p1":{"x":393,"y":39},"p2":{"x":543,"y":135}}}]]
File saved
add
Valid Token
{"type":"data","idFrame":2,"bigData":[{"defineItem":"Inconus","data":{"p1":{"x":5,"y":450},"p2":{"x":750,"y":607}}},{"defineItem":"Inconus","data":{"p1":{"x":255,"y":428},"p2":{"x":421,"y":561}}},{"defineItem":"Inconus","data":{"p1":{"x":601,"y":167},"p2":{"x":767,"y":301}}},{"defineItem":"Bonjour","data":{"p1":{"x":257,"y":18,"p2":{"x":555,"y":375}}},{"defineItem":"Inconus","data":{"p1":{"x":470,"y":300},"p2":{"x":637,"y":433}}},{"data":{"p1":{"x":393,"y":39},"p2":{"x":543,"y":135}}},{"ata":{"p1":{"x":599,"y":70},"p2":{"x":744,"y":150}}}]]
File saved
remove
Valid Token
{"type":"data","idFrame":2,"bigData":[{"defineItem":"Inconus","data":{"p1":{"x":5,"y":450},"p2":{"x":750,"y":607}}},{"defineItem":"Inconus","data":{"p1":{"x":255,"y":428},"p2":{"x":421,"y":561}}},{"defineItem":"Inconus","data":{"p1":{"x":601,"y":167},"p2":{"x":767,"y":301}}},{"defineItem":"Bonjour","data":{"p1":{"x":257,"y":18,"p2":{"x":555,"y":375}}},{"defineItem":"Inconus","data":{"p1":{"x":470,"y":300},"p2":{"x":637,"y":433}}},{"data":{"p1":{"x":393,"y":39},"p2":{"x":543,"y":135}}}]]
File saved
remove
Valid Token
{"type":"data","idFrame":2,"bigData":[{"defineItem":"Inconus","data":{"p1":{"x":5,"y":450},"p2":{"x":750,"y":607}}},{"defineItem":"Inconus","data":{"p1":{"x":255,"y":428},"p2":{"x":421,"y":561}}},{"defineItem":"Inconus","data":{"p1":{"x":601,"y":167},"p2":{"x":767,"y":301}}},{"defineItem":"Bonjour","data":{"p1":{"x":257,"y":18,"p2":{"x":555,"y":375}}},{"defineItem":"Inconus","data":{"p1":{"x":470,"y":300},"p2":{"x":637,"y":433}}}]]
File saved
Client disconnect. Client(s) : 0

L'application - Serveur

- **Json**
  - Sauvegarde
  - Communication
- **MySQL**
  - Jeton
- **Web Socket**
  - Socket.IO

```
▼ object {3}
     type : data
     idFrame : 9
  ▼ bigData [3]
     ▼ 0  {2}
           defineItem : unknown_fish
        ▼ data {2}
           ▼ p1    {2}
                 x    : 533
                 y    : 102
           ▼ p2    {2}
                 x    : 635
                 y    : 178
     ► 1  {2}
     ► 2  {2}
```

```
D:\LIRMM_stage\18_04_16\NodeJS_Server>node server.js
Server launch...
Client connected. Client(s) : 1
panda
add
{"type":"data","idFrame":1,"bigData":[[{"defineItem":"Inconus","data":{"p1":{"x":133,"y":325},"p2":{"x":454,"y":560}}},{"defineItem":"Panda","data":{"p1":
{"x":539,"y":64},"p2":{"x":727,"y":184}}},{"defineItem":"Panda","data":{"p1":{"x":742,"y":279},"p2":{"x":942,"y":456}}},{"defineItem":"Inconus","data":{"p
1":{"x":410,"y":391},"p2":{"x":572,"y":487}}},{"defineItem":"Autre","data":{"p1":{"x":555,"y":508},"p2":{"x":688,"y":650}}}]]}
File saved
```

Les premiers retours

Des chiffres :

- 45127 Vignettes par 3 personnes en 5 jours
- 3000 Vignettes par jours et par personne contre 500

Avis :

- Fluide et rapide
- Intuitif

Amélioration à prévoire :

- Gestion des fichiers plus poussée
- Compatibilité tactile