Contemporary Databases

PE07 - GridFS

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In this practice exercise, you will be running MongoDB commands to create a GridFS Database.

1. Pick two images of your choice, or other large objects (audio, video, pdf,…) from the Internet or elsewhere.
2. Store the images in a MongoDB GridFS database using the mongofiles command (OS command)
3. Use the mongofiles command to list the items in the database.
4. Retrieve the images from the MongoDB GridFS database and store them in another spot on the file system.
5. Using the find() and pretty() command, display the fs.files collection.
6. Using the find(), pretty() and limit() command, display 20 documents in the fs.chunks collection. **Show only the \_id, files\_id, and the number of the chunk**.

Paste the commands and results from steps 2 through 6 an MS Word document and submit it to the dropbox. Do not print the binary data. Do not zip the file.

**Results**

Ques 2 :

PS C:\Users\tuhee> mongofiles --db SampleImages put ichigo.jpg --local C:\Mongo\images\ichigo.jpg

2021-04-05T20:32:37.823-0400 connected to: mongodb://localhost/

2021-04-05T20:32:40.321-0400 adding gridFile: ichigo.jpg

2021-04-05T20:32:40.465-0400 added gridFile: ichigo.jpg

PS C:\Users\tuhee> mongofiles --db SampleImages put demon.jpg --local C:\Mongo\images\demon.jpg

2021-04-05T20:45:25.293-0400 connected to: mongodb://localhost/

2021-04-05T20:45:25.295-0400 adding gridFile: demon.jpg

2021-04-05T20:45:25.324-0400 added gridFile: demon.jpg

PS C:\Users\tuhee>

PS C:\Users\tuhee> mongofiles --db SampleImages put sailingship.jpg --local C:\Mongo\data\images\sailingShip.JPG

2021-04-05T21:55:42.984-0400 connected to: mongodb://localhost/

2021-04-05T21:55:42.985-0400 adding gridFile: sailingship.jpg

2021-04-05T21:55:43.012-0400 added gridFile: sailingship.jpg

PS C:\Users\tuhee> mongofiles --db SampleImages put citywall.jpg --local C:\Mongo\data\images\cityWall.JPG

2021-04-05T21:56:14.560-0400 connected to: mongodb://localhost/

2021-04-05T21:56:14.562-0400 adding gridFile: citywall.jpg

2021-04-05T21:56:14.592-0400 added gridFile: citywall.jpg

PS C:\Users\tuhee>

Ques 3 :

IN WIN -

PS C:\Users\tuhee> mongofiles --db SampleImages list

2021-04-05T22:04:15.849-0400 connected to: mongodb://localhost/

ichigo.jpg 216882

demon.jpg 163630

sailingship.jpg 3582080

citywall.jpg 3582026

PS C:\Users\tuhee>

QUES 4:

PS C:\Users\tuhee>

PS C:\Users\tuhee> mongofiles --db SampleImages get demon.jpg --local C:\Users\tuhee\Desktop\new\demon.jpg

2021-04-05T21:02:22.521-0400 connected to: mongodb://localhost/

2021-04-05T21:02:22.536-0400 finished writing to C:\Users\tuhee\Desktop\new\demon.jpg

PS C:\Users\tuhee> mongofiles --db SampleImages get ichigo.jpg --local C:\Users\tuhee\Desktop\new\ichigo.jpg

2021-04-05T21:02:58.202-0400 connected to: mongodb://localhost/

2021-04-05T21:02:58.211-0400 finished writing to C:\Users\tuhee\Desktop\new\ichigo.jpg

PS C:\Users\tuhee>

PS C:\Users\tuhee> mongofiles --db SampleImages get sailingship.jpg --local C:\Mongo\data\images\newImages\sailingShip.JPG

2021-04-05T22:00:45.729-0400 connected to: mongodb://localhost/

2021-04-05T22:00:45.747-0400 finished writing to C:\Mongo\data\images\newImages\sailingShip.JPG

PS C:\Users\tuhee> mongofiles --db SampleImages get citywall.jpg --local C:\Mongo\data\images\newImages\cityWall.JPG

2021-04-05T22:01:34.311-0400 connected to: mongodb://localhost/

2021-04-05T22:01:34.327-0400 finished writing to C:\Mongo\data\images\newImages\cityWall.JPG

PS C:\Users\tuhee>

RESULT IN CLIENT

> db.fs.files.find().pretty()

{

"\_id" : ObjectId("606bac28fc5a30505eac5e8d"),

"length" : NumberLong(216882),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T00:32:40.464Z"),

"filename" : "ichigo.jpg",

"metadata" : {

}

}

{

"\_id" : ObjectId("606baf251b2888c89586a42b"),

"length" : NumberLong(163630),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T00:45:25.323Z"),

"filename" : "demon.jpg",

"metadata" : {

}

}

>

QUES 5 :

IN CLIENT –

> db.fs.files.find().pretty()

{

"\_id" : ObjectId("606bac28fc5a30505eac5e8d"),

"length" : NumberLong(216882),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T00:32:40.464Z"),

"filename" : "ichigo.jpg",

"metadata" : {

}

}

{

"\_id" : ObjectId("606baf251b2888c89586a42b"),

"length" : NumberLong(163630),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T00:45:25.323Z"),

"filename" : "demon.jpg",

"metadata" : {

}

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"length" : NumberLong(3582080),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T01:55:43.012Z"),

"filename" : "sailingship.jpg",

"metadata" : {

}

}

{

"\_id" : ObjectId("606bbfbe61c7de938f16f676"),

"length" : NumberLong(3582026),

"chunkSize" : 261120,

"uploadDate" : ISODate("2021-04-06T01:56:14.592Z"),

"filename" : "citywall.jpg",

"metadata" : {

}

}

>

> db.fs.chunks.find().count()

30

>

QUES 6 :

> db.fs.chunks.find({},{\_id:1, files\_id:1, n:1}).pretty().limit(20)

{

"\_id" : ObjectId("606bac28fc5a30505eac5e8e"),

"files\_id" : ObjectId("606bac28fc5a30505eac5e8d"),

"n" : 0

}

{

"\_id" : ObjectId("606baf251b2888c89586a42c"),

"files\_id" : ObjectId("606baf251b2888c89586a42b"),

"n" : 0

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905b"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 0

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905c"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 1

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905d"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 2

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905e"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 3

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd905f"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 4

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9060"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 5

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9061"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 6

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9062"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 7

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9063"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 8

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9064"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 9

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9065"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 10

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9066"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 11

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9067"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 12

}

{

"\_id" : ObjectId("606bbf9e477f7bbb8ffd9068"),

"files\_id" : ObjectId("606bbf9e477f7bbb8ffd905a"),

"n" : 13

}

{

"\_id" : ObjectId("606bbfbe61c7de938f16f677"),

"files\_id" : ObjectId("606bbfbe61c7de938f16f676"),

"n" : 0

}

{

"\_id" : ObjectId("606bbfbe61c7de938f16f678"),

"files\_id" : ObjectId("606bbfbe61c7de938f16f676"),

"n" : 1

}

{

"\_id" : ObjectId("606bbfbe61c7de938f16f679"),

"files\_id" : ObjectId("606bbfbe61c7de938f16f676"),

"n" : 2

}

{

"\_id" : ObjectId("606bbfbe61c7de938f16f67a"),

"files\_id" : ObjectId("606bbfbe61c7de938f16f676"),

"n" : 3

}

>