**2-1 Assignment: CRUD in MongoDB**

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CS-340: Client/Server Development

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July 5, 2023

1. **Accessed the dataset, city\_inspections.json, in the /usr/local/datasets directory in my Apporto environment. Using the mongoimport tool and documents found in the city\_inspections.json file, I loaded the database “city” into the “inspections” collection. I completed this task by typing the following commands in the Linux terminal to perform the import in the right directory:**

**Changed into the Apporto directory with the data sets:**

cd /usr/local/datasets/

**Used the mongo import utility to load the data set:**

mongoimport –-username=”${MONGO\_USER}” \

--password=”${MONGO\_PASS}” –-port=${MONGO\_PORT} \

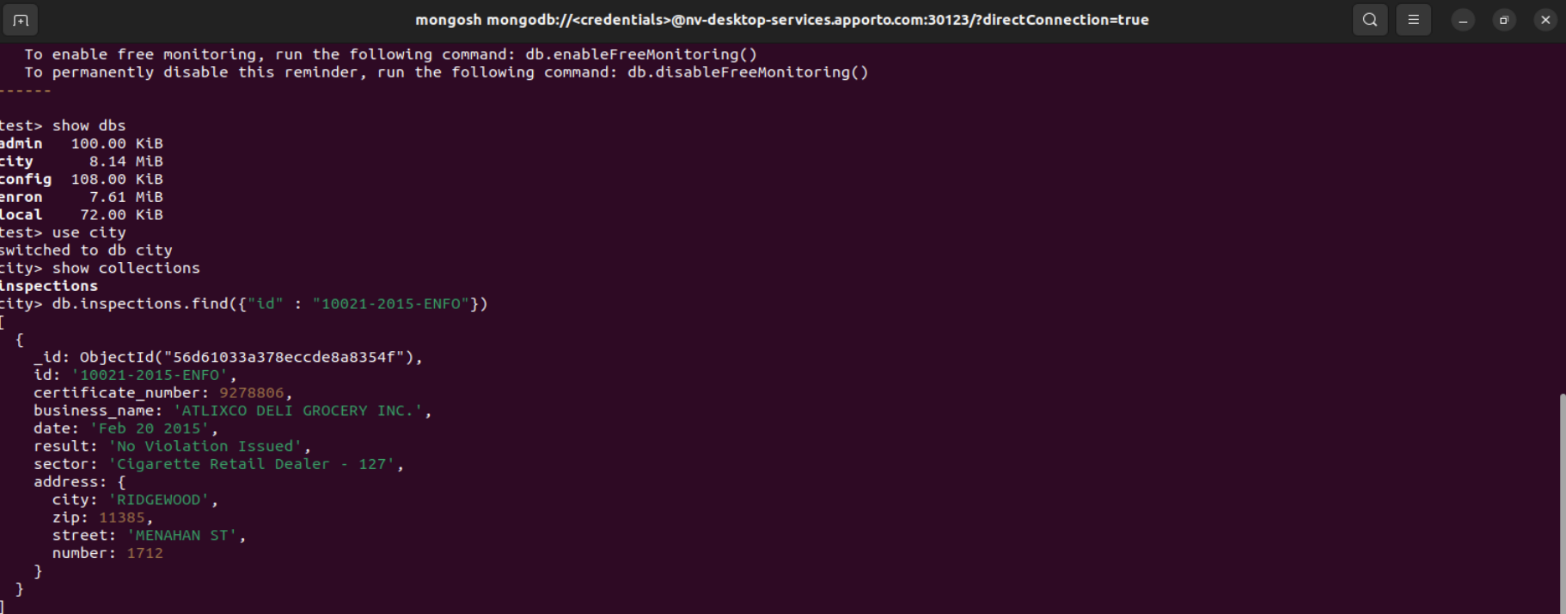
--host=${MONGO\_HOST} –-db city –-collection inspections \

--authenticationDatabase admin –-drop ./city\_inspections.json

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1. **Verified the load by “using” the “city” database, and issuing the following queries in the *mongo shell*:**
2. **db.inspections.find({"id" : "10021-2015-ENFO"})**



1. **db.inspections.find({"result":"Out of Business"},{"business\_name":1}).limit(10)**

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|  |  |
| --- | --- |
| **Key** | **Value** |
| id | "20032-2020-ACME" |
| certificate\_number | 9998888 |
| business\_name | "ACME Explosives" |
| date | Today's date |
| result | "Business Padlocked" |
| sector | "Explosive Retail Dealer-999" |
| address | number -> 1721 street -> Boom Road city -> BRONX zip -> 10463 |

1. **Using the insertOne command in the mongo shell, I inserted a document to the database named “city” within the collection named “inspections.” Use the following key-value pairs as data for my document.**

**I verified the database creation and insertion using the findOne() function in the mongo shell as shown below:**

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1. **I answered the following questions using MongoDB queries.**
2. **What is the distinct list of inspection “sector” in the current inspections collection? How many are in the list? Do not count by hand.**

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I used the .distinct with the .length commands to determine that there are 87 in the inspection “sector” list in the current inspections collection, as shown above.

1. **What is the difference in the date data type for the business named “AUSTIN 2012” versus your business document insertion of “Acme Explosives”?**

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The difference, as shown above, is that AUSTIN 2012’s date appears to be entered manually; it only shows the month, day, and year (in string format). In contrast, ACEME Explosives has the generated date and timestamp with time zone, which was found using the date() command.

1. **How many businesses have a “Violation Issued”? (See Value column above.)**

**13,823 Violations Issued:**

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As shown above, using the .countDocuments command, there are 13,823 businesses with violations issued.

1. **Using the updateOne command in the mongo shell, I updated the document with the ID “20032-2020-ACME” in the collection “inspections” in the database “city” with the information below.**

|  |  |
| --- | --- |
| **Key** | **Value** |
| **business\_name** | **"New ACME Flowers"** |
| **Result** | **"Business Re-opened** |
| **comments** | **"Flowers after the explosion"** |

I Verified the database update using the appropriate find() function in the mongo shell as shown below:

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1. **Using the database “city” with documents found in the “inspections” collection, I performed the tasks listed below. Verifying by providing screenshots of the results as evidence.**
2. **I updated all the documents that contain the key-value pair "city":"ROSEDALE" in the address subdocument by changing the zip code in the address subdocument to "76114"as shown below:**

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1. **I removed the first document with the key-value pair "result":"Violation Issued."**

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