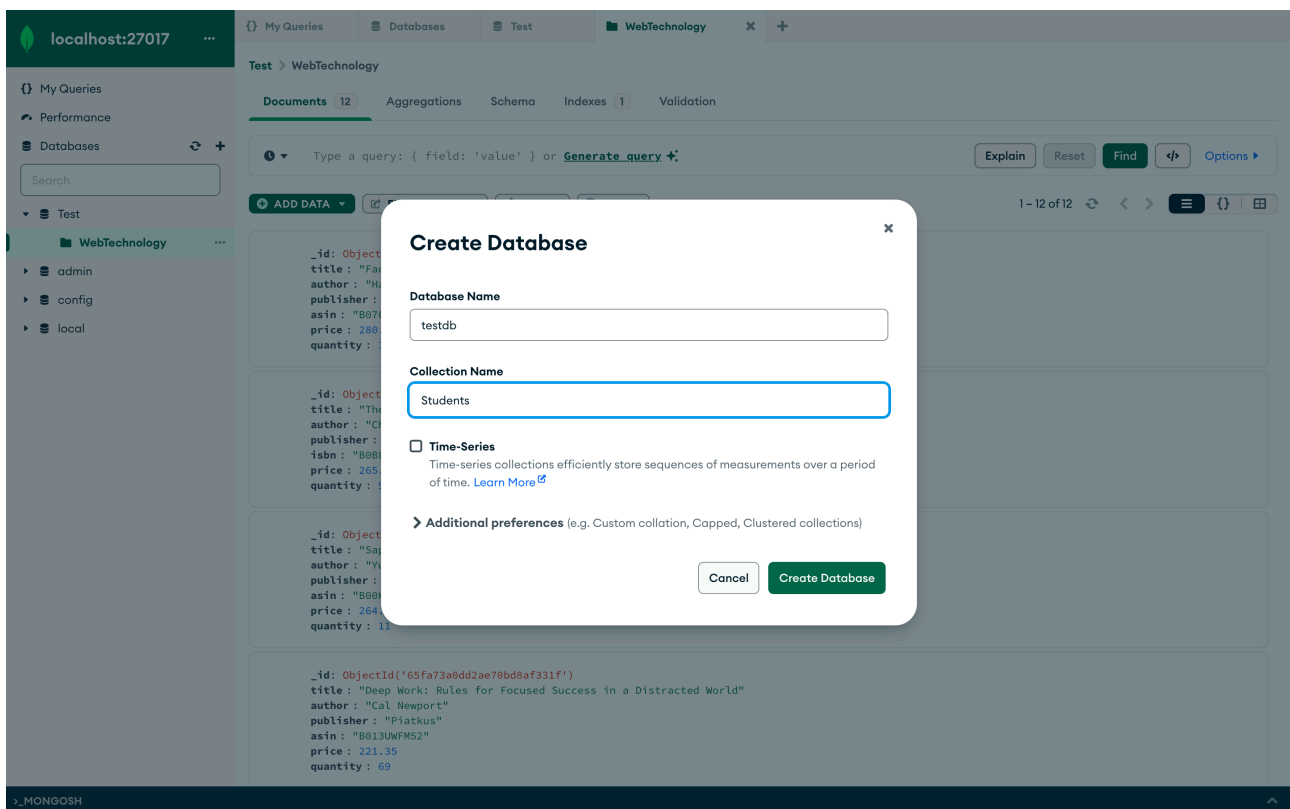


NAME:ANKUR MISHRA
ROLL:22CS3010

WEB_TECH_ASSIGNMENT_LAB_10

1,2,3.



4.

localhost:27017

My QueriesPerformanceDatabasesTestStudents

testdb > Students

Documents11AggregationsSchemaIndexes1Validation

Type a query: (field: 'value') or **Generate query**

ADD DATAEXPORT DATAUPDATEDELETE

1 - 11 of 11

My QueriesPerformanceDatabasesTestStudents

WebTechnologyadminconfiglocaltestdb

Students

testdb > Students

Documents11AggregationsSchemaIndexes1Validation

Type a query: (field: 'value') or **Generate query**

ADD DATAEXPORT DATAUPDATEDELETE

1 - 11 of 11

{

"_id": {},

"Name": "Sumit",

"age": 30,

"E-mail": "sumit@xyz"

}

{

"_id": {},

"Name": "Bla",

"age": 31,

"E-mail": "bla@xyz"

}

{

"_id": {},

"Name": "Anshul",

"age": 33,

"E-mail": "anshul@trader"

}

{

"_id": {},

"Name": "Samay",

"age": 23,

"E-mail": "samay@xyz.com"

}

{

"_id": {},

"Name": "Sunil",

"age": 35,

"E-mail": "blonde@myhair"

}

{

"_id": {},

"Name": "Naruto",

"age": 39,

"E-mail": "naruto@hokage"

}

{

"_id": {},

"Name": "Tanmay",

"age": 47,

"E-mail": "tanmay@gmail.com"

}

{

"_id": {},

"Name": "Jaby",

"age": 41,

"E-mail": "jaby@koay.com"

}

{

"_id": {},

"Name": "Riya",

"age": 39,

"E-mail": "riya@gmail.com"

}

{

"_id": {},

"Name": "Divya",

"age": 30,

"E-mail": "divya@ya.com"

}

{

"_id": {},

"Name": "Sensei",

"age": 30,

"E-mail": "Sensei@xyz"

}

5.

localhost:27017

My QueriesPerformanceDatabasesTestStudents

testdb > Students

Documents11AggregationsSchemaIndexes1Validation

Generate queryResetAnalyzeOptions

This report is based on a sample of 11 documents. [Learn more](#)

Looking for data modeling tools? [Check out Hackolade Studio.](#)

My QueriesPerformanceDatabasesTestStudents

WebTechnologyadminconfiglocaltestdb

Students

testdb > Students

Documents11AggregationsSchemaIndexes1Validation

Generate queryResetAnalyzeOptions

This report is based on a sample of 11 documents. [Learn more](#)

Looking for data modeling tools? [Check out Hackolade Studio.](#)

_id

objectId

0.006.0012.0018.0023.00

Inserted: 2024-03-20 09:02:54

age

int32

0%13.5%27%

31113111111

E-mail

string

bla@xyzdiv@iya.comblonde@myhairsamay@xyz.comnaruto@hokagesumit@xyzRiya@gmail.comJaby@koay.com

Tanmay@gmail.combull@traderSensei@xyz

Name

string

SenseiSumitJabyDivyaSamaySunilnarutoblaanshulRiyaTanmay

6.

localhost:27017

My Queries Databases Test Students

testdb > Students

Documents Aggregations Schema Indexes Validation

Generate query Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 11 of 11

```
{
  "_id": {},
  "Name": "Sumit",
  "age": 20,
  "E-mail": "sumit@xyz"
}
```

```
{
  "_id": {},
  "Name": "bta",
  "age": 21,
  "E-mail": "bta@xyz"
}
```

```
1 {
2   "_id": {},
3   "Name": "nanshul",
4   "age": 55,
5   "E-mail": "bull@trader"
6 }
7
8
```

Document modified. CANCEL REPLACE

```
{
  "_id": {},
  "Name": "Samay",
  "age": 23,
  "E-mail": "samay@xyz.com"
}
```

```
{
  "_id": {},
  "Name": "Sunil",
  "age": 16,
  "E-mail": "blonde@myhair"
}
```

```
{
  "_id": {},
  "Name": "naruto",
  "age": 10,
  "E-mail": "naruto@hokage"
}
```

```
{
  "_id": {},
  "Name": "Tannay",
  "age": 67,
  "E-mail": "Tannay@gmail.com"
}
```

> MONGOSH

7.

localhost:27017

My Queries Databases Test Students

testdb > Students

Documents Aggregations Schema Indexes Validation

Generate query Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

1 - 3 of 3

Delete 3 documents

testdb.Students

Filter { age: 20 } Export

Preview (sample of 3 documents)

```
_id: ObjectId('65fa6fedd2ae70bd8af3319')
Name: "Sumit"
age: 20
E-mail: "sumit@xyz"
```

```
_id: ObjectId('65fa6fedd2ae70bd8af3328')
Name: "Divya"
age: 20
E-mail: "div@iya.com"
```

```
_id: ObjectId('65fa6fedd2ae70bd8af3329')
Name: "Sensei"
age: 20
E-mail: "Sensei@xyz"
```

Cancel Delete 3 documents

> MONGOSH

8.

The screenshot shows the MongoDB Compass interface at localhost:27017. The left sidebar displays the database structure with 'testdb' selected. The main panel is titled 'testdb > Students' and shows the 'Aggregations' tab. A single stage named '\$group' is configured with the following JavaScript code:

```
1 // **
2 * _id: The id of the group.
3 * FieldN: The first field name.
4 */
5 {
6   _id: null,
7   avgscore: {
8     $avg: "$age"
9   }
10 }
```

The 'Output after \$group stage (Sample of 1 document)' shows a single document with the following structure:

```
{
  "_id": null,
  "avgscore": 28.909090909090909
}
```

Buttons for 'Generate aggregation', 'Explain', 'Export', 'Run', and 'Options' are visible. Below the aggregation editor, there is a '+ Add Stage' button and a link to 'Learn more about aggregation pipeline stages'.

9.

The screenshot shows the MongoDB Compass interface at localhost:27017. The left sidebar is the same as in the previous screenshot. The main panel is titled 'testdb > Students' and shows the 'Indexes' tab. A table lists the existing indexes:

Name and Definition	Type	Size	Usage	Properties
Name_1	REGULAR	20.5 KB	0 (since Tue Apr 02 2024)	
id	REGULAR	34.9 KB	9 (since Tue Apr 02 2024)	UNIQUE

A 'Create Index' dialog box is open in the foreground. It is titled 'Create Index' and shows 'testdb.Students' as the collection. Under 'Index fields', 'Name' is selected with a dropdown arrow, and '1 (asc)' is selected with a dropdown arrow. There is a '+' button to the right of the second dropdown. Below the fields, there is an 'Options' section with a chevron icon. At the bottom of the dialog are 'Cancel' and 'Create Index' buttons.

10.

The screenshot shows the MongoDB Compass interface. On the left, the 'testdb' database is selected, and the 'Students' collection is visible. The main panel displays the 'Documents' tab for the 'Students' collection. An 'Export' dialog box is open in the center, titled 'Export' with a close button (X). Below the title, it says 'Collection testdb.Students'. Under 'Export File Type', there are two buttons: 'JSON' (which is selected and highlighted with a blue border) and 'CSV'. Below these buttons, there is a link that says '> Advanced JSON Format'. At the bottom of the dialog, there are two buttons: 'Cancel' and 'Export...'. The background shows a list of documents from the 'Students' collection, each with fields like '_id', 'Name', 'age', and 'E-mail'.

11.

The screenshot shows the MongoDB Compass interface with the 'Aggregations' tab selected. A pipeline is defined with two stages: 'Sort' and 'Limit'. The 'Sort' stage is configured to sort by 'age' in descending order. The 'Limit' stage is configured to limit the results to 5 documents. The output of the pipeline is displayed, showing 5 documents. At the bottom, there is a message that says 'Export completed. 11 documents written.' with a 'SHOW FILE' button.