

Lab6 : MongoDB (Solution)

Objectives: Study NoSQL Document Model using MongoDB

Estimated Time : 3 hours

Lab Solution

1. Install Mongo Shell and connect to RDBProject database using the below command

mongo "mongodb+srv://dmmcluster.f1uoi.gcp.mongodb.net/RDBProject" --username st_dmm

2. Convert your Peer-review feedback into the below JSON format and insert into feedback collection

	A	B	C	D	E	F	G	H
1				Peer Feedback Form				
2		Reviewer Name	xx	xx	xx			
3		Meeting Room#	xx					
4								
5								
6		Team#	Project Title	Member#	Presenter Name	Time Taken (min)	Summary of Presentation	Strengths
7		19	Bike sharing	19-1	Mr. XYZ	15	good presentation	precise and easy to understand
8		20						practice presentation skills
9								
10								
11								
12								
13								

```
{
  "member_id": "19-1",
  "presenter_name": "Mr. XYZ",
  "project_id": "19",
  "project_name": "Bike sharing",
  "summary_of_presentation": "the presentation was well prepared and_",
  "strengths": [ "precise", "easy to understand" ],
  "suggestions": [ "practice presentation skills" ]
...
}
```

... means you can add any other information because NOSQL is schemaless.

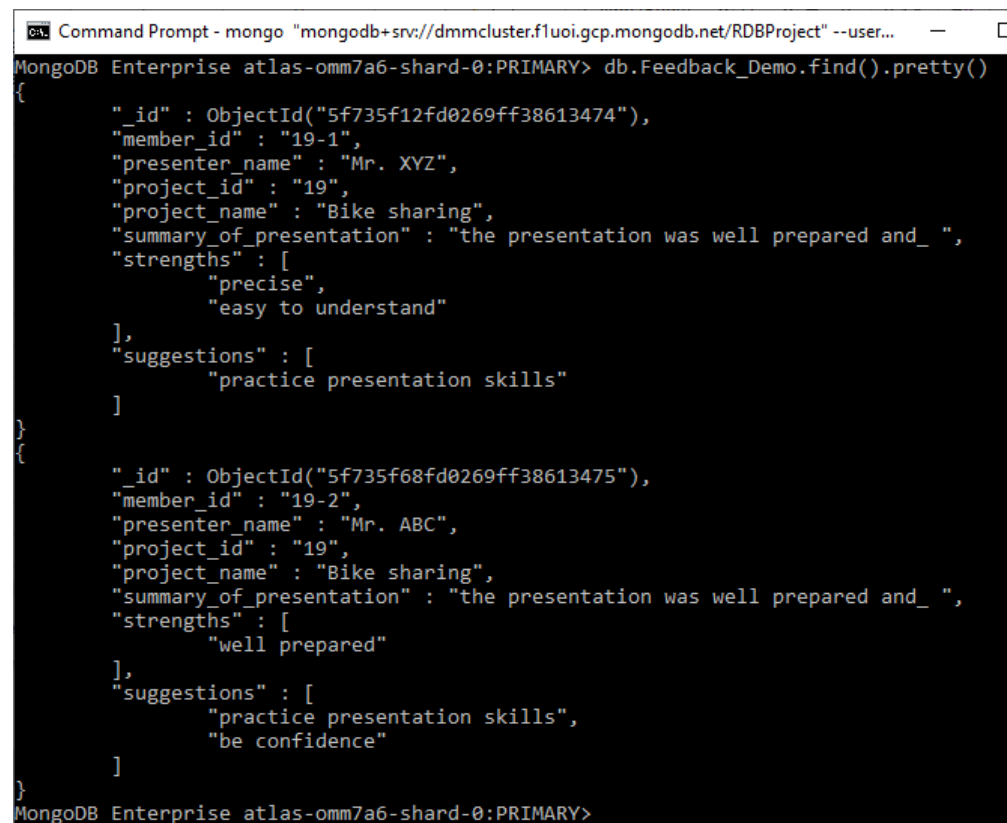
3. Insert the peer review into the feedback table in the database.
4. Write MongoDB command to retrieve the following information, capture the running screen and the returned result.

Answer The solution is running with the Feedback_Demo Collection.

```

db.Feedback_Demo.insertOne(
{
  "member_id": "19-1",
  "presenter_name": "Mr. XYZ",
  "project_id": "19",
  "project_name": "Bike sharing",
  "summary_of_presentation": "the presentation was well prepared and_",
  "strengths": [ "precise", "easy to understand" ],
  "suggestions": ["practice presentation skills" ]
})
db.Feedback_Demo.insertOne(
{
  "member_id": "19-2",
  "presenter_name": "Mr. ABC",
  "project_id": "19",
  "project_name": "Bike sharing",
  "summary_of_presentation": "the presentation was well prepared and_",
  "strengths": [ "well prepared" ],
  "suggestions": ["practice presentation skills", "be confidence" ]
})

```



```

Command Prompt - mongo "mongodb+srv://dmmcluster.fluoi.gcp.mongodb.net/RDBProject" --user...
MongoDB Enterprise atlas-omm7a6-shard-0:PRIMARY> db.Feedback_Demo.find().pretty()
{
  "_id" : ObjectId("5f735f12fd0269ff38613474"),
  "member_id" : "19-1",
  "presenter_name" : "Mr. XYZ",
  "project_id" : "19",
  "project_name" : "Bike sharing",
  "summary_of_presentation" : "the presentation was well prepared and_",
  "strengths" : [
    "precise",
    "easy to understand"
  ],
  "suggestions" : [
    "practice presentation skills"
  ]
}
{
  "_id" : ObjectId("5f735f68fd0269ff38613475"),
  "member_id" : "19-2",
  "presenter_name" : "Mr. ABC",
  "project_id" : "19",
  "project_name" : "Bike sharing",
  "summary_of_presentation" : "the presentation was well prepared and_",
  "strengths" : [
    "well prepared"
  ],
  "suggestions" : [
    "practice presentation skills",
    "be confidence"
  ]
}
MongoDB Enterprise atlas-omm7a6-shard-0:PRIMARY>

```

[TASK1] List your presentation feedback reviewed by friends (if I am ABC)

`db.Feedback_Demo.find({"member_id":"19-2"})`

```
MongoDB Enterprise atlas-omm7a6-shard-0:PRIMARY> db.Feedback_Demo.find(
{"member_id":"19-2"})
{ "_id" : ObjectId("5f735f68fd0269ff38613475"), "member_id" : "19-2",
  "presenter_name" : "Mr. ABC", "project_id" : "19", "project_name" :
  "Bike sharing", "summary_of_presentation" : "the presentation was wel
l prepared and_", "strengths" : [ "well prepared" ], "suggestions" :
  [ "practice presentation skills", "be confidence" ] }
```

[TASK2] How many strengths are provided in total?

`db.Feedback_Demo.aggregate({$project:{NumberOfItemsInArray:{$size:"$strengths"}}},{ $group: { _id: null, total: { $sum: "$NumberOfItemsInArray" } } })`

```
MongoDB Enterprise atlas-omm7a6-shard-0:PRIMARY> db.Feedback_Demo.ag
gregate({$project:{NumberOfItemsInArray:{$size:"$strengths"}}},{ $grou
p: { _id: null, total: { $sum: "$NumberOfItemsInArray" } } })
{ "_id" : null, "total" : 3 }
```

[TASK3] What is the average number of suggestion for a reviewer?

`db.Feedback_Demo.aggregate({$project:{NumberOfItemsInArray:{$size:"$suggestions"}}},{ $group: { _id: null, total: { $avg: "$NumberOfItemsInArray" } } })`

```
MongoDB Enterprise atlas-omm7a6-shard-0:PRIMARY> db.Feedback_Demo.agg
regate({$project:{NumberOfItemsInArray:{$size:"$suggestions"}}},{ $gro
up: { _id: null, total: { $avg: "$NumberOfItemsInArray" } } })
{ "_id" : null, "total" : 1.5 }
```

Submission System: [Google Classroom](#)

Total TASKS: 3