

SPRINT 5

Nivel 1

Crea una base de datos con MongoDB utilizando como colecciones los archivos adjuntos.

Local

4 DBS6 COLLECTIONS

☆ FAVORITE

HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 5.0.30 Community

Filter your data

admin

config

local

+

> _MONGOSH

> use sprint5

< 'switched to db sprint5'

sprint5>

DatabasesPerformance

CREATE DATABASE

Database NameStorage Size

admin20.0KB

config24.0KB

local20.0KB

Creación de base de datos, colecciones e importación de archivos.

Collections

CREATE COLLECTION

Collection Name ^DocumentsAvg. Doc

comments0-

movies0-

sessions0-

theaters0-

users0-

+

> _MONGOSH

> db.createCollection("comments")

< { ok: 1 }

> db.createCollection("movies")

< { ok: 1 }

> db.createCollection("sessions")

< { ok: 1 }

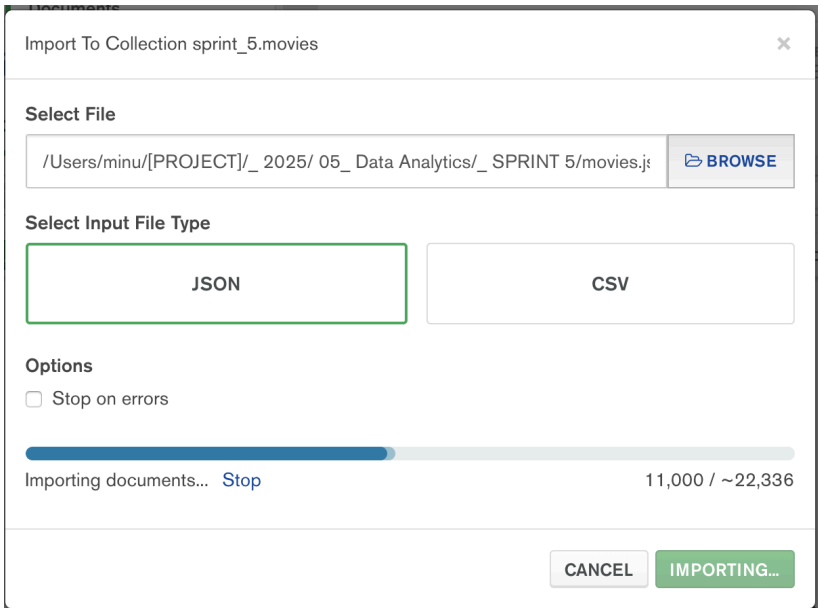
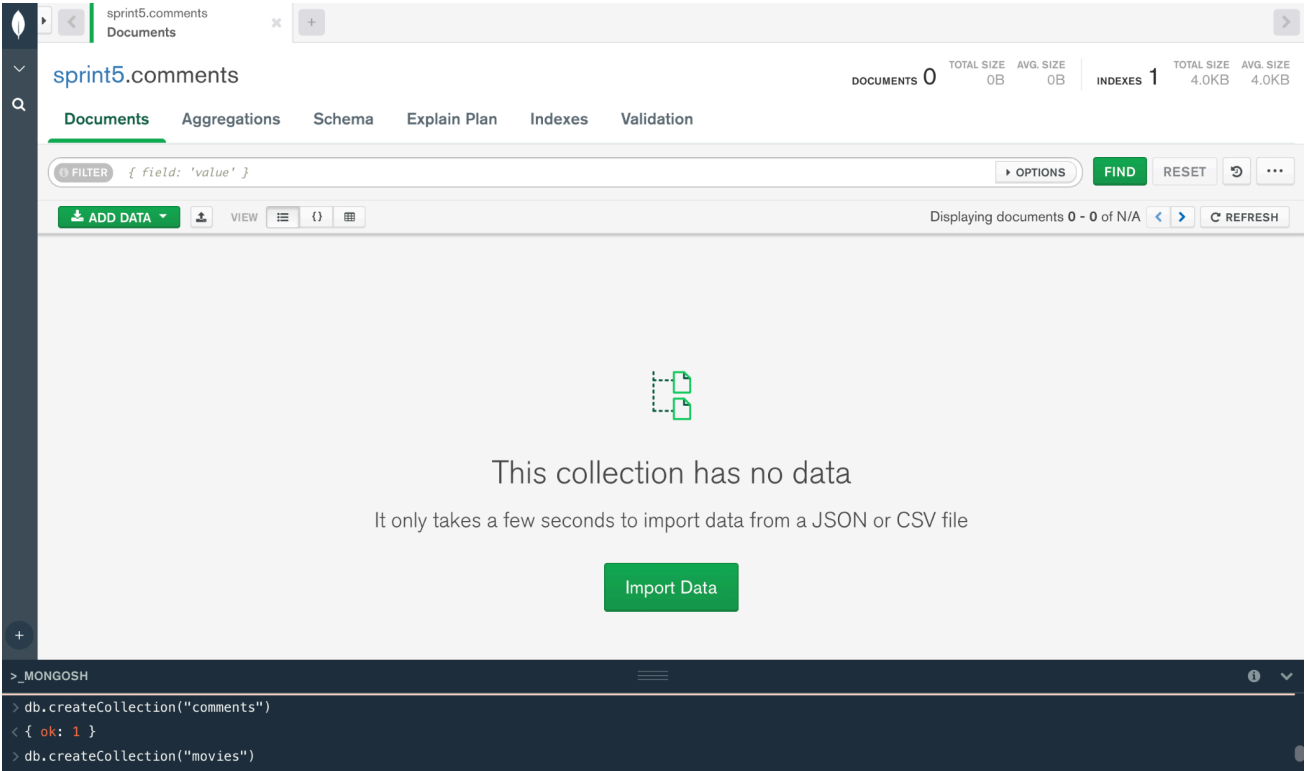
> db.createCollection("theaters")

< { ok: 1 }

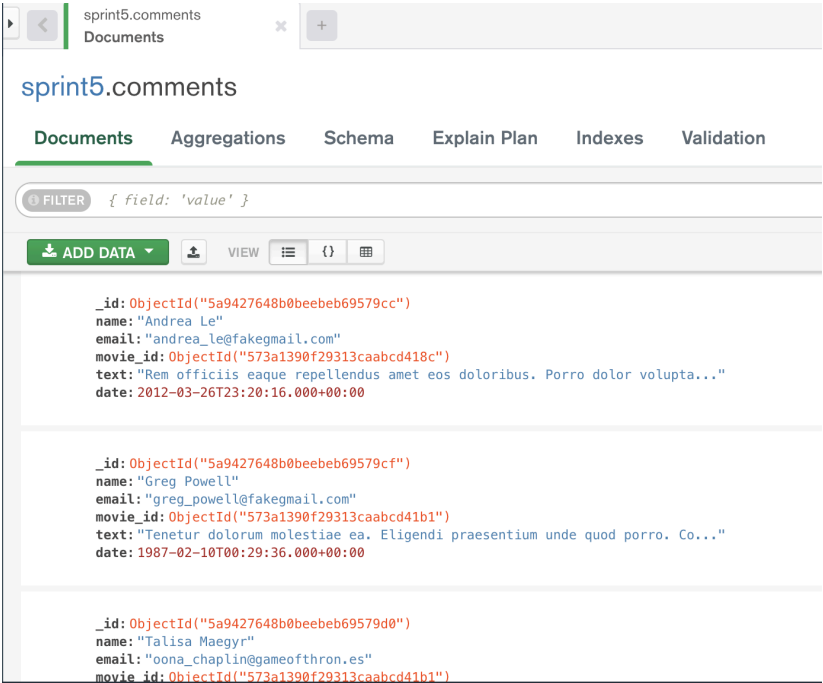
> db.createCollection("users")

< { ok: 1 }

sprint5>



Importación de archivos: dentro de cada colección -> click CTA "Import data", se abre una ventana y dónde puedo elegir el archivo. Repito dentro de cada colección.



Aquí ya vemos los documentos, importados correctamente.

Collection Name ^	Documents	
comments	50,304	Vemos que hemos importado todos los archivos; rápidamente visualizamos la cantidad de documentos dentro de cada colección.
movies	23,539	
sessions	1	
theaters	1,564	
users	185	

Nivel 1 | Ejercicio 1

Muestra los 2 primeros comentarios que aparecen en la base de datos.

```
< 'switched to db sprint5'
> db.comments.find().limit(2).pretty()
< { _id: ObjectId("5a9427648b0beeb69579cc"),
  name: 'Andrea Le',
  email: 'andrea_le@fakegmail.com',
  movie_id: ObjectId("573a1390f29313caabcd418c"),
  text: 'Rem officiis eaque repellendus amet eos doloribus. Porro dolor voluptatum voluptates e',
  date: 2012-03-26T23:20:16.000Z }
{ _id: ObjectId("5a9427648b0beeb69579cf"),
  name: 'Greg Powell',
  email: 'greg_powell@fakegmail.com',
  movie_id: ObjectId("573a1390f29313caabcd41b1"),
  text: 'Tenetur dolorum molestiae ea. Eligendi praesentium unde quod porro. Commodi nisi sit g',
  date: 1987-02-10T00:29:36.000Z }
sprint5>
```

Collection Name ^	Documents
comments	50,304
movies	23,539
sessions	1
theaters	1,564
users	185

```

> _MONGOSH
< { ok: 1 }
> db.createCollection("users")
< { ok: 1 }
> db.users.countDocuments()
< 185
sprint5>

```

¿Cuántos usuarios tenemos registrados?

185 usuarios.

Este dato lo podemos visualizar en el listado de colecciones, y también podemos averiguarlo con el comando countDocuments.

¿Cuál fue el primer usuario en registrarse? **Ned Stark**

```

> db.users.find().sort({ createdAt: 1 }).limit(1).pretty()
< { _id: ObjectId("59b99db4cfa9a34dcd7885b6"),
  name: 'Ned Stark',
  email: 'sean_bean@gameofthron.es',
  password: '$2b$12$UREFwsRUoyF0CRqGNK0Lz00HM/jLhgUCNNIJ9RJAqMUQ74cr1J1Vu' }

```

¿Cuántos cines existen en el estado de California? **169**

```

> db.theaters.countDocuments({ "location.address.state": "CA" })
< 169

```

¿Cuántas películas de comedia existen en nuestra base de datos? **7.024**

```

> db.movies.countDocuments({genres:"Comedy"})
< 7024

```

Nivel 1 | Ejercicio 2

Muéstrame todos los documentos de las películas producidas en 1932, pero que el género sea drama o estén en francés.

#Lógica:

- Busca (FIND) películas:
Año: 1932.
- Que cumplan una de estas dos condiciones:
Género: drama
Ó
Idioma: Francés.

```
> db.movies.find({
  year:1932, $or: [{genres: "Drama"}, {languages: "French"}]
})
< { _id: ObjectId("573a1391f29313caabcd9458"),
  plot: 'A young artist draws a face at a canvas on his easel. Suddenly the mouth on the drawing comes into
it away with his hand, but when he looks...',
  runtime: 55,
  rated: 'UNRATED',
  cast:
    [ 'Enrique Rivero',
      'Elizabeth Lee Miller',
      'Pauline Carton',
      'Odette Talazac' ],
  num_mflix_comments: 1,
  poster: 'https://m.media-amazon.com/images/M/MV5BYWY3ODk5ZWYtYjlmYi00NjA4LTk4ZWYtMzBhZDE5MjY0YTxxXkEyXkFqc
title: 'The Blood of a Poet',
  lastupdated: '2015-09-16 13:13:05.537000000',
  languages: [ 'French' ],
  released: 2010-05-20T00:00:00.000Z,
  directors: [ 'Jean Cocteau' ],
  writers: [ 'Jean Cocteau' ],
  awards: { wins: 1, nominations: 0, text: '1 win.' },
  year: 1932,
  imdb: { rating: 7.5, votes: 3903, id: 21331 },
  countries: [ 'France' ],
  type: 'movie',
  tomatoes:
    { viewer: { rating: 3.9, numReviews: 2865, meter: 86 },
      dvd: 2008-04-20T00:00:00.000Z
```

```
{ '_id': ObjectId("573a1392f29313caabdc99a3"),
  'plot': 'Junta is hated by the people in the village where she lives, especially by the women, who suspect her of b
mountains to a cave high up, whence a ...',
  'genres': [ 'Drama', 'Fantasy', 'Mystery' ],
  'runtime': 85,
  'cast':
    [ 'Leni Riefenstahl',
      'Mathias Wieman',
      'Beni Fèhrer',
      'Max Holzboer' ],
  'poster': 'https://m.media-amazon.com/images/M/MV5BNTQ1NTMzMtQtODIyYS00MTAxLWE1NTgtZGFkZTE2YmZkZmNjXkEyXkFqcGdeQXVy
  'title': 'The Blue Light',
  'fullplot': 'Junta is hated by the people in the village where she lives, especially by the women, who suspect her
arby mountains to a cave high up, whence a mysterious blue light glows when the moon is full. Many young men of the
e is driven out of town, and takes to living in the mountains. Eventually she shares the secret of the blue light w
  'languages': [ 'German', 'Italian' ],
  'released': 1934-05-08T00:00:00.000Z,
  'directors': [ 'Leni Riefenstahl', 'Bèla Balèzs' ],
  'writers': [ 'Bèla Balèzs', 'Leni Riefenstahl (story)' ],
  'awards': { wins: 1, nominations: 1, text: '1 win & 1 nomination.' },
  'lastupdated': '2015-08-03 01:02:12.350000000',
  'year': 1932,
  'imdb': { rating: 7, votes: 727, id: 22694 },
  'countries': [ 'Germany' ],
  'type': 'movie',
  'tomatoes':
    { viewer: { rating: 3.7, numReviews: 325, meter: 61 },
      dvd: 2006-08-22T00:00:00.000Z,
```

Nivel 1 | Ejercicio 3

Muéstrame todos los documentos de películas estadounidenses que tengan entre 5 y 9 premios que fueron producidas entre 2012 y 2014.

#Lógica:

- películas estadounidenses (countries: "USA")
- que tengan entre 5 y 9 premios (awards.wins: greater-equal: 5, less-equal than: 9)
- producidas entre 2012 y 2014 (year: { \$gte: 2012, \$lte: 2014 })

```
> db.movies.find ({
  countries: "USA",
  "awards.wins":{$gte:5, $lte:9},
  year: {$gte:2012, $lte:2014}
})
< { _id: ObjectId("573a13acf29313caabd29366"),
  fullplot: 'The manager of the negative assets sector of Life magazine, Walter Mitty, not going anywhere but from his home to his job and vice-versa. He is attracted to the recently hired Cheryl Melhoff but he is too shy to invite her on a date. The magazine is about to release its last printed edition and the loathsome manager of transition Times has been the liaison between the magazine and the mysterious independent photographer. Walter suggests to the senior management the use of the negative as a gift for his work. Sean also suggests to the senior management the use of the negative that is missing. Walter has no means to contact Sean and finds a clue down in the beginning of an unbelievable adventure.',
  imdb: { rating: 7.4, votes: 211230, id: 359950 },
  year: 2013,
  plot: 'When his job along with that of his co-worker are threatened, Walter Mitty goes on an adventure more extraordinary than anything he could have ever imagined.',
  genres: [ 'Adventure', 'Comedy', 'Drama' ],
  rated: 'PG',
  metacritic: 54,
  title: 'The Secret Life of Walter Mitty',
  lastupdated: '2015-08-31 00:10:51.747000000',
  languages: [ 'English', 'Spanish', 'Icelandic' ],
  writers:
    [ 'Steve Conrad (screenplay)',
      'Steve Conrad (screen story by)',
      'James Thurber (based on the short story by)' ],
  tvpe: 'movie'.
```

```
{ _id: ObjectId("573a13b5f29313caabd45772"),
  plot: 'After their cave is destroyed, a caveman family must trek through
genres: [ 'Animation', 'Adventure', 'Comedy' ],
runtime: 98,
metacritic: 55,
rated: 'PG',
cast:
  [ 'Nicolas Cage',
    'Emma Stone',
    'Ryan Reynolds',
    'Catherine Keener' ],
poster: 'https://m.media-amazon.com/images/M/MV5BMTcyOTc20TA1Ml5BMl5BanB
title: 'The Croods',
fullplot: 'The Croods is a prehistoric comedy adventure that follows the
raveling across a spectacular landscape, the Croods discover an incredible
languages: [ 'English' ],
released: 2013-03-22T00:00:00.000Z,
directors: [ 'Kirk De Micco', 'Chris Sanders' ],
writers:
  [ 'Chris Sanders (screenplay)',
    'Kirk De Micco (screenplay)',
    'John Cleese (story)',
    'Kirk De Micco (story)',
    'Chris Sanders (story)' ],
awards:
  { wins: 8,
    nominations: 39,
    text: 'Nominated for 1 Oscar. Another 7 wins & 39 nominations.' },
lastupdated: '2015-09-10 17:45:48.560000000',
year: 2013,
imdb: { rating: 7.3, votes: 134568, id: 481499 },
countries: [ 'USA' ],
type: 'movie',
```

```
> db.movies.countDocuments({
  countries:"USA",
  "awards.wins": {$gte:5, $lte:9},
  year: {$gte:2012, $lte:2014}
})
< 166
```

Nos devuelve mucha cantidad de documentos, hacemos un count para saber cuántas películas cumplen esa condición. **166 películas.**

Nivel 2 | Ejercicio 1

Cuenta cuántos comentarios escribe un usuario que utiliza "GAMEOFTHRON.ES" como dominio de correo electrónico.

#lógica:

- count comentarios.
- \$regex busca correos que terminen en @gameofthron.es (busca patrones que empiezen, terminen o contengan esa condición)
- \. es necesario para indicar un punto literal
- i hace la búsqueda insensible a mayúsculas/minúsculas

```
> db.comments.countDocuments ({
  email: { $regex: /@gameofthron\.es$/i }
})
< 22841
```

Nivel 2 | Ejercicio 2

¿Cuántos cines existen en cada código postal situados dentro del estado Washington DC (DC)?

#Lógica:

- match: cines que el estado es DC
- group: cines que tengan el mismo zip code.

```
> db.theaters.aggregate ([
  {
    $match: { "location.address.state": "DC" }
  },
  {
    $group: {
      _id:"$location.address.zipcode",
      total_teathers: { $sum:1 }
    }
  },
]);
< { _id: '20010', total_teathers: 1 }
  { _id: '20016', total_teathers: 1 }
  { _id: '20002', total_teathers: 1 }
```

Nivel 3 | Ejercicio 1

Encuentra todas las películas dirigidas por John Landis con una puntuación IMDb (Internet Movie Database) de entre 7,5 y 8.

```
#Lógica:
- Buscar (find)
- directors: John Landis
- imd: gte: 7,5 - lte: 8
```

```
> db.movies.find({
  directors:"John Landis",
  "imdb.rating": { $gte:7.5, $lte:8 }
})
```

```
< { _id: ObjectId("573a1397f29313caabce6d94"),
  fullplot: 'Faber College has one frat house so disreputable it will take anyone. It has a second one full of
can stand them except Dean Wormer. The dean enlists the help of the second frat to get the boys of Delta Ho
oming parade to end all parades for all time.',
  imdb: { rating: 7.6, votes: 84834, id: 77975 },
  year: 1978,
  plot: 'At a 1962 college, Dean Vernon Wormer is determined to expel the entire Delta Tau Chi Fraternity,
genres: [ 'Comedy' ],
  rated: 'R',
  metacritic: 82,
  title: 'Animal House',
  lastupdated: '2015-09-13 00:02:47.803000000',
  languages: [ 'English', 'Italian' ],
  writers: [ 'Harold Ramis', 'Douglas Kenney', 'Chris Miller' ],
  type: 'movie',
  tomatoes:
    { website: 'http://www.animalhouse.com/',
      viewer: { rating: 3.8, numReviews: 184490, meter: 89 },
      dvd: 1998-02-24T00:00:00.000Z,
      critic: { rating: 7.7, numReviews: 46, meter: 91 },
      lastUpdated: 2015-09-13T17:40:34.000Z,
      consensus: 'The talents of director John Landis and Saturday Night Live\'s irrepressible John Belushi
tinues to resonate.',
      rotten: 4,
      production: 'Universal Pictures',
      fresh: 42 },
  poster: 'https://m.media-amazon.com/images/M/MV5BM2M2ZDA4MTYtOGRjMi00OTg5LWI1ZTUtMjQxZTc2NWZjNDZkXkEyXkF0
num_mflix_comments: 1,
  released: 1978-07-28T00:00:00.000Z,
  awards: { wins: 2, nominations: 1, text: '2 wins & 1 nomination.' },
  countries: [ 'USA' ],
  cast:
    [ 'Tom Hulce',
      'Stephen Furst',
      'Mark Metcalf',
      'Mary Louise Weller' ],
  directors: [ 'John Landis' ],
```

```
{ _id: ObjectId("573a1397f29313caabce76f7"),
  plot: 'Jake Blues, just out from prison, puts together his old band to save the Catholic home where he and
  genres: [ 'Action', 'Comedy', 'Crime' ],
  runtime: 133,
  rated: 'R',
  cast: [ 'John Belushi', 'Dan Aykroyd', 'James Brown', 'Cab Calloway' ],
  num_mflix_comments: 1,
  poster: 'https://m.media-amazon.com/images/M/MV5BYTdUMDExOGUtN2I3MS00MjY5LWE1NTAtYzc3MzIxN2M3OWY1XkEyXkFqc
  title: 'The Blues Brothers',
  fullplot: 'After the release of Jake Blues from prison, he and brother Elwood go to visit "The Penguin", t
  the Archdiocese will stop supporting the school and will sell the place to the Education Authority. The onl
  aid within 11 days. The Blues Brothers want to help, and decide to put their blues band back together and ra
  sion from God" they seem to make more enemies along the way. Will they manage to come up with the money in t
  languages: [ 'English' ],
  released: 1980-06-20T00:00:00.000Z,
  directors: [ 'John Landis' ],
  writers: [ 'Dan Aykroyd', 'John Landis' ],
  awards: { wins: 1, nominations: 0, text: '1 win.' },
  lastupdated: '2015-09-01 00:09:39.130000000',
  year: 1980,
  imdb: { rating: 7.9, votes: 131885, id: 80455 },
  countries: [ 'USA' ],
  type: 'movie',
  tomatoes:
    { website: 'http://bluesbrothers.com/',
      viewer: { rating: 3.7, numReviews: 254544, meter: 93 },
      dvd: 2005-08-30T00:00:00.000Z,
      critic: { rating: 7.1, numReviews: 52, meter: 87 },
      lastUpdated: 2015-09-13T18:01:41.000Z,
      consensus: 'Too over the top for its own good, but ultimately rescued by the cast\'s charm, director Jo
      rotten: 7,
      production: 'Universal Pictures',
      fresh: 45 } }
```

Hacemos un count para saber cuántas películas son:

```
> db.movies.countDocuments({
  directors:"John Landis",
  "imdb.rating": { $gte:7.5, $lte:8 }
})
< 4
```

Nivel 3 | Ejercicio 2

Muestra en un mapa la ubicación de todos los teatros de la base de datos.

- Schemas -> analyse modele -> desplegar location. Pero no veo el mapa

sprint5.theaters
Schema

sprint5.theaters

Documents Aggregations **Schema** Explain Plan Indexes Validation

FILTER

This report is based on a sample of 1000 documents.

location

document

Document with 2 nested fields.

address

document

Document with 5 nested fields.

geo

document

coordinates

array

double

Array lengths
min: 2 average: 2.0 max: 2

type

string

Point

