MONGO-DB UNVEILED:

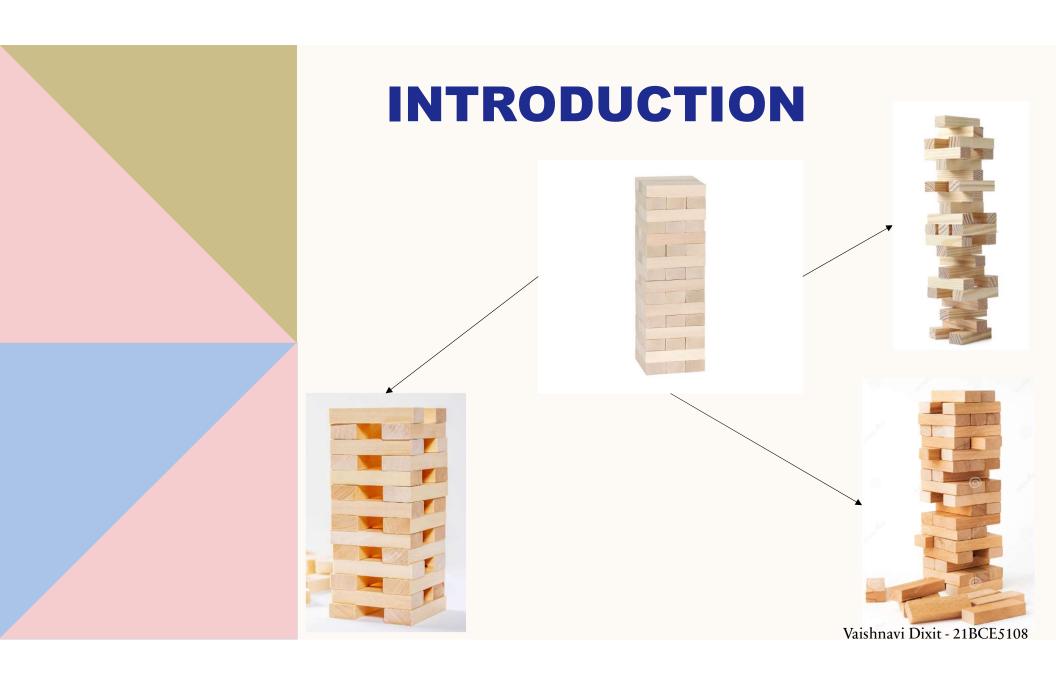
MASTERING THE FUNDAMENTALS FOR EFFECTIVE DATA MANAGEMENT



AGENDA

- Introduction to mongo DB
- Advantages of mongo DB
- Getting Started with mongo DB
- Art of Creation in mongo DB
- Queries in mongo DB













NSQL

Easy on USE

GETTING STARTED WITH MONGODB

SOFTWARE REQUIREMENTS

- Operating System: MongoDB supports a wide range of operating systems, including Windows, macOS, Linux, and several Unix-like systems.
- System Architecture: MongoDB runs on both 32-bit and 64-bit systems. Processor: MongoDB requires a 64-bit processor.
- Memory (RAM): The minimum recommended RAM size is 4 GB, but the actual requirement depends on the data size and workload.
- Storage: MongoDB relies on disk storage for data persistence. You should
 ensure that you have enough disk space to accommodate your data and
 indexes. SSDs or other high-performance storage options are preferable for
 optimal performance
- MONGOSH Connection between Server and Database.

ART OF CREATION IN MONGO DB

C:\Program Files\MongoDB\mongosh-1.10.1-win32-x64\bin>mongosh

```
Current Mongosh Log ID: 64ae3fc7f558d59449ecb694
Connecting to:
                        mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1.10.1
Using MongoDB:
                        6.0.7
Using Mongosh:
                        1.10.1
For mongosh info see: https://docs.mongodb.com/mongodb-shell/
   The server generated these startup warnings when booting
   2023-07-12T00:28:52.620+05:30: Access control is not enabled for the database. Read and write access to data and configuration is
unrestricted
test> show dbs
          40.00 KiB
admin
config
          60.00 KiB
local
          72.00 KiB
recipie 72.00 KiB
recipies 16.00 KiB
test> use recipe_database
switched to db recipe_database
recipe_database> db.createCollection("recipe")
```

INSERT IN ELEMENTS INTO COLLECTION

Basic Syntax to insert values in collections:

```
    Single Values:-
    db.collection.insertOne(
    <document>,
    writeConcern: <document>,
    bypassDocumentValidation: <boolean>
    }
```

```
    Multiple Values:-
db.collection.insertMany(
        [<document1>, <document2>, ...],
        {
            writeConcern: <document>,
            ordered: <boolean>,
            bypassDocumentValidation: <boolean>
        }
        )
```

ORDER ID

```
recipe_database> db.recipes.insertOne({'title': 'Spaghetti Bolognese','ingredients': ['spaghetti', 'ground beef', 'onion', 'garlic', 'tomato sauce'], 'instructions': '1. Cook spaghetti according to package instructions. 2. In a pan, brown the ground beef with choppe d onions and minced garlic. 3. Add tomato sauce and simmer for 15 minutes. 4. Serve the sauce over cooked spaghetti.','duration': 45, 'difficulty': 'Intermediate'})

{
    acknowledged: true,
    insertedId: ObjectId("64ae4049f558d59449ecb695")
}

recipe_database> db.recipes.insertOne({'title': 'Chocolate Chip Cookies','ingredients': ['flour', 'sugar', 'butter', 'chocolate chips'],'instructions': '1. Preheat oven to 350°F (175°C). 2. In a mixing bowl, cream together butter and sugar until light and fluffy. 3.

Beat in eggs, one at a time, then stir in vanilla. 4. Gradually add flour and mix well. 5. Fold in chocolate chips. 6. Drop rounded tablespoons of dough onto ungreased baking sheets. 7. Bake for 10-12 minutes or until edges are golden brown. 8. Allow cookies to cool on baking sheets for 5 minutes before transferring to wire racks to cool completely.', 'duration': 30, 'difficulty': 'Easy'})

acknowledged: true,
    insertedId: ObjectId("64ae4058f558d59449ecb696")
}
```

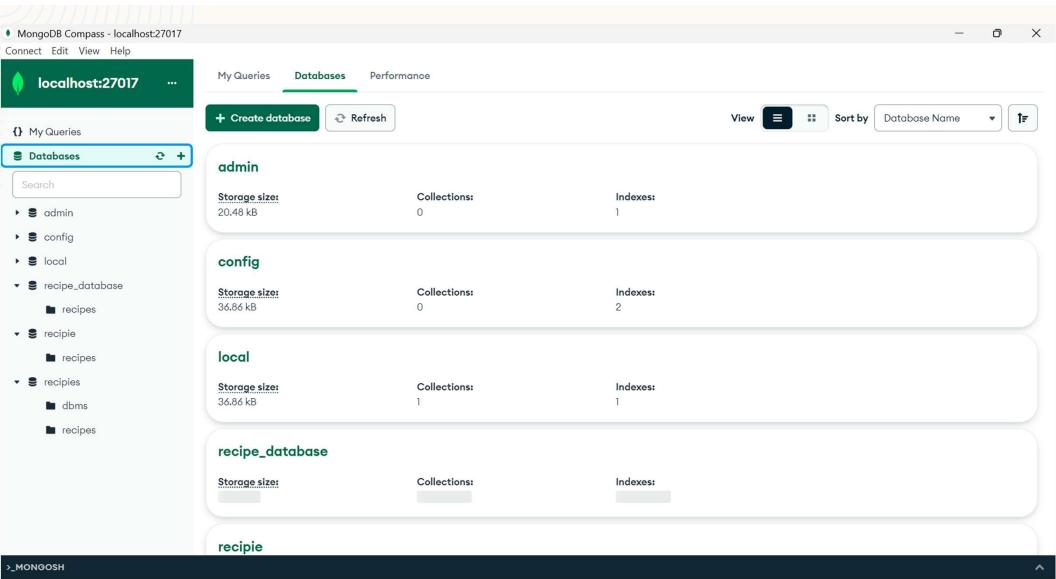
FIND FUNCTION

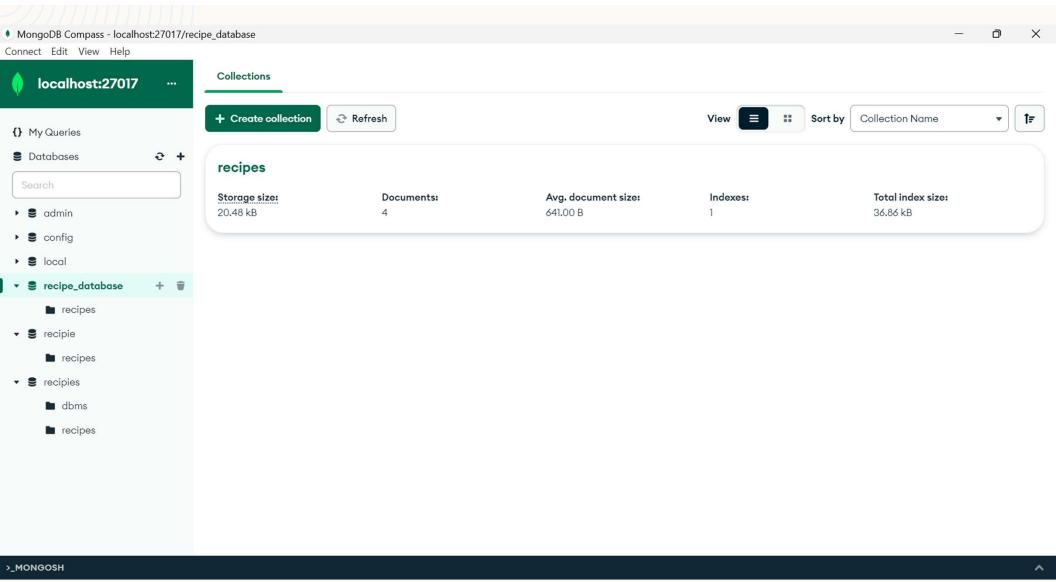
```
recipe_database> db.recipes.findOne({ title: 'Chocolate Chip Cookies' });
{
    _id: ObjectId("64ae4058f558d59449ecb696"),
    title: 'Chocolate Chip Cookies',
    ingredients: [ 'flour', 'sugar', 'butter', 'chocolate chips' ],
    instructions: '1. Preheat oven to 350°F (175°C). 2. In a mixing bowl, cream together butter and
sugar until light and fluffy. 3. Beat in eggs, one at a time, then stir in vanilla. 4. Gradually a
dd flour and mix well. 5. Fold in chocolate chips. 6. Drop rounded tablespoons of dough onto ungre
ased baking sheets. 7. Bake for 10-12 minutes or until edges are golden brown. 8. Allow cookies to
cool on baking sheets for 5 minutes before transferring to wire racks to cool completely.',
    duration: 30,
    difficulty: 'Easy'
}
```

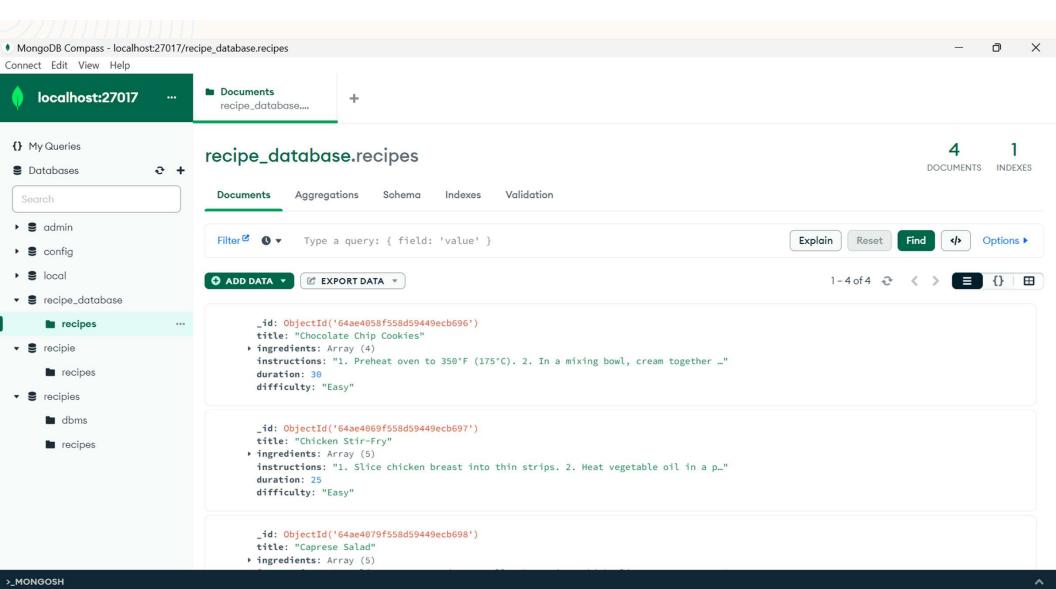
```
recipe_database> db.recipes.find()
    _id: ObjectId("64ae4049f558d59449ecb695"),
    title: 'Spaghetti Bolognese',
    ingredients: [ 'spaghetti', 'ground beef', 'onion', 'garlic', 'tomato sauce' ],
    instructions: '1. Cook spaghetti according to package instructions. 2. In a pan, brown the ground beef with chopped onions and mi
nced garlic. 3. Add tomato sauce and simmer for 15 minutes. 4. Serve the sauce over cooked spaghetti.',
    duration: 45,
    difficulty: 'Intermediate'
    _id: ObjectId("64ae4058f558d59449ecb696"),
    title: 'Chocolate Chip Cookies',
    ingredients: [ 'flour', 'sugar', 'butter', 'chocolate chips' ],
    instructions: '1. Preheat oven to 350°F (175°C). 2. In a mixing bowl, cream together butter and sugar until light and fluffy. 3.
Beat in eggs, one at a time, then stir in vanilla. 4. Gradually add flour and mix well. 5. Fold in chocolate chips. 6. Drop rounded t
ablespoons of dough onto ungreased baking sheets. 7. Bake for 10-12 minutes or until edges are golden brown. 8. Allow cookies to cool
 on baking sheets for 5 minutes before transferring to wire racks to cool completely.',
    duration: 30,
    difficulty: 'Easy'
  },
    _id: ObjectId("64ae4069f558d59449ecb697"),
    title: 'Chicken Stir-Fry',
    ingredients: [
      'chicken breast',
      'bell peppers',
      'soy sauce',
      'vegetable oil'
```

DELETING ENTRIES

```
recipe_database> db.recipes.deleteOne({ title: 'Spaghetti Carbonara' });
{ acknowledged: true, deletedCount: 0 }
recipe_database> db.recipe.deleteOne({ title: 'Spaghetti Carbonara' });
{ acknowledged: true, deletedCount: 0 }
recipe_database> db.recipe.deleteOne({ title: 'Spaghetti Bolognese' });
{ acknowledged: true, deletedCount: 0 }
recipe_database> db.recipes.deleteOne({ title: 'Spaghetti Bolognese' });
{ acknowledged: true, deletedCount: 1 }
```







MONGODB: WHERE DATA FINDS A COZY NOSQL NEST TO CALL HOME, WITHOUT ANY SQL-TERATIONS!.



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