

# Tarea S5.01. Consultas con MongoDB

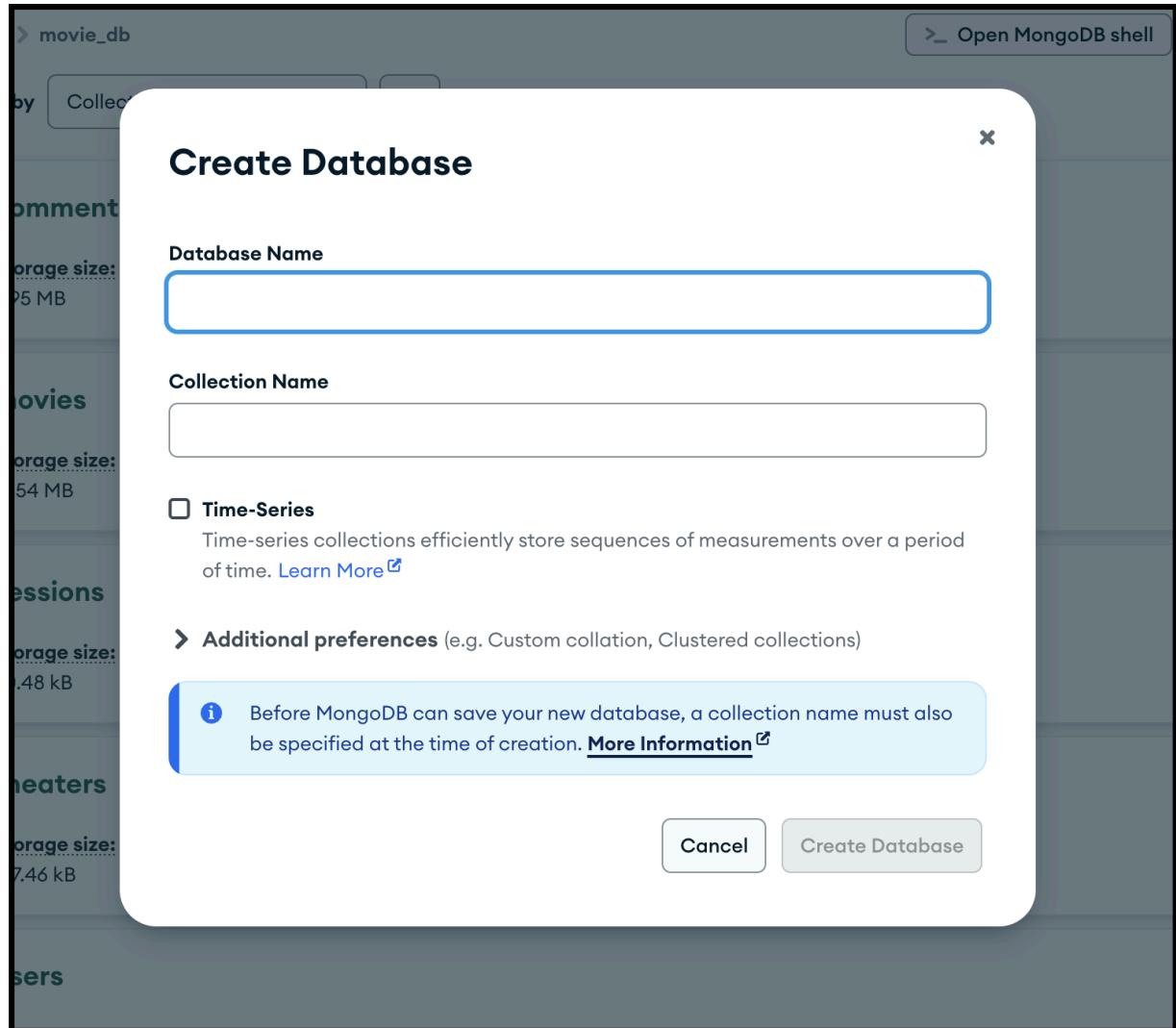
**Trabajaremos con una base de datos que contiene colecciones relacionadas con una aplicación de entretenimiento cinematográfico:**

- **users:** Almacena información de usuarios/as, incluyendo nombres, correos electrónicos y contraseñas cifradas.
- **theatres:** Contiene datos de cines, como ID, ubicación (dirección y coordenadas geográficas).
- **sessions:** Guarda sesiones de usuario, incluyendo ID de usuario y tokens JWT para la autenticación.
- **movies:** Incluye detalles de películas, como trama, géneros, duración, elenco, comentarios, año de lanzamiento, directores, clasificación y premios.
- **comments:** Almacena comentarios de usuarios/as sobre películas, con información del autor/a del comentario, ID de la película, texto del comentario y la fecha.

**Llevarás a cabo algunas consultas que te solicita el/la cliente, quien está evaluando si serás capaz o no de hacerte cargo de la parte analítica del proyecto vinculado con su base de datos.**

## Nivel 1

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



Sort by Collection Name ▾

**comments**

Storage size: 6.95 MB

**movies**

Storage size: 21.54 MB

**sessions**

Storage size: 20.48 kB

**theaters**

Storage size: 147.46 kB

Documents: 1.6 K Avg. document size: 223.00 B Indexes: 1

### Create Collection

Collection Name

Time-Series  
Time-series collections efficiently store sequences of measurements over a period of time. [Learn More](#)

Additional preferences (e.g. Custom collation, Clustered collections)

[Cancel](#) [Create Collection](#)

- test
  - admin
  - config
  - local
  - movie\_db
  - comments
  - movies
  - sessions
  - theaters
  - users

**ADD DATA** **EXPORT DATA** **UPDATE** **DELETE**

Import JSON or CSV file

Insert document

```
_id: ObjectId('5a9427648b0beebeb69579cf')
name : "Greg Powell"
email : "greg_powell@fakegmail.com"
movie_id : ObjectId('573a1390f29313caabcd418c')
text : "Tenetur dolorum molestiae ea. Eligendi praesentium ut
date : 2012-03-26T23:20:16.000+00:00

_id: ObjectId('5a9427648b0beebeb69579cf')
name : "Greg Powell"
email : "greg_powell@fakegmail.com"
movie_id : ObjectId('573a1390f29313caabcd418c')
text : "Tenetur dolorum molestiae ea. Eligendi praesentium ut
date : 1987-02-10T00:29:36.000+00:00

_id: ObjectId('5a9427648b0beebeb69579cf')
```

The screenshot shows the Compass MongoDB interface. On the left, there's a sidebar with 'CONNECTIONS' and a search bar. The main area shows the 'test' database expanded, with 'movie\_db' selected. Below it, five collections are listed: 'comments', 'movies', 'sessions', 'theaters', and 'users'. Each collection card provides storage size, document count, average document size, index count, and total index size.

Collection	Storage size	Documents	Avg. document size	Indexes	Total index size
comments	6.95 MB	50 K	284.00 B	1	524.29 kB
movies	21.54 MB	24 K	1.60 kB	1	364.54 kB
sessions	20.48 kB	1	540.00 B	1	20.48 kB
theaters	147.46 kB	1.6 K	223.00 B	1	32.77 kB
users	36.86 kB	185	159.00 B	1	20.48 kB

## Ejercicio 1

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

```
test> use movie_db
switched to db movie_db
movie_db> db.comments.find().limit(2)
[ {
  _id: ObjectId('5a9427648b0beebeb69579cc'),
  name: 'Andrea Le',
  email: 'andrea_le@fakegmail.com',
  movie_id: ObjectId('573a1390f29313caabcd418c'),
  text: 'Rem officiis eaque repellendus amet eos doloribus. Porro dolor voluptatum voluptates neque culpa molestias. Voluptate unde nulla temporibus ullam.',
  date: ISODate('2012-03-26T23:20:16.000Z')
},
  {
    _id: ObjectId('5a9427648b0beebeb69579cf'),
    name: 'Greg Powell',
    email: 'greg_powell@fakegmail.com',
    movie_id: ObjectId('573a1390f29313caabcd41b1'),
    text: 'Tenetur dolorum molestiae ea. Eligendi praesentium unde quod porro. Commodo nisi sit placeat rerum vero cupiditate neque. Dolorem nihil vero animi.',
    date: ISODate('1987-02-10T00:29:36.000Z')
}
]
```

- ¿Cuántos usuarios tenemos registrados?

```
movie_db> db.users.countDocuments()
185
movie_db>
```

- ¿Cuántos cines hay en el estado de California?

```
--> movie_db> db.theaters.distinct("location.address.state")
[
  'AK', 'AL', 'AR', 'AZ', 'CA', 'CO', 'CT',
  'DC', 'DE', 'FL', 'GA', 'HI', 'IA', 'ID',
  'IL', 'IN', 'KS', 'KY', 'LA', 'MA', 'MD',
  'ME', 'MI', 'MN', 'MO', 'MS', 'MT', 'NC',
  'ND', 'NE', 'NH', 'NJ', 'NM', 'NV', 'NY',
  'OH', 'OK', 'OR', 'PA', 'PR', 'RI', 'SC',
  'SD', 'TN', 'TX', 'UT', 'VA', 'VT', 'WA',
  'WI', 'WV', 'WY'
]
movie_db> db.theaters.countDocuments({ "location.address.state": "CA" })
169
movie_db> █
```

- ¿Quién fue el primer usuario/a en registrarse?

```
--> movie_db> db.users.find().sort({ _id: 1 }).limit(1)
[
  {
    _id: ObjectId('59b99db4cfa9a34dcd7885b6'),
    name: 'Ned Stark',
    email: 'sean_bean@gomeofthron.es',
    password: '$2b$12$UREFwsRUoyF0CRqGNK0Lz00HM/jLhgUCNNIJ9RJAqMUQ74crlJ1Vu'
  }
]
movie_db> █
```

- ¿Cuántas películas de comedia hay en nuestra base de datos?

```
--> movie_db> db.movies.countDocuments({ genres: "Comedy" })
7024
movie_db> █
```

## Ejercicio 2

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

**Query:**

```
{
  $and: [{ "year": 1932 }, {"$or": [{ "genres": "Drama" }, { "languages": "French" }]}]
}
```

**Project:** { "title": 1, "year": 1, "genres": 1, "languages": 1 }

**Sort:** { field: -1 } or [['field', -1]]

**Collation:** {}

**Index Hint:** { field: -1 }

**Max Time MS:** 60000

**Skip:** 0    **Limit:** 0

**EXPORT DATA** 25 1-18 of 18

_id: ObjectId('573a1391f29313caabcd9458') title: "The Blood of a Poet" languages: Array (1) year: 1932
_id: ObjectId('573a1392f29313caabcd99a3') genres: Array (3) title: "The Blue Light" languages: Array (2) year: 1932
_id: ObjectId('573a1392f29313caabcd99e3') genres: Array (1) title: "Broken Lullaby" languages: Array (1) year: 1932
_id: ObjectId('573a1392f29313caabcd9a10') genres: Array (2) title: "The Crowd Roars" languages: Array (1) year: 1932

## Ejercicio 3

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

```
movie_db> 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 tazine and has a tedious life, not going anywhere but from his home to his job and vice-versa. He is an escapist, daydreaming into ld of fantasy many times a day. Walter has a crush on the recently hired Cheryl Melhoff but he is too shy to invite her on a date e is trying to contact her via online dating. The magazine is preparing to release its last printed edition and the loathsome man f transition Ted Hendricks is preparing an inevitable downsizing over the next few days. Walter has been the liaison between the ne and the mysterious independent photographer Sean O'Connell who has sent to him a package of negatives and a wallet as a gift i work. Sean also suggests to the senior management the use of negative 25 for the cover of the last edition. However, Walter cann d the negative that is missing. Walter has no means to contact Sean and finds a clue that he might be in Greenland. He decides to l to Greenland to track Sean 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 takes action in the real world embarking on a glo urney that turns into 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)'
  ],
  type: 'movie',
  tomatoes: {
    website: 'http://WalterMitty.com',
    viewer: { rating: 3.7, numReviews: 77663, meter: 70 },
    dvd: ISODate('2014-04-15T00:00:00.000Z'),
    critic: { rating: 6, numReviews: 177, meter: 50 },
    boxOffice: '$58.2M',
    consensus: "It doesn't lack for ambition, but The Secret Life of Walter Mitty fails to back up its grand designs with enough"
  }
}
```

test > movie\_db > movies

Documents 23.5K Aggregations Schema Indexes 1 Validation

Generate query Explain Reset Find Options ▾

Project { "title": 1, "year": 1, "awards.wins": 1, "countries": 1 }

Sort { field: -1 } or [[{'field': -1}]] Max Time MS 60000

Collection { locale: 'simple' } Skip 0 Limit 0

Index Hint { field: -1 }

EXPORT DATA

25 1 - 25 of 166

`_id: ObjectId('573a13acf29313caabd29366')`  
year : 2013  
title : "The Secret Life of Walter Mitty"  
awards : Object  
countries : Array (2)

`_id: ObjectId('573a13b5f29313caabd45772')`  
title : "The Croods"  
awards : Object  
year : 2013  
countries : Array (1)

`_id: ObjectId('573a13b9f29313caabd4dd15')`  
year : 2013  
title : "The Book Thief"  
awards : Object  
countries : Array (2)

`_id: ObjectId('573a13b9f29313caabd4de39')`  
title : "World War Z"  
awards : Object  
year : 2013  
countries : Array (2)