

TAREA PARA BD07

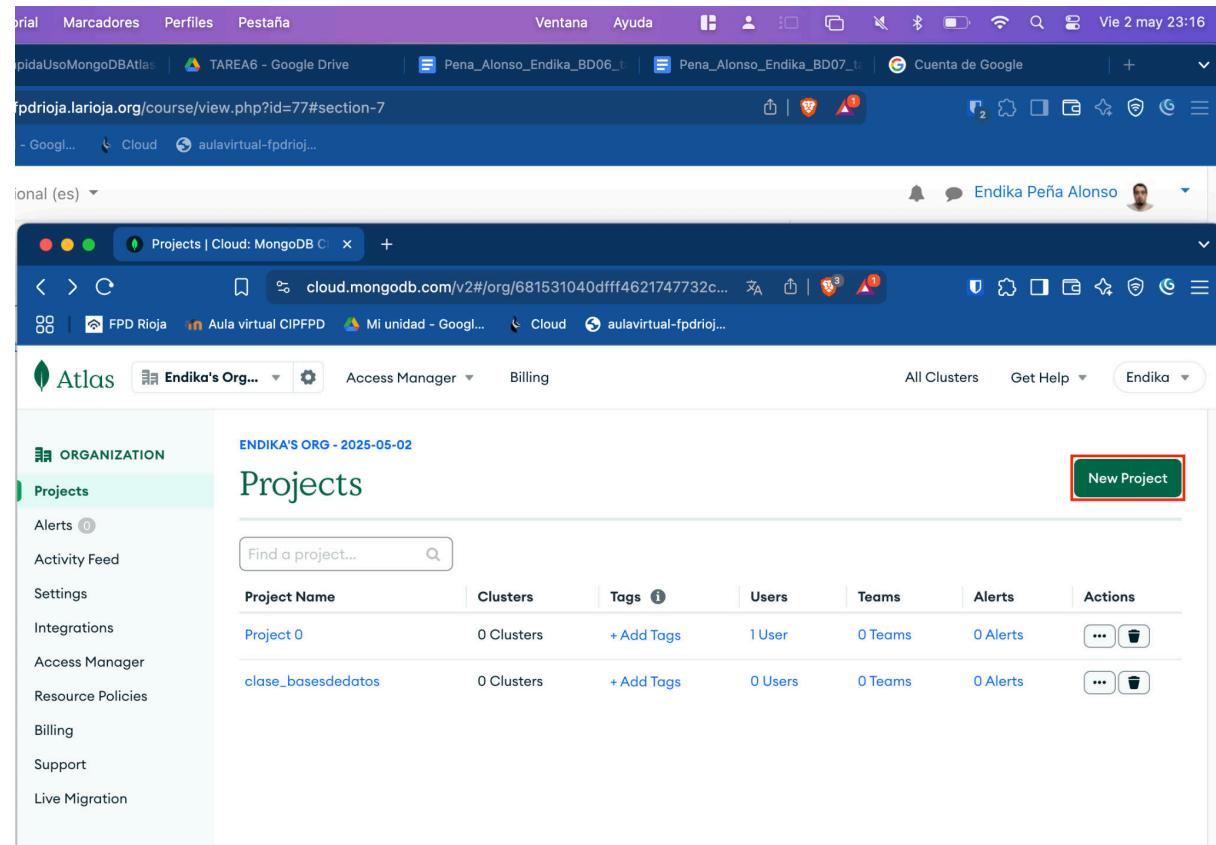
Bases de datos no relacionales

Índice

Proceso de creación de un proyecto.....	3
Creación de la base de datos.....	7
Insertando documentos.....	10
Búsquedas.....	12
Libros del género Distopía.....	12
Libros publicados antes del año 2000.....	13
Libros que están prestados.....	14
Libros de un autor específico.....	15
Actualizar el estado de "prestado" a false.....	16
Eliminar un libro por título.....	18

Proceso de creación de un proyecto

Una vez iniciado sesión podemos irnos a proyectos y pulsar sobre nuevo proyecto, debemos darle un nombre.



The screenshot shows a web browser window with a purple header bar containing links like 'Marcadores', 'Perfiles', and 'Pestaña'. Below the header, there's a toolbar with icons for file operations and a timestamp 'Vie 2 may 23:16'. The main content area displays a MongoDB Cloud interface. On the left, a sidebar titled 'ORGANIZATION' lists 'Projects' (which is highlighted in green), 'Alerts (0)', 'Activity Feed', 'Settings', 'Integrations', 'Access Manager', 'Resource Policies', 'Billing', 'Support', and 'Live Migration'. The main content area is titled 'ENDIKA'S ORG - 2025-05-02' and shows a table of existing projects:

Project Name	Clusters	Tags	Users	Teams	Alerts	Actions
Project 0	0 Clusters	+ Add Tags	1 User	0 Teams	0 Alerts	[...] [Delete]
clase_basesdedatos	0 Clusters	+ Add Tags	0 Users	0 Teams	0 Alerts	[...] [Delete]

In the top right corner of the main content area, there is a green rectangular button with the text 'New Project' in white.

The screenshot shows a web browser window with the following details:

- Top Bar:** Shows tabs for "TAREA6 - Google Drive", "Pena_Alonso_Endika_BD06_t", "Pena_Alonso_Endika_BD07_t", and "Cuenta de Google".
- Address Bar:** Displays the URL "fpdrioja.larioja.org/course/view.php?id=77#section-7".
- Content Area:** A MongoDB Atlas interface titled "Create a Project".
 - Sidebar:** Labeled "ORGANIZATION" and "Projects". Other options include Alerts, Activity Feed, Settings, Integrations, Access Manager, Resource Policies, Billing, Support, and Live Migration.
 - Main Form:** "Name Your Project" field containing "nombrebasedatos".
 - Optional Section:** "Add Tags (Optional)" with a note about labeling projects.
 - Table:** A header row for managing tags with columns "Key", "Value", and "Actions".

Después de darle nombre debemos asignar los permisos y terminar dándole a crear.

The screenshot shows a web browser window with the following details:

- Address Bar:** cloud.mongodb.com/v2#/org/681531040dff4621747732c...
- Header:** Ventana, Ayuda, Pestaña, Marcadores, Perfiles, Página.
- Content:**
 - Left Sidebar (Organization):** Projects (selected), Alerts, Activity Feed, Settings, Integrations, Access Manager, Resource Policies, Billing, Support, Live Migration.
 - Main Area (Create a Project):**
 - Step:** ✓ Name Your Project > Add Members.
 - Add Members and Set Permissions:**
 - Input field: Invite new or existing users via email address...
 - Text: Give your members access permissions below.
 - Table:

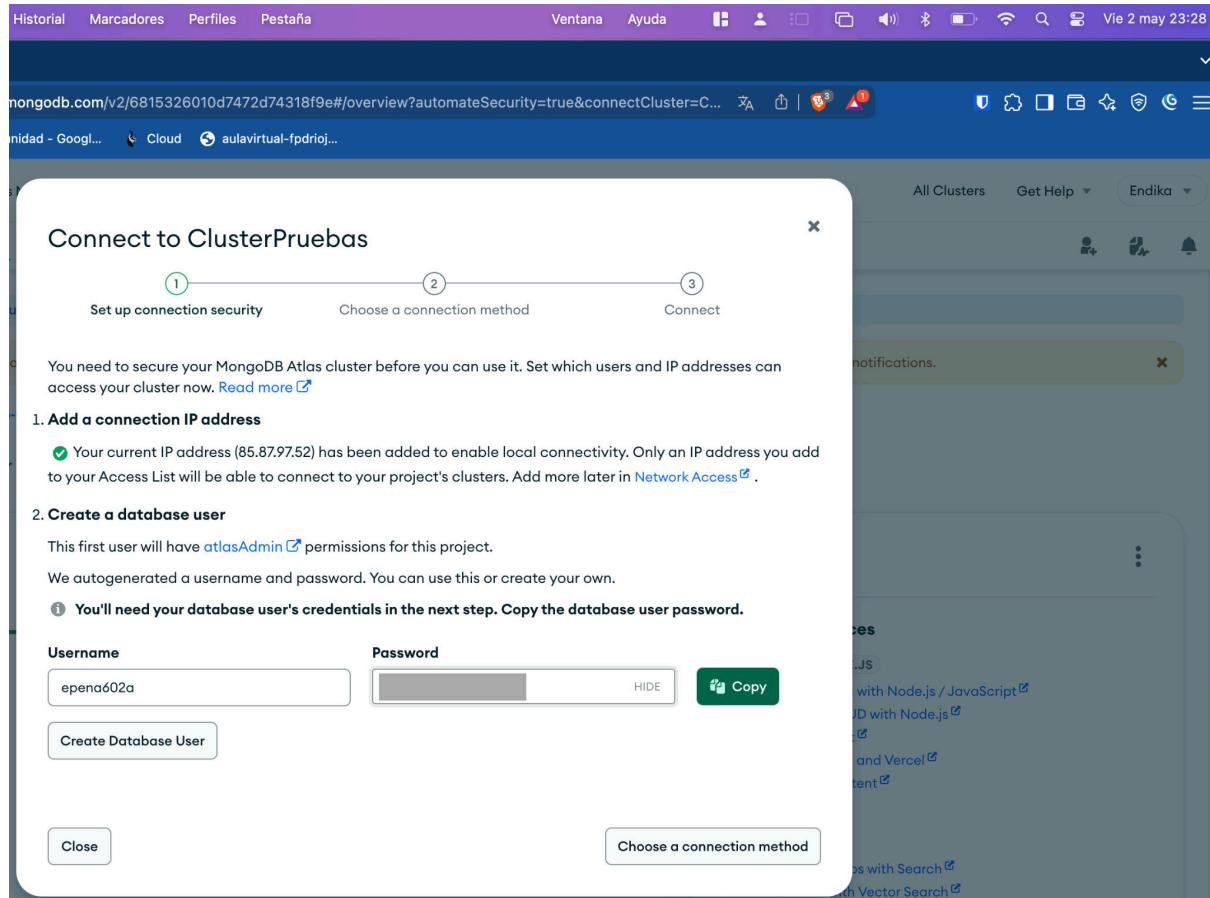
epena602a@fpdrioja.com (you)	Project Owner
------------------------------	---------------
 - Project Member Permissions:**
 - Project Owner:** Has full administration access.
 - Project Cluster Manager:** Can update clusters.
 - Project Data Access Admin:** Can access and modify a cluster's data and indexes, and kill operations.
 - Project Data Access Read/Write:** Can access a cluster's data and indexes, and modify data.
 - Project Data Access Read Only:** Can access a cluster's data only.
- Bottom Buttons:** Back, Cancel, Create Project.

Para la creación de la base de datos previamente debemos crear un cluster.

The screenshot shows a web browser window with the following details:

- Address Bar:** cloud.mongodb.com/v2#/clusters/starterTemplates
- Header:** Ventana, Ayuda, Página, Visualización, Historial, Marcadores, Perfiles, Pestaña.
- Content:**
 - Cluster Options:**
 - M10:** \$0.09/hour. Dedicated cluster for development environments and low-traffic applications. Storage: 10 GB, RAM: 2 GB, vCPU: 2 vCPUs.
 - Flex:** From \$0.011/hour. Up to \$30/month. For application development and testing, with on-demand burst capacity for unpredictable traffic. Storage: 5 GB, RAM: Shared, vCPU: Shared.
 - Free:** For learning and exploring MongoDB in a cloud environment. Storage: 512 MB, RAM: Shared, vCPU: Shared.
 - Note:** Free forever! Your free cluster is ideal for experimenting in a limited sandbox. You can upgrade to a production cluster anytime.
 - Configurations:** Name: ClusterPruebas.
 - Quick setup:** Automate security setup (checked), Preload sample dataset (checked).

Al crear el cluster nos dará un usuario password para poder conectarnos.



Creación de la base de datos

Primer debemos ir a los clusters y pulsamos sobre browse collections

The screenshot shows the MongoDB Cloud interface. At the top, there's a navigation bar with tabs like 'Iniciación', 'Visualización', 'Historial', 'Marcadores', 'Perfiles', and 'Pestaña'. Below the navigation is a toolbar with icons for 'Org...', 'Access Manager', 'Billing', 'All Clusters', 'Get Help', and a user dropdown. The main content area is titled 'Clusters' and shows a message: 'Sample dataset successfully loaded. Access it in [Collections](#) or by connecting with the MongoDB Shell.' Below this, there's a section titled 'Visualize Your Data' with four charts: 'R 0 W' (Last 16 minutes), 'Connections 2.0' (Last 21 minutes), 'In 92.85 B/s Out 708.11 B/s' (Last 16 minutes), and 'Data Size 135.15 MB / 512.00 MB (26%)' (Last 21 minutes). At the bottom, there's a table with columns: VERSION, REGION, TYPE, BACKUPS, LINKED APP SERVICES, ATLAS SQL, and ATLAS SEARCH.

The screenshot shows the MongoDB Atlas interface. A modal window titled 'Create Database' is open. In the 'Database name' field, 'BibliotecasDB' is entered. In the 'Collection name' field, 'libros' is entered. Under 'Additional Preferences', 'Clustered Index Collection' is selected. In the 'Index keys' section, there is a JSON object: { "_id": 1 }. The 'Index name' field is empty. At the bottom right of the modal are 'Cancel' and 'Create' buttons.

The screenshot shows the MongoDB Atlas interface with the 'Collections' tab selected for the 'BibliotecasDB' database. The left sidebar shows the database structure: Overview, DATABASE, Clusters, SERVICES, SECURITY, and various service links. The main panel displays the 'libros' collection under the 'BibliotecasDB' namespace. It shows storage details: STORAGE SIZE: 4KB, LOGICAL DATA SIZE: 0B, TOTAL DOCUMENTS: 0, and INDEXES TOTAL SIZE: 0B. Below this, there are tabs for Find, Indexes, Schema Anti-Patterns, Aggregation, and Search Indexes. A search bar at the top of the main panel allows generating queries in natural language using Compass. At the bottom, there is a 'QUERY RESULTS: 0' section and a 'Type a query: { field: 'value' }' input field with 'Filter' and 'Apply' buttons.

Insertando documentos

The screenshot shows the MongoDB Atlas interface. On the left, there's a sidebar with options like Overview, DATABASE, Clusters, SERVICES, etc. The main area shows databases and collections. A modal window titled "Insert Document" is open, prompting to insert into the "libros" collection. The document being inserted is:

```
1 {  
2   "titulo": "Fahrenheit 451",  
3   "autor": "Ray Bradbury",  
4   "genero": "Ciencia ficción",  
5   "año": 1953,  
6   "prestado": false  
7 }
```

At the bottom of the modal are "Cancel" and "Insert" buttons.

Hacemos lo mismo con 5, lo repetimos todas las veces.

The screenshot shows the MongoDB Compass interface. On the left, the sidebar includes sections for Overview, DATABASE (selected), Clusters, SERVICES, SECURITY, and various migration and access options. The main panel displays the 'Data Services' tab, specifically the 'BibliotecasDB.libros' collection. It shows 5 documents with the following data:

_id	título	autor	genero	año	prestado
ObjectId('68153ff57c82474b02e57273')	"1984"	"George Orwell"	"Distopía"	1949	true
ObjectId('6815414d7c82474b02e572e8')	"Un mundo feliz"	"Huxley, Aldous"	"Ficción"	1932	false
ObjectId('6815414d7c82474b02e572e9')	"La guerra del fin del mundo"	"Huxley, Aldous"	"Ficción"	1958	false
ObjectId('6815414d7c82474b02e572ea')	"La máquina del tiempo"	"Huxley, Aldous"	"Ficción"	1939	false

Búsquedas

Libros del género Distopía

The screenshot shows the MongoDB Compass interface. On the left, the sidebar includes sections for Overview, DATABASE (selected), Clusters, SERVICES, SECURITY, and various administrative tools. The main panel displays the database 'BibliotecasDB' and the collection 'libros'. A search bar at the top right says 'Search Namespaces'. Below it, a 'Find' section contains a filter: '{genero: "Distopía"}'. The results section shows two documents matching the query:

```
_id: ObjectId('68153ff57c82474b02e57273')
titulo: "1984"
autor: "George Orwell"
genero: "Distopía"
año: 1949
prestado: true

_id: ObjectId('6815414d7c82474b02e572e8')
titulo: "Un mundo feliz"
autor: "Huxley, Aldous"
```

Libros publicados antes del año 2000

The screenshot shows a web browser window with two tabs open. The top tab is titled 'Curso: Bases de Datos' and displays a course page from 'fpdrioja.larioja.org'. The bottom tab is titled 'ClusterPruebas Data | Cloud:' and displays the MongoDB Compass interface. The left sidebar of the Compass interface shows a database named 'BibliotecasDB' containing two collections: 'libros' and 'sample_mflix'. The right panel shows the results of a query for books published before 2000. The results table has columns for '_id', 'titulo', 'autor', 'genero', 'año', and 'prestado'. Two documents are listed:

_id	titulo	autor	genero	año	prestado
ObjectId('68153ff57c82474b02e57273')	"1984"	"George Orwell"	"Distopía"	1949	true
ObjectId('6815414d7c82474b02e572e8')	"1949"	"George Orwell"	"Distopía"	1949	false

Libros que están prestados

The screenshot shows a web browser window with two tabs open. The top tab is a course page from 'aulavirtual-fpdrioja...' titled 'Bases de Datos'. The bottom tab is 'ClusterPruebas Data | Cloud' connected to 'cloud.mongodb.com'. Both tabs show a list of items, likely documents in a MongoDB collection.

The main content area is the MongoDB Compass interface for the 'libros' collection in the 'BibliotecasDB' database. The left sidebar shows the database structure with 'Overview', 'DATABASE', 'Clusters', 'SERVICES', and 'SECURITY' sections. The right panel displays a query result titled 'QUERY RESULTS: 1-4 OF 4'.

The results show two documents:

```
_id: ObjectId('68153ff57c82474b02e57273')
titulo: "1984"
autor: "George Orwell"
genero: "Distopía"
año: 1949
prestado: true

_id: ObjectId('6815415c7c82474b02e572ed')
```

Below the results, the status bar indicates 'System Status: All Good'.

Libros de un autor específico

The screenshot shows a web browser window with two tabs open. The top tab is a course page from 'aulavirtual-fpdrioja.org' titled 'Bases de Datos'. The bottom tab is 'ClusterPruebas Data | Cloud' from 'cloud.mongodb.com', showing the MongoDB Compass interface. The Compass interface displays a database named 'BibliotecasDB' with a collection named 'libros'. A search query has been run for the author 'George Orwell', returning three results. The first result is highlighted and shows the document structure: '_id: ObjectId('68153ff57c82474b02e57273'), título: '1984'', autor: 'George Orwell', genero: 'Distopía', año: 1949, prestado: true'. The results are listed under the heading 'QUERY RESULTS: 1-3 OF 3'.

_id	título	autor	genero	año	prestado
ObjectId('68153ff57c82474b02e57273')	'1984'	'George Orwell'	'Distopía'	1949	true
ObjectId('6815420d7c82474b02e57329')					

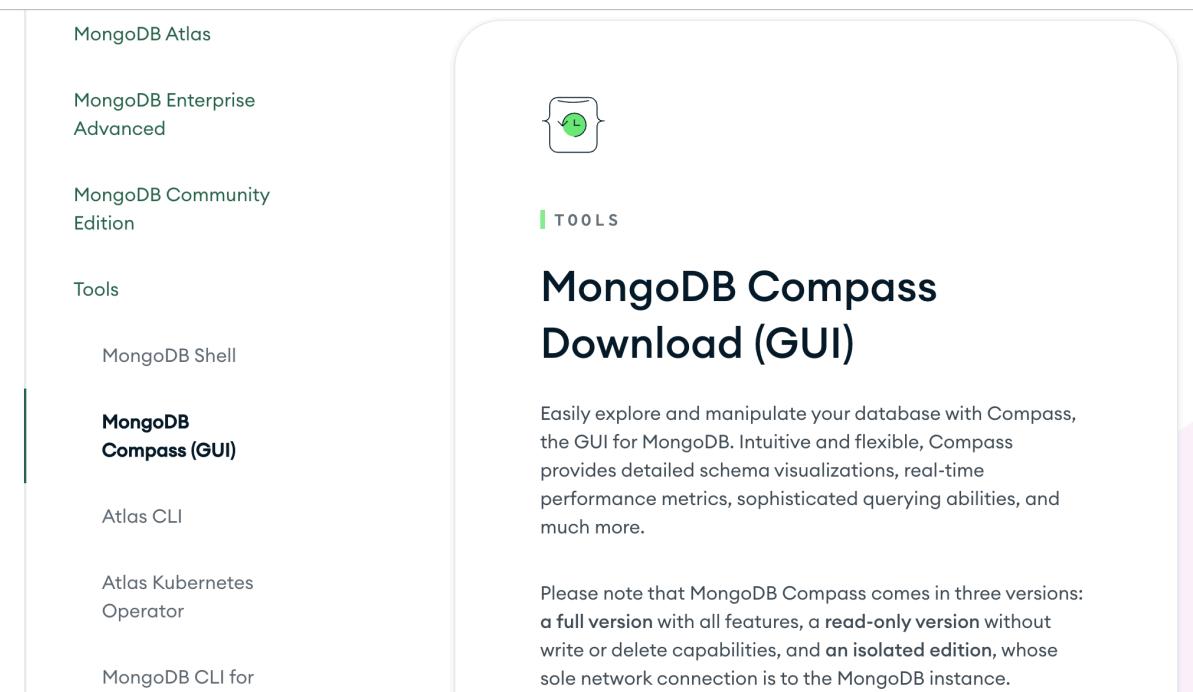
Actualizar el estado de "prestado" a false

The screenshot shows the MongoDB Compass interface. On the left, the sidebar lists databases (clase_basesde...), services (Atlas Search, Stream Processing, Triggers, Migration, Data Federation), security (Quickstart, Backup, Database Access, Network Access, Advanced), and system status (All Good). The main area shows the 'BibliotecasDB' database with the 'libros' collection selected. The document details pane shows a document with the following fields:

Field	Type
_id	ObjectId('68153ff57c82474b02e57273')
título	String
autor	String
genero	String
año	Int32
prestado	Boolean

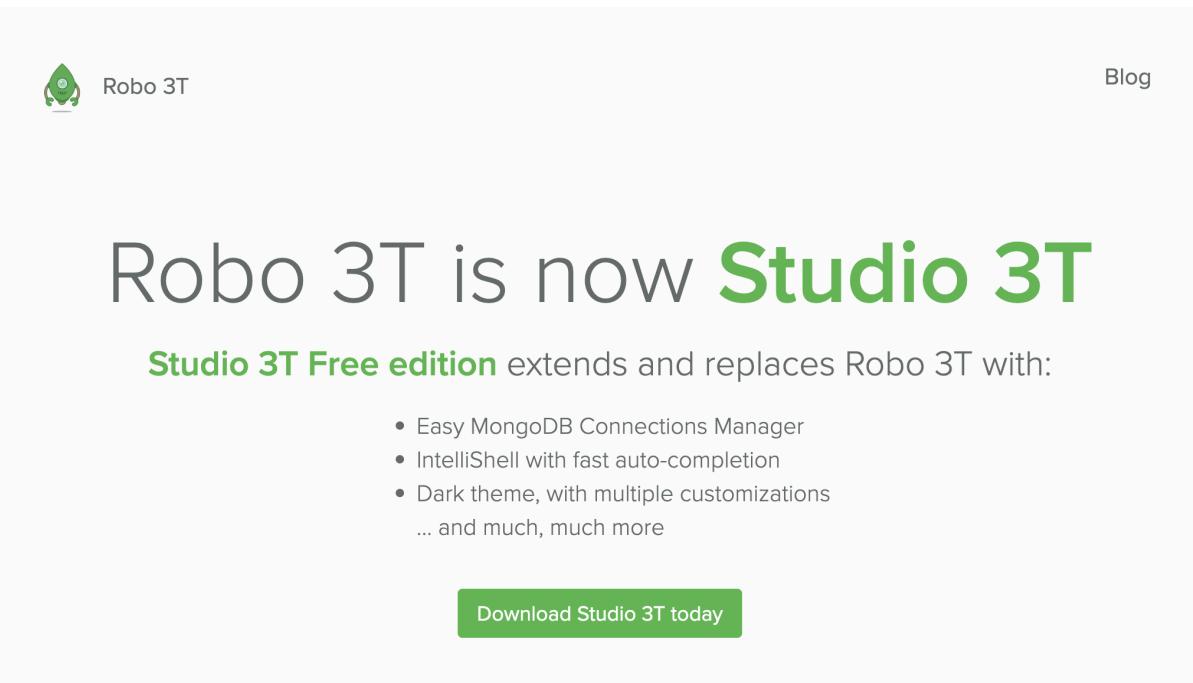
The 'prestado' field is highlighted with a red border and has the value 'true'. Below the document details, a message says 'Document modified.' with 'CANCEL' and 'UPDATE' buttons. The top of the screen shows a browser window with the URL cloud.mongodb.com/v2/6815326010d7472d74318f9e#/met....

Otras alternativas es usar un cliente como Compass



The screenshot shows the MongoDB Compass download page. On the left, there's a sidebar with links: MongoDB Atlas, MongoDB Enterprise Advanced, MongoDB Community Edition, Tools (selected), MongoDB Shell, MongoDB Compass (GUI) (highlighted in blue), Atlas CLI, Atlas Kubernetes Operator, and MongoDB CLI for. The main content area features the MongoDB logo and the title "MongoDB Compass Download (GUI)". Below the title, it says: "Easily explore and manipulate your database with Compass, the GUI for MongoDB. Intuitive and flexible, Compass provides detailed schema visualizations, real-time performance metrics, sophisticated querying abilities, and much more." At the bottom, it notes: "Please note that MongoDB Compass comes in three versions: a full version with all features, a read-only version without write or delete capabilities, and an isolated edition, whose sole network connection is to the MongoDB instance."

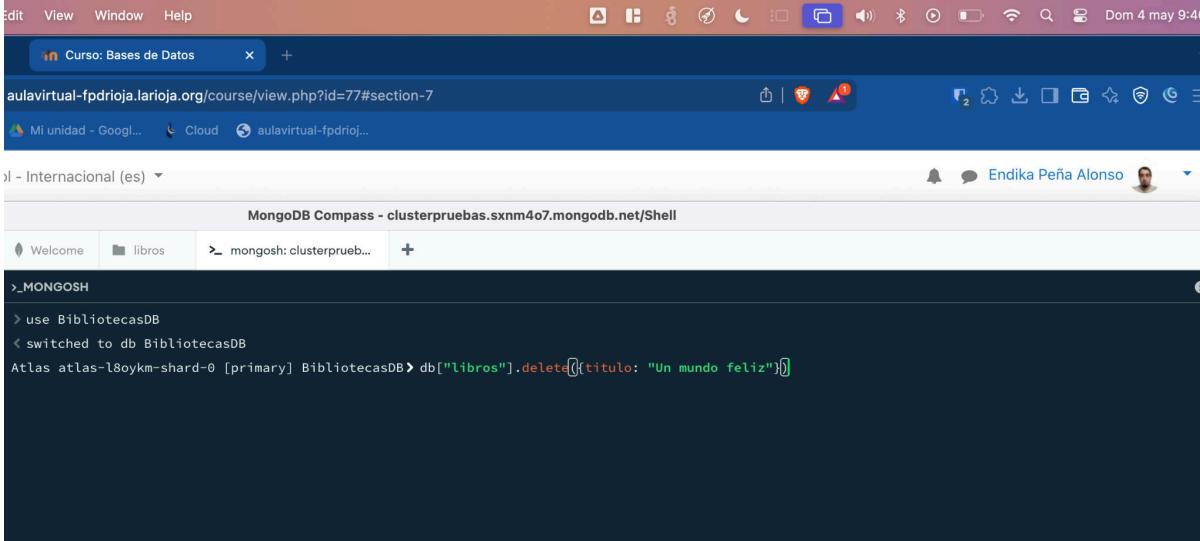
O también podemos usar el cliente de Robo3T Studio



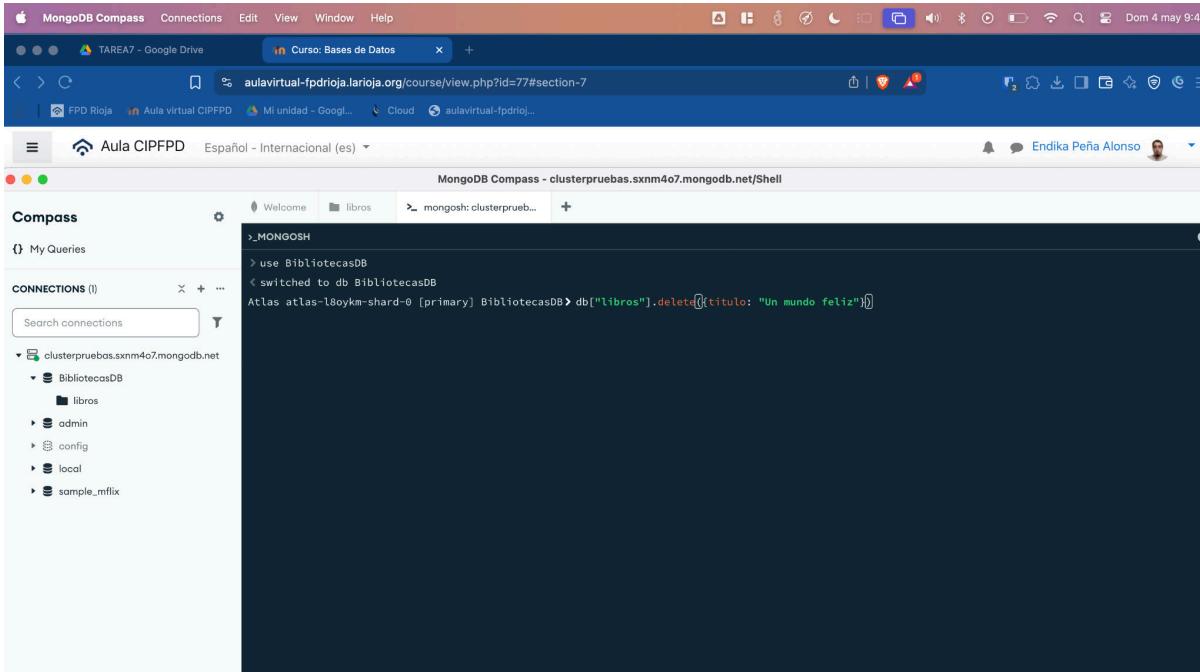
The screenshot shows the Robo 3T landing page. It features the Robo 3T logo and the text "Robo 3T is now **Studio 3T**". Below this, it says: "Studio 3T Free edition extends and replaces Robo 3T with:". A bulleted list follows: • Easy MongoDB Connections Manager • IntelliShell with fast auto-completion • Dark theme, with multiple customizations ... and much, much more. At the bottom, there's a green button with the text "Download Studio 3T today".

Eliminar un libro por título

Realizado desde mongo compass cliente para hacer consultas sobre mongo.



```
>_MONGOSH
> use BibliotecasDB
< switched to db BibliotecasDB
Atlas atlas-l8oykm-shard-0 [primary] BibliotecasDB> db["libros"].delete({titulo: "Un mundo feliz"})
```



```
>_MONGOSH
> use BibliotecasDB
< switched to db BibliotecasDB
Atlas atlas-l8oykm-shard-0 [primary] BibliotecasDB> db["libros"].delete({titulo: "Un mundo feliz"})
```