Data Base Project

22 JANUARY

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Erasmus+

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MongoDB + Express + Postman

What is MongoDB?

MongoDB is a document database with the scalability and flexibility that you want with the querying and indexing that you need

What is Express?

Express provides a minimal interface to build our applications. It provides us the tools that are required to build our app. It is flexible as there are numerous modules available on npm, which can be directly plugged into Express.

Unlike its competitors like Rails and Django, which have an opinionated way of building applications, Express has no "best way" to do something. It is very flexible and pluggable.

> ***"Even Amazon, [Alphabet-parent] Google, and Microsoft came to us and told us we are one of the most popular technologies on their cloud platform"***
> ***"So given those secular trends, we're quite bullish about the opportunity in front of us."***
> **Dev Ittycheria**

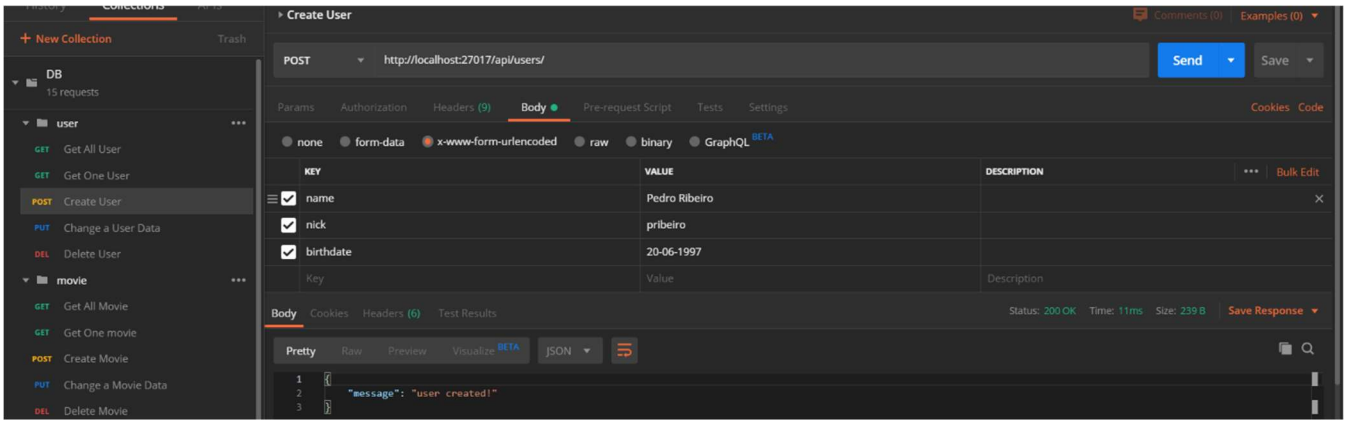
What is Postman?

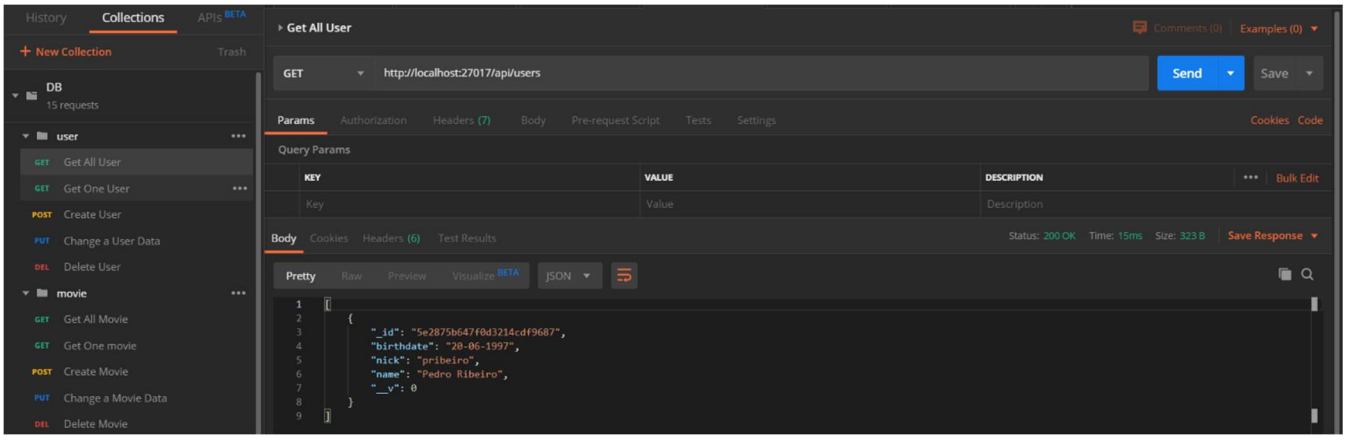
Postman is currently one of the most popular tools used in API testing. It started in 2012 as a side project by Abhinav Asthana to simplify API workflow in testing and development.
API stands for Application Programming Interface which allows software applications to communicate with each other via API calls.

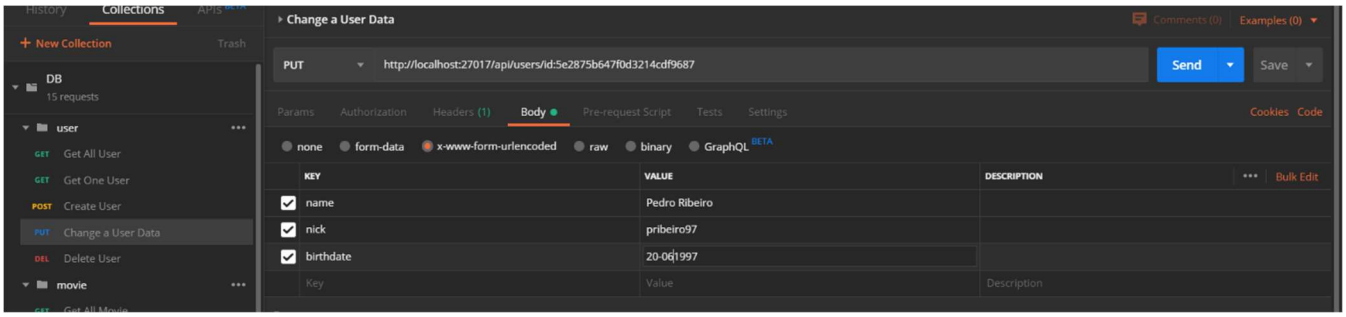
Final Reports

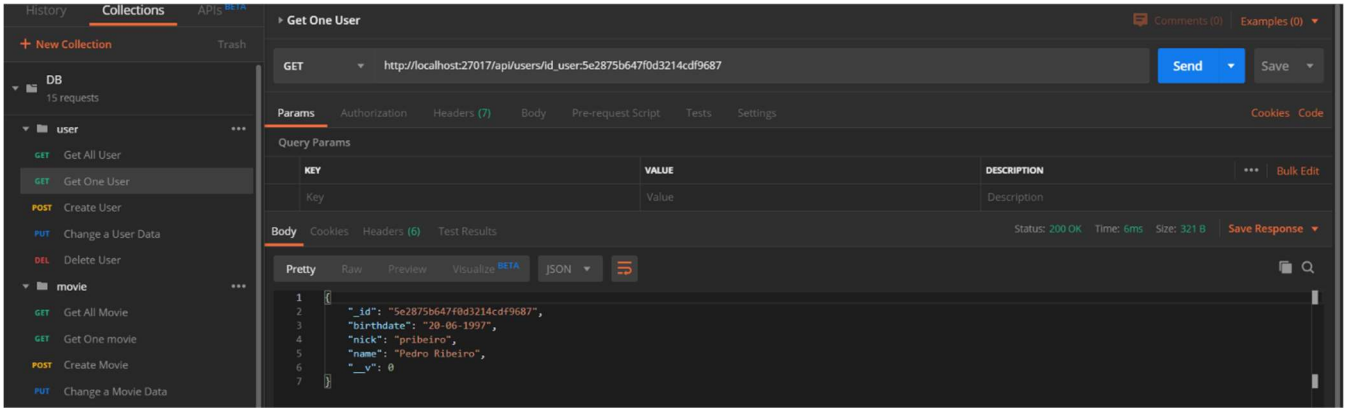
The application is capable of CRUD though Postman.
And every, unless of create data, to do in a web browser.

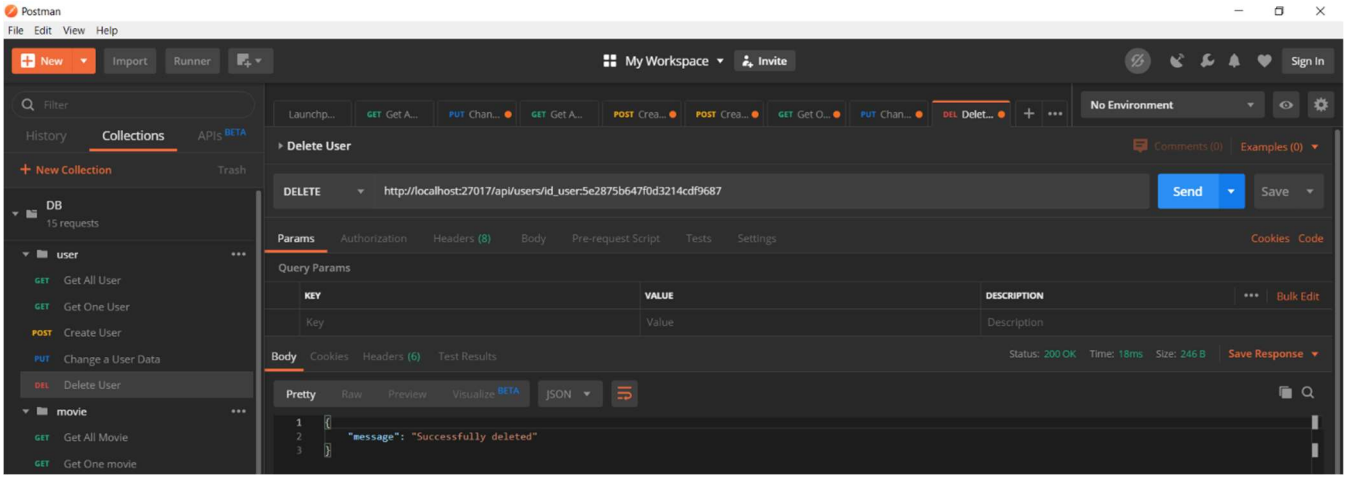
User:

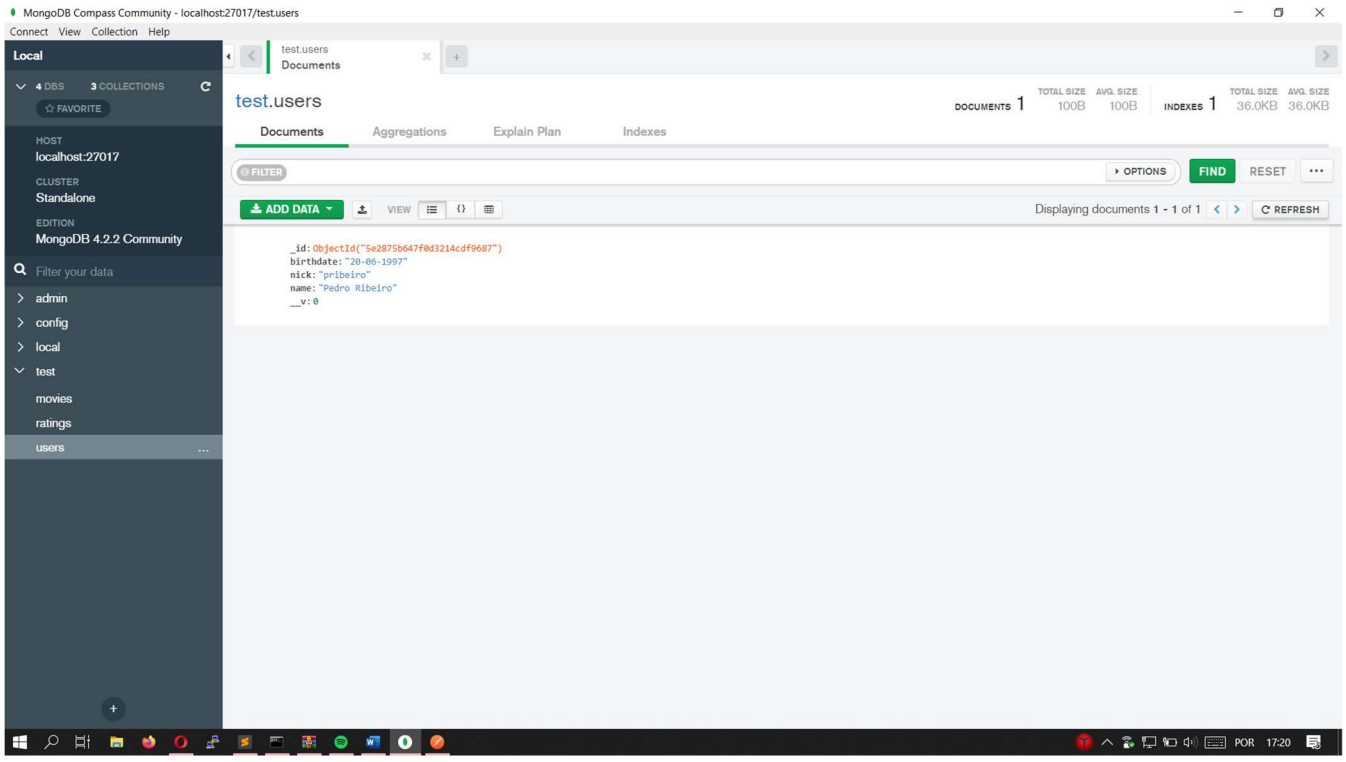




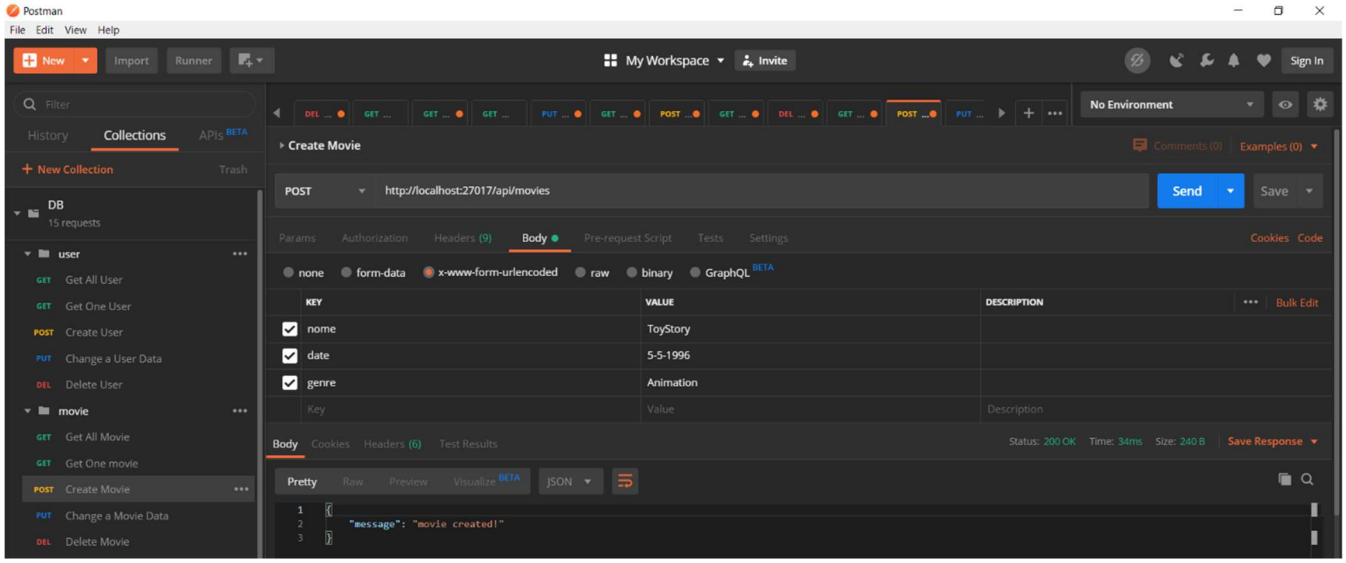


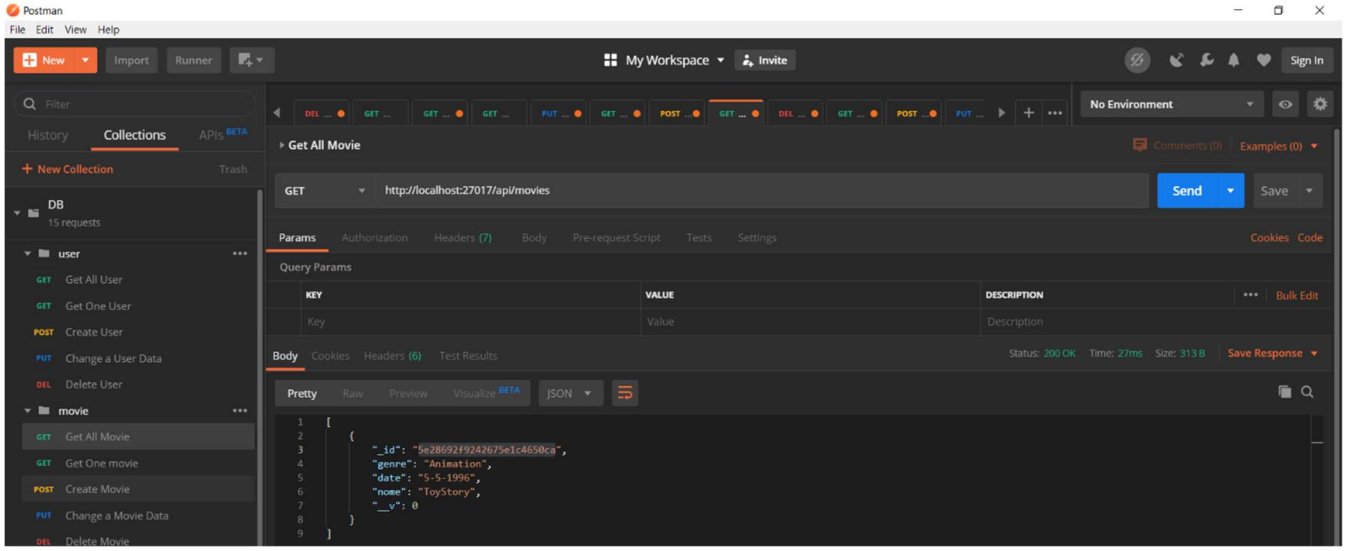


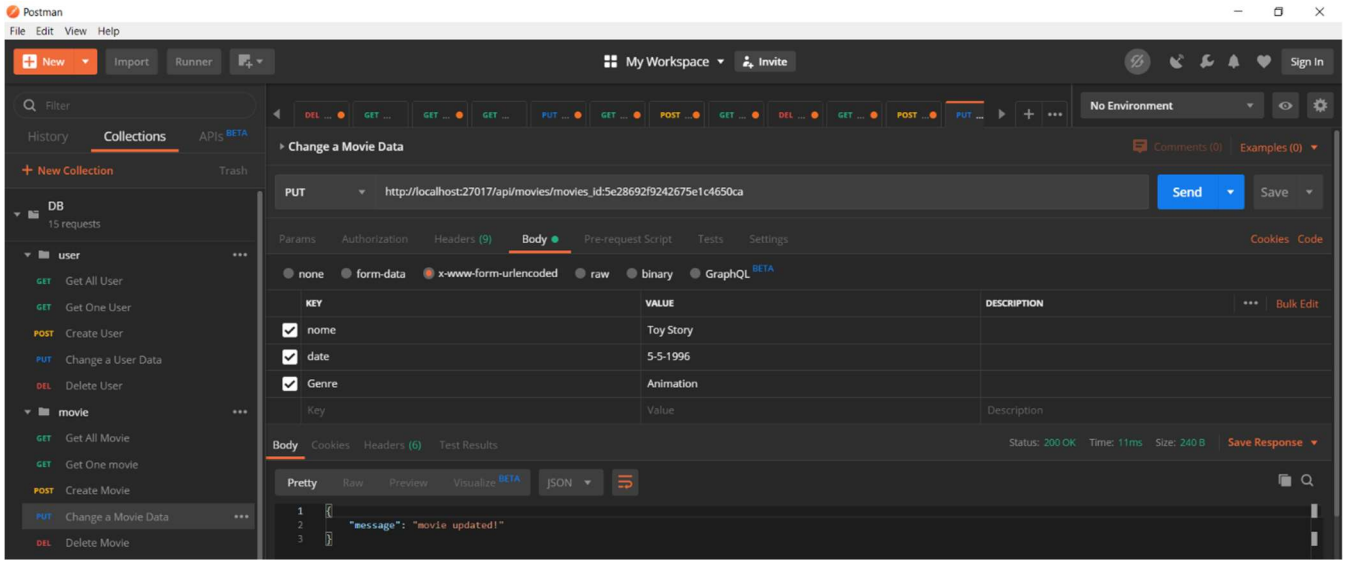

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Delete User
DELETE
http://localhost:27017/api/users/id_user:5e2875b647f0d3214cdf9687
Send
Save
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 18ms Size: 246 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "Successfully deleted"
}

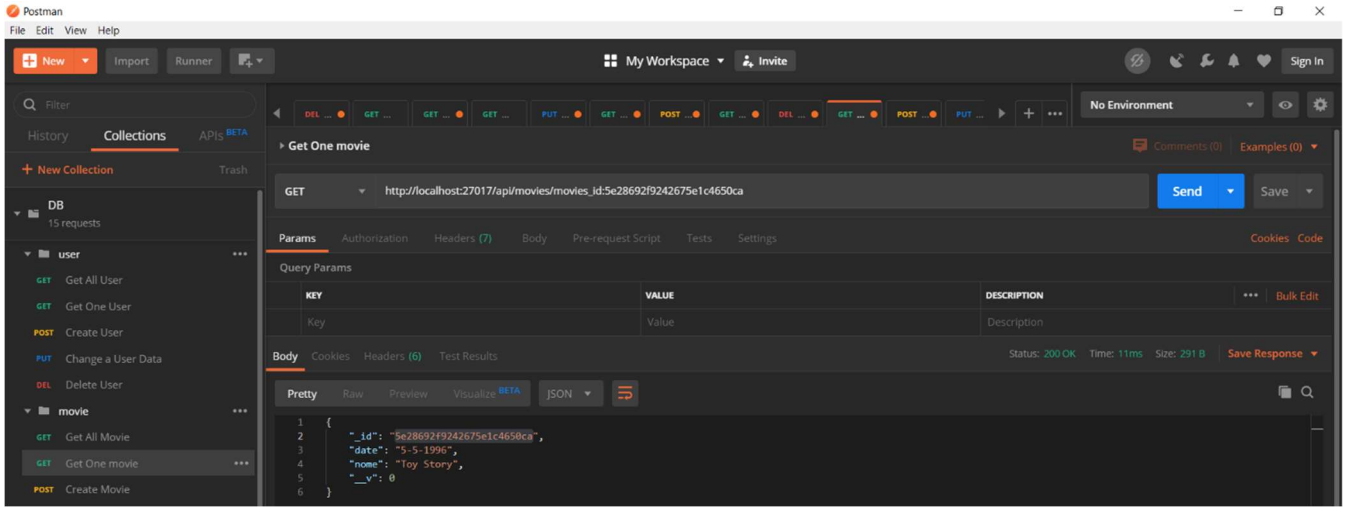

MongoDB Compass Community - localhost:27017/test.users
Connect View Collection Help
Local
4 DBS 3 COLLECTIONS
FAVORITE
HOST
localhost:27017
CLUSTER
Standalone
EDITION
MongoDB 4.2.2 Community
Filter your data
admin
config
local
test
movies
ratings
users
test.users
Documents
test.users
Documents Aggregations Explain Plan Indexes
DOCUMENTS 1 TOTAL SIZE 100B AVG. SIZE 100B
INDEXES 1 TOTAL SIZE 36.0KB AVG. SIZE 36.0KB
FILTER
OPTIONS FIND RESET
ADD DATA VIEW
Displaying documents 1 - 1 of 1 REFRESH
_id: ObjectId("5e2875b647f0d3214cdf9687")
birthdate: "20-06-1997"
nick: "pribeiro"
name: "Pedro Ribeiro"
__v: 0
POR 17:20

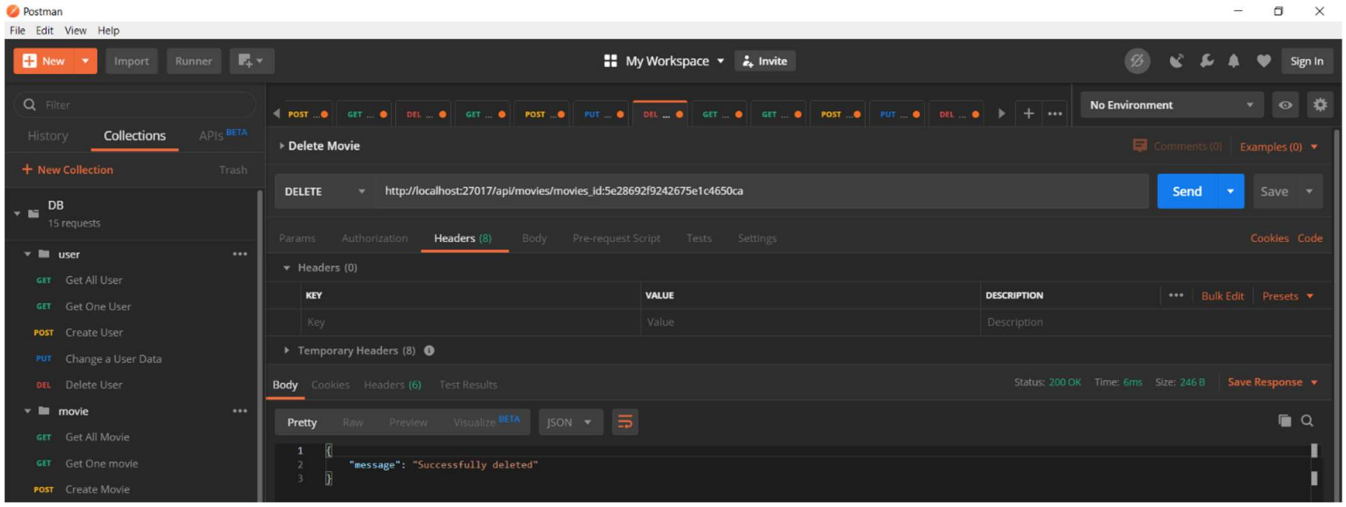
Movies:

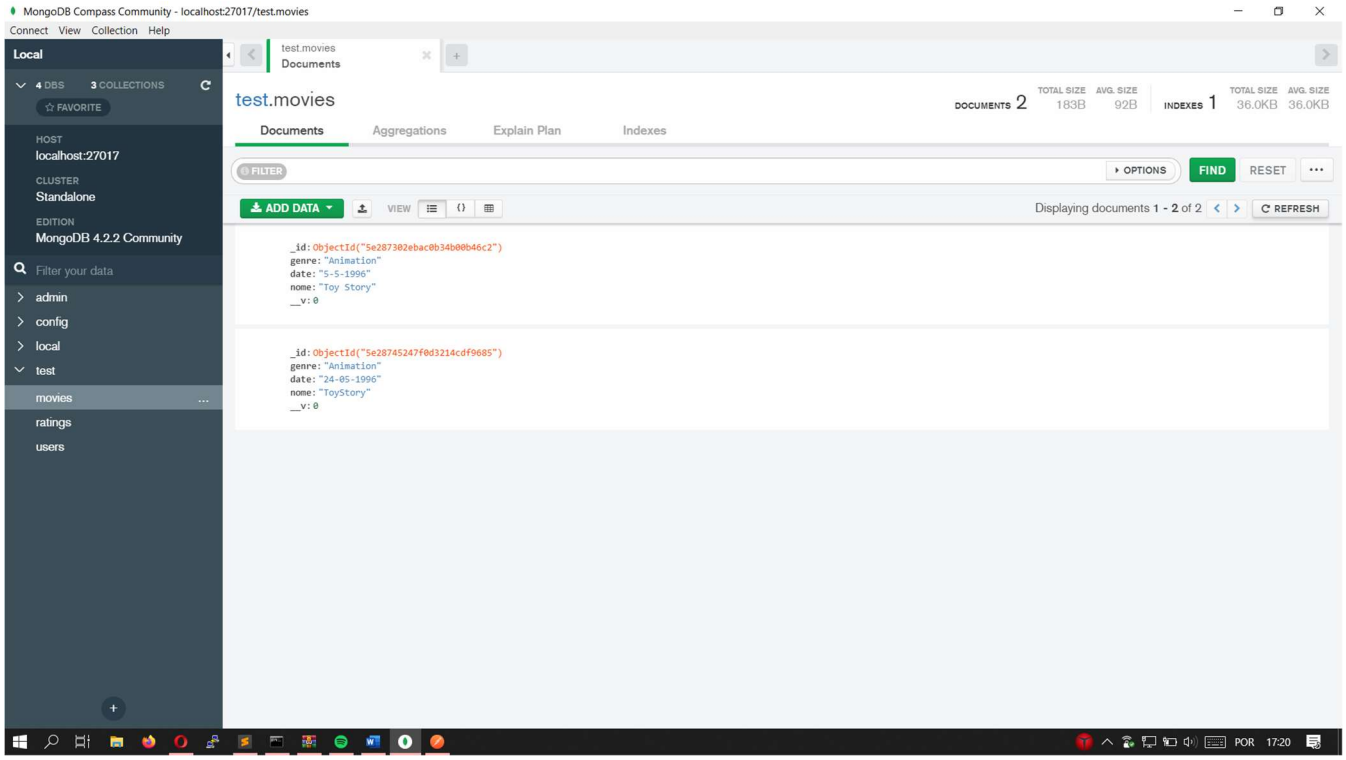

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Create Movie
POST http://localhost:27017/api/movies
Send Save
Params Authorization Headers (9) Body Pre-request Script Tests Settings
Cookies Code
none form-data x-www-form-urlencoded raw binary GraphQL BETA
KEY VALUE DESCRIPTION Bulk Edit
nome ToyStory
date 5-5-1996
genre Animation
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 34ms Size: 240 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "movie created!"
}


Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Get All Movie
GET http://localhost:27017/api/movies
Send Save
Params Authorization Headers (7) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 27ms Size: 313 B Save Response
Pretty Raw Preview Visualize BETA JSON
[
{
"_id": "5e28692f9242675e1c4650ca",
"genre": "Animation",
"date": "5-5-1996",
"nome": "ToyStory",
"__v": 0
}
]

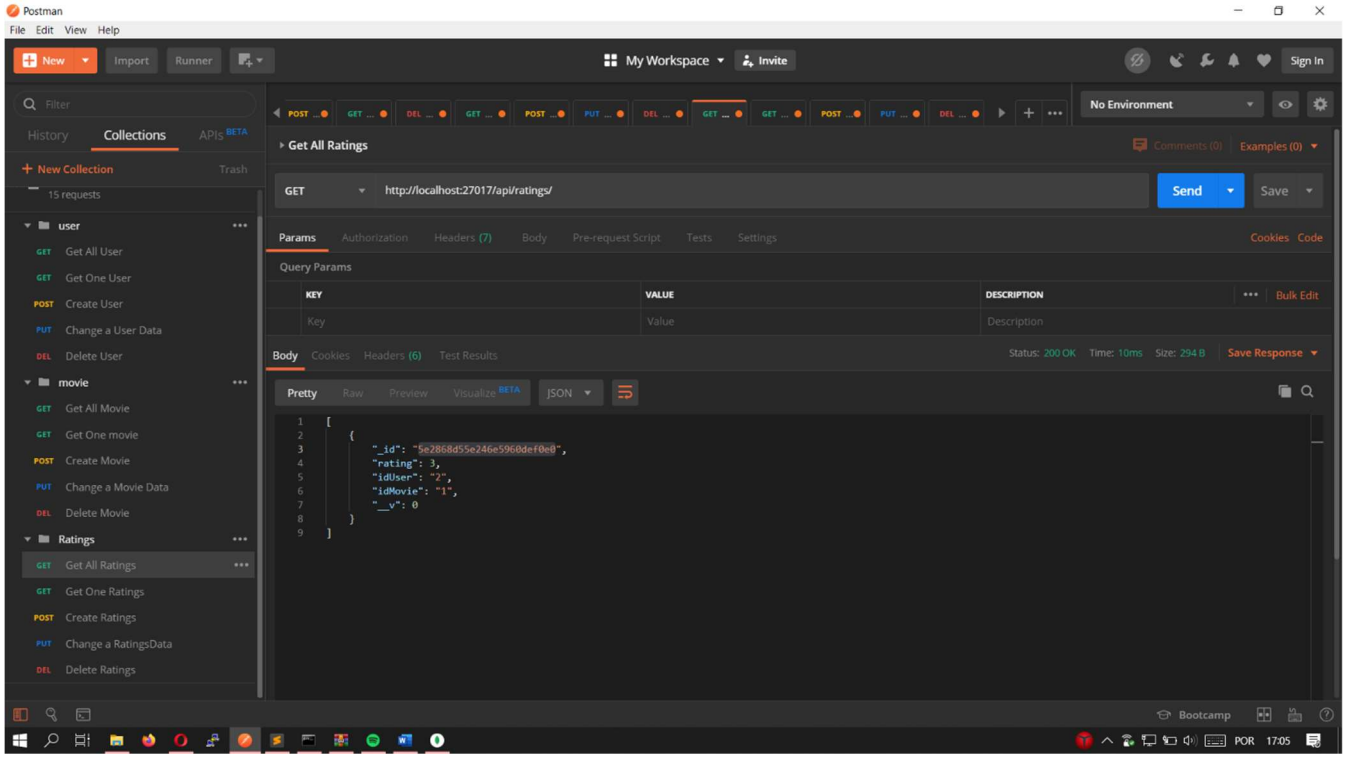

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Change a Movie Data
PUT http://localhost:27017/api/movies/movies_id:5e28692f9242675e1c4650ca
Send Save
Params Authorization Headers (9) Body Pre-request Script Tests Settings
Cookies Code
none form-data x-www-form-urlencoded raw binary GraphQL BETA
KEY VALUE DESCRIPTION Bulk Edit
nome Toy Story
date 5-5-1996
Genre Animation
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 11ms Size: 240 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "movie updated!"
}

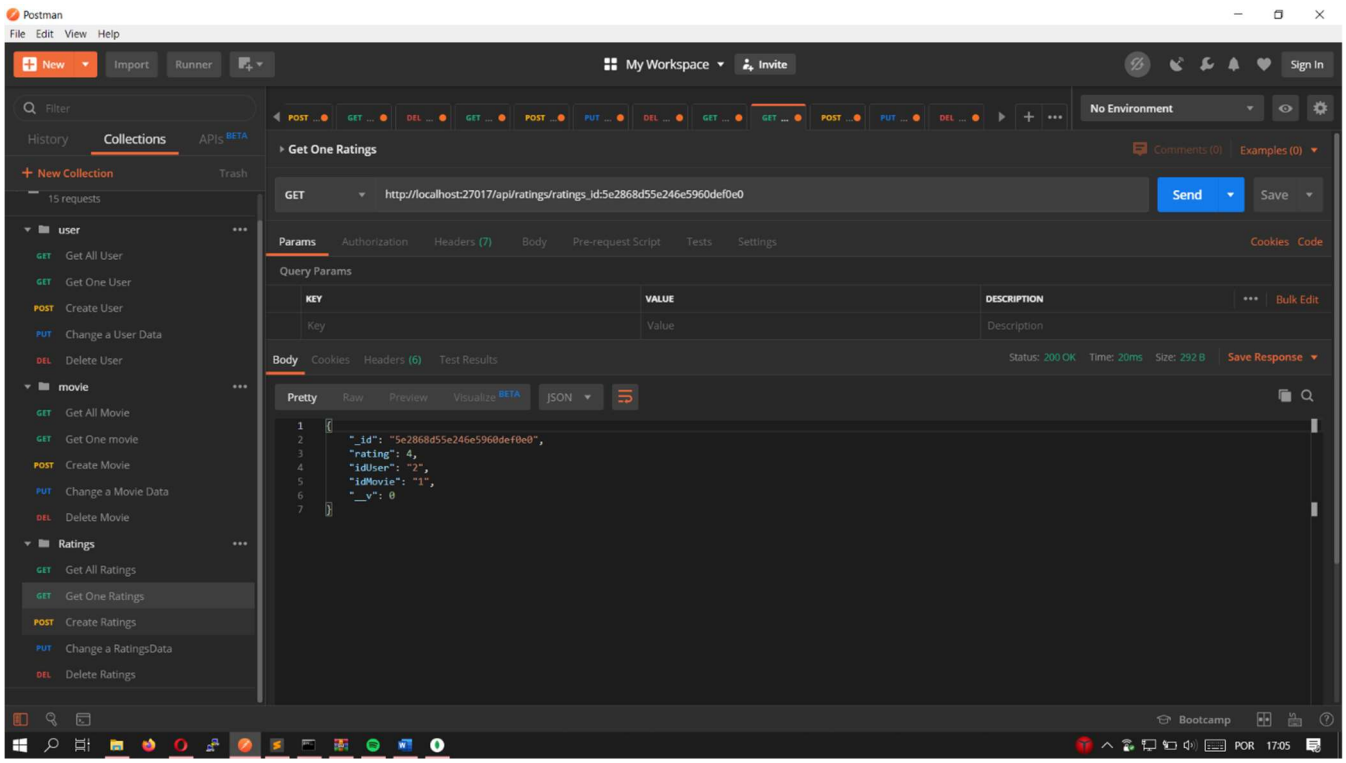

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Get One movie
Comments (0) Examples (0)
GET http://localhost:27017/api/movies/movies_id:5e28692f9242675e1c4650ca
Send Save
Params Authorization Headers (7) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 11ms Size: 291 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"_id": "5e28692f9242675e1c4650ca",
"date": "5-5-1996",
"nome": "Toy Story",
"__v": 0
}

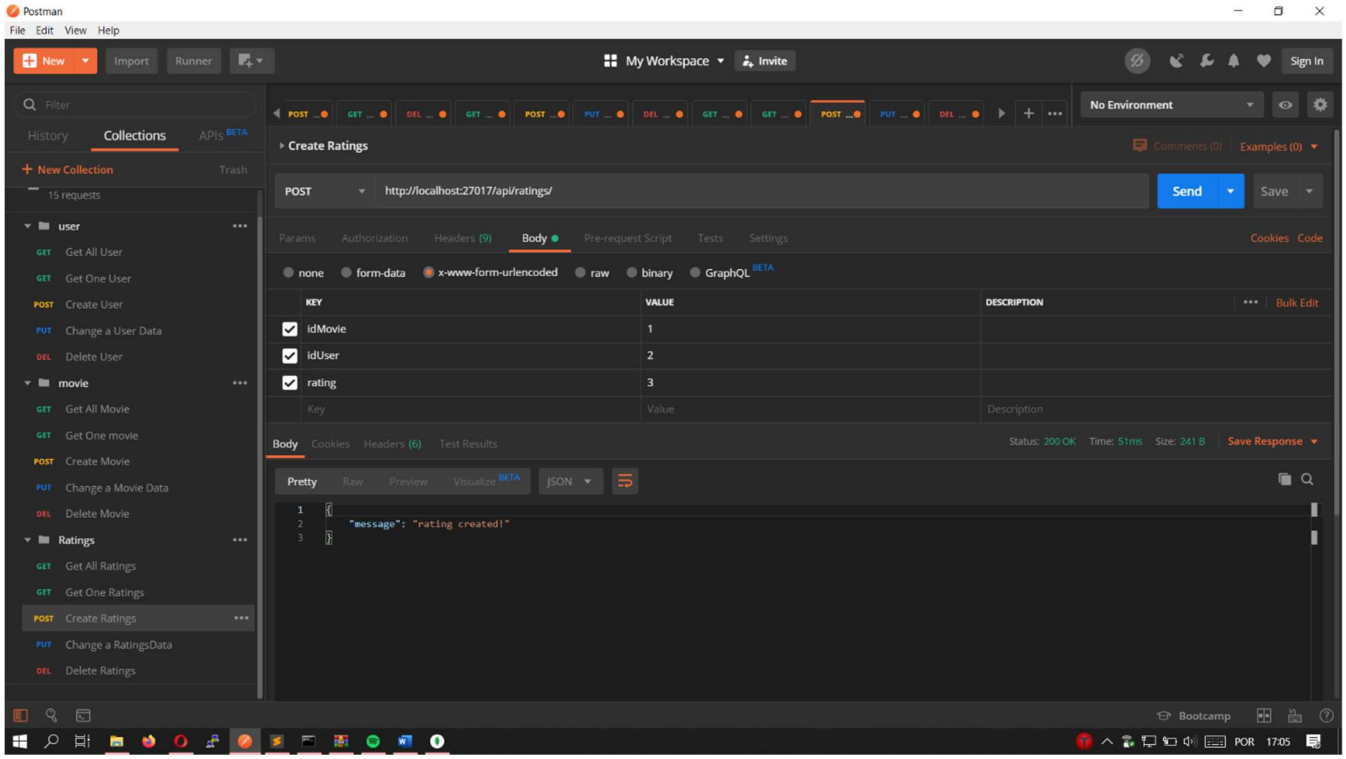

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
DB
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Delete Movie
Comments (0) Examples (0)
DELETE http://localhost:27017/api/movies/movies_id:5e28692f9242675e1c4650ca
Send Save
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies Code
Headers (0)
KEY VALUE DESCRIPTION Bulk Edit Presets
Key Value Description
Temporary Headers (8)
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 6ms Size: 246 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "Successfully deleted"
}

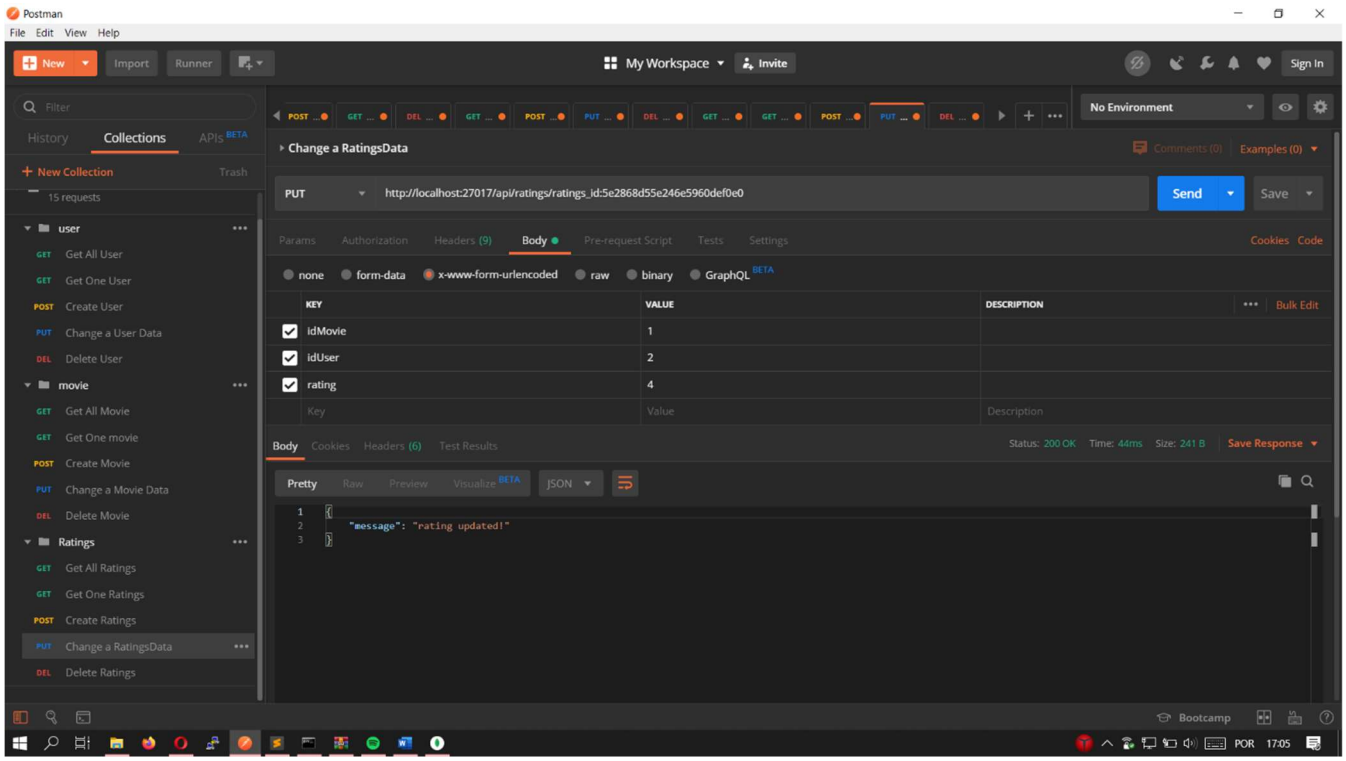

MongoDB Compass Community - localhost:27017/test.movies
Connect View Collection Help
Local
4 DBS 3 COLLECTIONS
FAVORITE
HOST
localhost:27017
CLUSTER
Standalone
EDITION
MongoDB 4.2.2 Community
Filter your data
admin
config
local
test
movies
ratings
users
test.movies
Documents
test.movies
DOCUMENTS 2 TOTAL SIZE 183B AVG. SIZE 92B
INDEXES 1 TOTAL SIZE 36.0KB AVG. SIZE 36.0KB
Documents Aggregations Explain Plan Indexes
FILTER OPTIONS FIND RESET
ADD DATA VIEW
Displaying documents 1 - 2 of 2 REFRESH
_id: ObjectId("5e287302ebac0b34b00b46c2")
genre: "Animation"
date: "5-5-1996"
nome: "Toy Story"
__v: 0
_id: ObjectId("5e28745247f0d3214cdf9685")
genre: "Animation"
date: "24-05-1996"
nome: "ToyStory"
__v: 0
POR 17:20

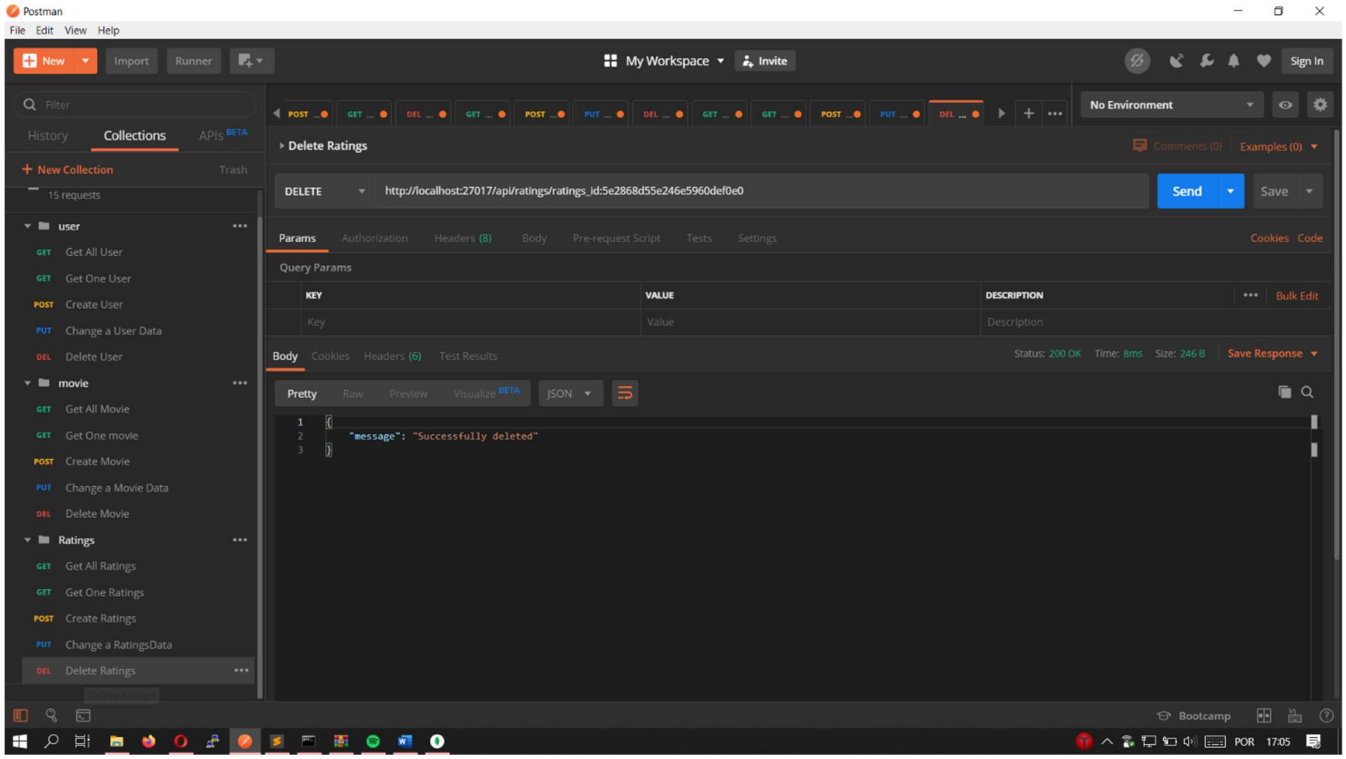
Ratings:

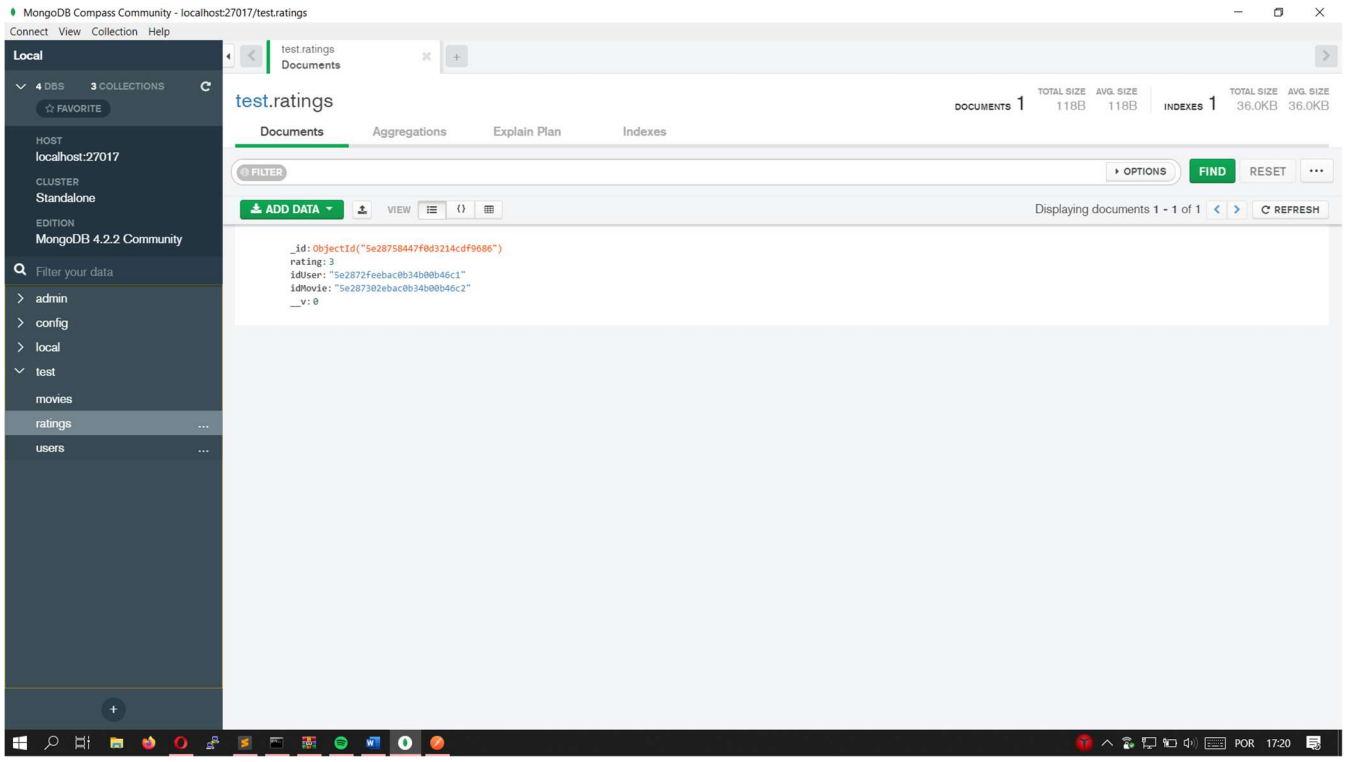

Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Ratings
Get All Ratings
Get One Ratings
Create Ratings
Change a RatingsData
Delete Ratings
Get All Ratings
GET http://localhost:27017/api/ratings/
Send Save
Params Authorization Headers (7) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 10ms Size: 294 B Save Response
Pretty Raw Preview Visualize BETA JSON
[
{
"_id": "5e2868d55e246e5960def0e0",
"rating": 3,
"idUser": "2",
"idMovie": "1",
"__v": 0
}
]
Bootcamp
POR 17:05


Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
No Environment
History Collections APIs BETA
New Collection Trash
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Ratings
Get All Ratings
Get One Ratings
Create Ratings
Change a RatingsData
Delete Ratings
Get One Ratings
GET http://localhost:27017/api/ratings/ratings_id:5e2868d55e246e5960def0e0
Send Save
Params Authorization Headers (7) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 20ms Size: 292 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"_id": "5e2868d55e246e5960def0e0",
"rating": 4,
"idUser": "2",
"idMovie": "1",
"__v": 0
}
Bootcamp
POR 17:05


Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
Filter
History Collections APIs BETA
New Collection Trash
15 requests
user
GET Get All User
GET Get One User
POST Create User
PUT Change a User Data
DEL Delete User
movie
GET Get All Movie
GET Get One movie
POST Create Movie
PUT Change a Movie Data
DEL Delete Movie
Ratings
GET Get All Ratings
GET Get One Ratings
POST Create Ratings
PUT Change a RatingsData
DEL Delete Ratings
No Environment
Create Ratings
Comments (0) Examples (0)
POST http://localhost:27017/api/ratings/
Send Save
Params Authorization Headers (9) Body Pre-request Script Tests Settings
Cookies Code
none form-data x-www-form-urlencoded raw binary GraphQL BETA
KEY VALUE DESCRIPTION Bulk Edit
idMovie 1
idUser 2
rating 3
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 51ms Size: 241 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "rating created!"
}
Bootcamp
POR 17:05


Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
Filter
History Collections APIs BETA
New Collection Trash
15 requests
user
GET Get All User
GET Get One User
POST Create User
PUT Change a User Data
DEL Delete User
movie
GET Get All Movie
GET Get One movie
POST Create Movie
PUT Change a Movie Data
DEL Delete Movie
Ratings
GET Get All Ratings
GET Get One Ratings
POST Create Ratings
PUT Change a RatingsData
DEL Delete Ratings
No Environment
Change a RatingsData
Comments (0) Examples (0)
PUT http://localhost:27017/api/ratings/ratings_id:5e2868d55e246e5960def0e0
Send Save
Params Authorization Headers (9) Body Pre-request Script Tests Settings
Cookies Code
none form-data x-www-form-urlencoded raw binary GraphQL BETA
KEY VALUE DESCRIPTION Bulk Edit
idMovie 1
idUser 2
rating 4
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 44ms Size: 241 B Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "rating updated!"
}
Bootcamp
POR 17:05


Postman
File Edit View Help
New Import Runner
My Workspace Invite
Sign In
History Collections APIs BETA
New Collection Trash
15 requests
user
Get All User
Get One User
Create User
Change a User Data
Delete User
movie
Get All Movie
Get One movie
Create Movie
Change a Movie Data
Delete Movie
Ratings
Get All Ratings
Get One Ratings
Create Ratings
Change a RatingsData
Delete Ratings
Delete Ratings
No Environment
DELETE
http://localhost:27017/api/ratings/ratings_id:5e2868d55e246e5960def0e0
Send
Save
Params Authorization Headers (8) Body Pre-request Script Tests Settings
Cookies Code
Query Params
KEY VALUE DESCRIPTION Bulk Edit
Key Value Description
Body Cookies Headers (6) Test Results
Status: 200 OK Time: 8ms Size: 246 B
Save Response
Pretty Raw Preview Visualize BETA JSON
{
"message": "Successfully deleted"
}
Bootcamp
POR 17:05


MongoDB Compass Community - localhost:27017/test.ratings
Connect View Collection Help
Local
4 DBS 3 COLLECTIONS
FAVORITE
HOST
localhost:27017
CLUSTER
Standalone
EDITION
MongoDB 4.2.2 Community
Filter your data
admin
config
local
test
movies
ratings
users
test.ratings
Documents
test.ratings
DOCUMENTS 1 TOTAL SIZE 118B AVG. SIZE 118B
INDEXES 1 TOTAL SIZE 36.0KB AVG. SIZE 36.0KB
Documents Aggregations Explain Plan Indexes
FILTER
OPTIONS FIND RESET
ADD DATA VIEW
Displaying documents 1 - 1 of 1
REFRESH
_id: ObjectId("5e28758447f0d3214cdf9686")
rating: 3
idUser: "5e2872feebac0b34b00b46c1"
idMovie: "5e287302ebac0b34b00b46c2"
__v: 0
POR 17:20

On document README.txt there are the command line to use on Postman , to be more quick, I decide not to include in this document.

Also I tried to Export the Postman WorkSpace but couldn’t discover how to do it.

Conclusion

In this short amount of time, we discover the power of MongoDB. It was very hard to learn everything about JS and how mongoDB and Postman work, in a short time like this. Without the website 'oreilly.com' we wouldn't be able to do the work. For me(Pedro), in my bachelor project I'll think to have an approach in mongoDB when it's about nosql, since now I have experience on it.