

Sprint 9 - Tasca S9.01. Consultes amb MongoDB

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Nivell 1

Crea una base de dades amb MongoDB utilitzant com a col·leccions els arxius adjunts.

He creado la base de datos cine con la colección de archivos adjuntos.

The screenshot shows the MongoDB Compass interface. On the left, the 'CONNECTIONS' panel lists the 'Cine' database. The main panel displays the 'Cine' database with the following collections and their statistics:

Collection Name	Storage size	Documents	Avg. document size	Indexes	Total index size
comments	4.10 kB	50 K	284.00 B	1	4.10 kB
movies	3.56 MB	24 K	1.60 kB	1	65.54 kB
sessions	4.10 kB	1	540.00 B	1	4.10 kB
theaters	4.10 kB	16 K	223.00 B	1	4.10 kB
users	4.10 kB	185	185.00 B	1	4.10 kB

Exercici 1

- Mostra els 2 primers comentaris que hi ha en la base de dades.

The screenshot shows the MongoDB Compass interface with the MongoDB shell open. The following commands and results are shown:

```

> MONGODB
> use Cine
switched to db Cine
> db.comments.find().limit(2)
< {
  _id: ObjectId('5a9427648b0beebe69579cc'),
  name: 'Andrea Le',
  email: 'andrea_le@fakegmail.com',
  movie_id: ObjectId('573a1390f29313caabdc418c'),
  text: 'Rem officiiis eaque repellendus amet eos doloribus. Porro dolor voluptatum voluptates neque culpa molestias. Voluptate un',
  date: 2012-03-26T23:20:16.000Z
}
{
  _id: ObjectId('5a9427648b0beebe69579cf'),
  name: 'Greg Powell',
  email: 'greg_powell@fakegmail.com',
  movie_id: ObjectId('573a1390f29313caabdc41b1'),
  text: 'Tenetur dolorum molestiae ea. Eligendi praesentium unde quod porro. Comodi nisi sit placeat rerum vero cupiditate neque',
  date: 1987-02-10T00:29:36.000Z
}
Cine>
  
```

- Quants usuaris tenim registrats?

The screenshot shows the MongoDB Compass interface with the MongoDB shell open. The following command and result are shown:

```

> db.users.countDocuments()
< 185
Cine>
  
```

- Quants cinemes hi ha en l'estat de Califòrnia?

```
> db["theaters"].find( {"location.address.state": "CA"} ).count()
< 169
Cine> |
```

- Quin va ser el primer usuari/ària en registrar-se?

```
> db.users.find().sort({ created_at: 1 }).limit(1)
< {
  _id: ObjectId('59b99db4cfa9a34dcd7885b6'),
  name: 'Ned Stark',
  email: 'sean_bean@gameofthron.es',
  password: '$2b$12$UREFwsRUoyF0CRqGNK0Lz00HM/jLhgUCNNIJ9RJAqMUQ74crlJ1Vu'
}
```

- Quantes pel·lícules de comèdia hi ha en la nostra base de dades?

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

Exercici 2

Mostra'm tots els documents de les pel·lícules produïdes en 1932, però que el gènere sigui drama o estiguin en francès.

```
> use Cine
< switched to db Cine
> 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 life and starts talki
  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/MV5BYWY3ODE5ZWEtYjlmY100NjA4LTk4ZWYtMzBhZDE5MjY0YTUxXkE5YkFqcGdeQXVyNzI4MDMyNTU@._.'
  title: 'The Blood of a Poet',
  lastupdated: '2015-09-16 13:13:05.537000000',
```

A continuación un ejemplo más claro de este filtro:

```

_id: ObjectId('573a1392f29313caabcd9a76'),
plot: 'In this romance a librarian takes a cruise and falls for an unobtainable man, a district attorney married to a crippled woman.',
genres: [
  'Drama',
],
runtime: 85,
rated: 'APPROVED',
cast: [
  'Barbara Stanwyck',
  'Adolphe Menjou',
  'Ralph Bellamy',
  'Dorothy Peterson'
],
num_oflix_comments: 3,
poster: 'https://m.media-amazon.com/images/M/MV5BMjEzNTU5NTk2MjI5MjI5bW50bnR5LWZlZ2pwZ2A2NTAmMjE9._V1_SV1800_5X677_AL_.jpg',
title: 'Forbidden',
fullplot: 'On a cruise to Cuba, Lulu Smith falls in love with Bob Grover. Back home, she breaks off the romance when he tells her he is married. Lulu has a baby, but doesn't tell Bob, who turns out to be a rising politician. She',
languages: [
  'English',
  'French'
],
released: 1932-01-15T00:00:00.000Z,
directors: [
  'Frank Capra'
],
writers: [
  'Frank Capra (story)',
  'Jo Swerling (adaptation)'
],
awards: {
  wins: 0,
  nominations: 1,
  text: '1 nomination.'
},
lastupdated: '2015-09-05 00:24:21.237000000',
year: 1932,
score: {
  ratings: 7,
  votes: 811,

```

Exercici 3

Mostra'm tots els documents de pel·lícules estatunidenques que tinguin entre 5 i 9 premis que van ser produïdes entre 2012 i 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, has been working for sixteen years for the magazine and has",
    imdb: {
      rating: 7.4,
      votes: 211230,
      id: 359950
    },
    year: 2013,
    plot: "When his job along with that of his co-worker are threatened, Walter takes action in the real world embarking on a global journey that tu",
    genres: [
      'Adventure',
      'Comedy',
      'Drama'
    ],
    rated: 'PG',
    metacritic: 54,
    title: 'The Secret Life of Walter Mitty',
    lastupdated: '2015-08-31 00:10:51.747000000',
    languages: [

```

Nivell 2

Exercici 1

Compte quants comentaris escriu un usuari/ària que utilitza "GAMEOFTHRON.ES" com a domini de correu electrònic.

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

Exercici 2

Quants cinemes hi ha en cada codi postal situats dins de l'estat Washington D. C. (DC)?

```
< switched to db Cine
> db.theaters.aggregate([
  {
    $match: { "location.address.state": "DC" }
  },
  {
    $group: {
      _id: "$location.address.zipcode",
      total_cinemes: { $sum: 1 }
    }
  },
  {
    $sort: { total_cinemes: -1 }
  }
])
<
{
  "_id": '20016',
  "total_cinemes": 1
}
{
  "_id": '20002',
  "total_cinemes": 1
}
{
  "_id": '20010',
  "total_cinemes": 1
}
}
```

Nivell 3

Exercici 1

Troba totes les pel·lícules dirigides per John Landis amb una puntuació IMDb (Internet Movie Database) d'entre 7,5 i 8.

```
> MONGODB
>
> 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 white, anglo-saxon, rich young men",
  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, but those trouble-makers have other pla",
  genres: [
    'Comedy'
  ],
  rated: 'R',
  metacritic: 82,
  title: 'Animal House',
  lastupdated: '2015-09-13 00:02:47.803800000',
  languages: [
    'English',
    'Italian'
  ],
  writers: [
    'Harold Road
```

Exercici 2

Mostra en un mapa la ubicació de tots els teatres de la base de dades.

