

# Design Database for Zen Class Programme

## - Create database

use zen\_class

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'zen\_class' database selected. The 'users' collection is visible, showing 5 documents, a storage size of 4.10 kB, and an average document size of 78.00 B. The bottom part shows the MongoDB Shell with the following commands and output:

```
> use zen_class
switched to db zen_class
> db.createCollection("users")
{ ok: 1 }
> db.users.insertMany([
  { userid: 1, name: "Abinaya", email: "abin@gmail.com" },
  { userid: 2, name: "Dinesh", email: "dinesh@gmail.com" },
  { userid: 3, name: "Anwar", email: "anwar@gmail.com" },
  { userid: 4, name: "Sabitha", email: "sabi@gmail.com" },
  { userid: 5, name: "Harini", email: "harini@gmail.com" }
])
```

The bottom of the screenshot shows the Windows taskbar with the date and time as 09:44 PM on 12-04-2024.

## -Create collection and insert data – “USERS” :

```
db.createCollection("users");
db.users.insertMany([
  { userid: 1, name: "Abinaya", email: "abi@gmail.com" },
  { userid: 2, name: "Dinesh", email: "dinesh@gmail.com" },
  { userid: 3, name: "Anwar", email: "anwar@gmail.com" },
  { userid: 4, name: "Sabitha", email: "sabi@gmail.com" },
  { userid: 5, name: "Harini", email: "harini@gmail.com" }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'config' database selected. The 'settings' tab is active, showing a table with columns: Storage size, Documents, Avg. document size, Indexes, and Total index size. The bottom part shows the MongoDB Shell with the following commands and output:

```
>_MONGOSH
> db.users.insertMany([
  { userid: 1, name: "Abinaya", email: "abi@gmail.com" },
  { userid: 2, name: "Dinesh", email: "dinesh@gmail.com" },
  { userid: 3, name: "Anwar", email: "anwar@gmail.com" },
  { userid: 4, name: "Sabitha", email: "sabi@gmail.com" },
  { userid: 5, name: "Harini", email: "harini@gmail.com" }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('66195dcf87e77159592b1f78'),
    '1': ObjectId('66195dcf87e77159592b1f79'),
    '2': ObjectId('66195dcf87e77159592b1f7a'),
    '3': ObjectId('66195dcf87e77159592b1f7b'),
    '4': ObjectId('66195dcf87e77159592b1f7c')
  }
}
```

The bottom status bar shows the Atlas atlas-9qhc1m-shard-0 [primary] zen\_class.

## - Create collection and insert data – “CODEKATA” :

```
db.createCollection("codekata");
db.codekata.insertMany([
  { userid: 1, problems: 50 },
  { userid: 2, problems: 60 },
  { userid: 3, problems: 90 },
  { userid: 4, problems: 51 },
  { userid: 5, problems: 61 }
])
```

The screenshot displays the MongoDB Compass web interface. The top navigation bar includes 'Connect', 'Edit', 'View', and 'Help'. The left sidebar shows the 'cluster0.mj6rrle....' database with a search bar and a list of databases including 'admin' and 'config'. The main panel shows the 'config' database settings, including 'Storage size', 'Documents', 'Avg. document size', 'Indexes', and 'Total index size'. Below this, a terminal window titled '> MONGOSH' shows the execution of the MongoDB shell command to create the 'codekata' collection and insert five documents. The output shows the command was acknowledged and the inserted document IDs are listed.

```
> MONGOSH
> }
> db.createCollection("codekata");
db.codekata.insertMany([
  { userid: 1, problems: 50 },
  { userid: 2, problems: 60 },
  { userid: 3, problems: 90 },
  { userid: 4, problems: 51 },
  { userid: 5, problems: 61 }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('66195fb087e77159592b1f7d'),
    '1': ObjectId('66195fb087e77159592b1f7e'),
    '2': ObjectId('66195fb087e77159592b1f7f'),
    '3': ObjectId('66195fb087e77159592b1f80'),
    '4': ObjectId('66195fb087e77159592b1f81')
  }
}
```

Atlas atlas-9qhc1m-shard-0 [primary] zen\_class>

## - Create collection and insert data – “ATTENDANCE” :

```
db.createCollection("attendance");
db.attendance.insertMany([
  { userid: 1, topicid: 2, attended: true },
  { userid: 2, topicid: 1, attended: true },
  { userid: 3, topicid: 5, attended: false },
  { userid: 4, topicid: 3, attended: true },
  { userid: 5, topicid: 4, attended: false }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'config' tab selected. The 'settings' section is visible, showing storage size, documents, average document size, indexes, and total index size. The bottom part shows the MongoDB Shell with the following commands and output:

```
>_MONGOSH
>
> db.createCollection("attendance");
db.attendance.insertMany([
  { userid: 1, topicid: 2, attended: true },
  { userid: 2, topicid: 1, attended: true },
  { userid: 3, topicid: 5, attended: false },
  { userid: 4, topicid: 3, attended: true },
  { userid: 5, topicid: 4, attended: false }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('661960a387e77159592b1f82'),
    '1': ObjectId('661960a387e77159592b1f83'),
    '2': ObjectId('661960a387e77159592b1f84'),
    '3': ObjectId('661960a387e77159592b1f85'),
    '4': ObjectId('661960a387e77159592b1f86')
  }
}
```

The bottom status bar shows the temperature as 28°C, mostly clear, and the time as 09:56 PM on 12-04-2024.

## - Create collection and insert data – “TOPICS” :

```
db.createCollection("topics");
db.topics.insertMany([
  { topicid: 1, topic: "HTML", topic_date: new Date("18-Oct-2020") },
  { topicid: 2, topic: "CSS", topic_date: new Date("28-Oct-2020") },
  { topicid: 3, topic: "JavaScript", topic_date: new Date("05-Nov-2020") },
  { topicid: 4, topic: "ReactJS", topic_date: new Date("15-Nov-2020") },
  { topicid: 5, topic: "NodeJS", topic_date: new Date("25-Nov-2020") }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'config' tab selected. The 'settings' section is visible, showing 'Storage size: -', 'Documents: -', 'Avg. document size: -', 'Indexes: -', and 'Total index size: -'. The bottom part shows the MongoDB Shell window with the following commands and output:

```
> MONGOSH
>
> db.createCollection("topics");
db.topics.insertMany([
  { topicid: 1, topic: "HTML", topic_date: new Date("18-Oct-2020") },
  { topicid: 2, topic: "CSS", topic_date: new Date("28-Oct-2020") },
  { topicid: 3, topic: "JavaScript", topic_date: new Date("05-Nov-2020") },
  { topicid: 4, topic: "ReactJS", topic_date: new Date("15-Nov-2020") },
  { topicid: 5, topic: "NodeJS", topic_date: new Date("25-Nov-2020") }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('661960f687e77159592b1f87'),
    '1': ObjectId('661960f687e77159592b1f88'),
    '2': ObjectId('661960f687e77159592b1f89'),
    '3': ObjectId('661960f687e77159592b1f8a'),
    '4': ObjectId('661960f687e77159592b1f8b')
  }
}
```

The bottom status bar shows the system temperature as 28°C, mostly clear, and the time as 09:57 PM on 12-04-2024.

## - Create collection and insert data – “TASKS” :

```
db.createCollection("tasks");
db.tasks.insertMany([
  { taskid: 1, topicid: 1, userid: 1, task: "HTML Task", due_date: new Date("18-Oct-2020"), submitted: true },
  { taskid: 2, topicid: 2, userid: 2, task: "CSS Task", due_date: new Date("28-Oct-2020"), submitted: false },
  { taskid: 3, topicid: 3, userid: 3, task: "Javascript Task", due_date: new Date("05-Nov-2020"), submitted: true },
  { taskid: 4, topicid: 4, userid: 4, task: "React Task", due_date: new Date("15-Nov-2020"), submitted: true },
  { taskid: 5, topicid: 5, userid: 5, task: "NodeJS Task", due_date: new Date("25-Nov-2020"), submitted: false }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'config' database selected. The 'settings' tab is active, showing a table with columns: Storage size, Documents, Avg. document size, Indexes, and Total index size. Below this, the MongoDB Shell window is open, showing the execution of the following commands:

```
> MONGOSH
>
> db.createCollection("tasks");
db.tasks.insertMany([
  { taskid: 1, topicid: 1, userid: 1, task: "HTML Task", due_date: new Date("18-Oct-2020"), submitted: true },
  { taskid: 2, topicid: 2, userid: 2, task: "CSS Task", due_date: new Date("28-Oct-2020"), submitted: false },
  { taskid: 3, topicid: 3, userid: 3, task: "Javascript Task", due_date: new Date("05-Nov-2020"), submitted: true },
  { taskid: 4, topicid: 4, userid: 4, task: "React Task", due_date: new Date("15-Nov-2020"), submitted: true },
  { taskid: 5, topicid: 5, userid: 5, task: "NodeJS Task", due_date: new Date("25-Nov-2020"), submitted: false }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6619612e87e77159592b1f8c'),
    '1': ObjectId('6619612e87e77159592b1f8d'),
    '2': ObjectId('6619612e87e77159592b1f8e'),
    '3': ObjectId('6619612e87e77159592b1f8f'),
    '4': ObjectId('6619612e87e77159592b1f90')
  }
}
```

The bottom part of the screenshot shows the Windows taskbar with the system clock displaying 09:58 PM on 12-04-2024.

## - Create collection and insert data – “COMPANY DRIVES” :

```
db.createCollection("companydrives");
db.companydrives.insertMany([
  { userid: 1, drive_date: new Date("20-Oct-2020"), company: "Apple" },
  { userid: 1, drive_date: new Date("22-Oct-2020"), company: "Amazon" },
  { userid: 2, drive_date: new Date("25-Oct-2020"), company: "TCS" },
  { userid: 3, drive_date: new Date("30-Oct-2020"), company: "Flipkart" },
  { userid: 4, drive_date: new Date("05-Nov-2020"), company: "Zomato" }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'config' tab selected. The 'settings' section is visible, showing storage size, documents, average document size, indexes, and total index size. The bottom part shows the MongoDB Shell with the following commands and output:

```
> MONGOSH
>
> db.createCollection("companydrives");
db.companydrives.insertMany([
  { userid: 1, drive_date: new Date("20-Oct-2020"), company: "Apple" },
  { userid: 1, drive_date: new Date("22-Oct-2020"), company: "Amazon" },
  { userid: 2, drive_date: new Date("25-Oct-2020"), company: "TCS" },
  { userid: 3, drive_date: new Date("30-Oct-2020"), company: "Flipkart" },
  { userid: 4, drive_date: new Date("05-Nov-2020"), company: "Zomato" }
])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6619615887e77159592b1f91'),
    '1': ObjectId('6619615887e77159592b1f92'),
    '2': ObjectId('6619615887e77159592b1f93'),
    '3': ObjectId('6619615887e77159592b1f94'),
    '4': ObjectId('6619615887e77159592b1f95')
  }
}
```

The output shows that the collection was created successfully and the data was inserted. The inserted IDs are listed in the 'insertedIds' field.

## - Create collection and insert data – “MENTORS” :

```
db.createCollection("mentors");
db.mentors.insertMany([
  { mentorid: 1, mentorname: "Rupan", mentor_email: "rupan@gmail.com", mentee_count: 20 },
  { mentorid: 2, mentorname: "Nagaraj", mentor_email: "nagaraj@gmail.com", mentee_count: 18 },
  { mentorid: 3, mentorname: "Krishna", mentor_email: "krishna@gmail.com", mentee_count: 30 },
  { mentorid: 4, mentorname: "Sabhari", mentor_email: "sabhari@gmail.com", mentee_count: 15 },
  { mentorid: 5, mentorname: "Manoj", mentor_email: "manoj@gmail.com", mentee_count: 20 }
])
```

The screenshot displays the MongoDB Compass interface and the MongoDB Shell. The top part shows the MongoDB Compass window with the 'cluster0.mj0rrle.mongodb.net/config' connection. The 'My Queries' tab is active, showing a 'settings' panel with fields for Storage size, Documents, Avg. document size, Indexes, and Total index size. Below this, the 'Databases' list shows 'admin' and 'config'. The bottom part shows the MongoDB Shell with the following commands and output:

```
>_MONGOSH
>
> db.createCollection("mentors");
db.mentors.insertMany([
  { mentorid: 1, mentorname: "Rupan", mentor_email: "rupan@gmail.com", mentee_count: 20 },
  { mentorid: 2, mentorname: "Nagaraj", mentor_email: "nagaraj@gmail.com", mentee_count: 18 },
  { mentorid: 3, mentorname: "Krishna", mentor_email: "krishna@gmail.com", mentee_count: 30 },
  { mentorid: 4, mentorname: "Sabhari", mentor_email: "sabhari@gmail.com", mentee_count: 15 },
  { mentorid: 5, mentorname: "Manoj", mentor_email: "manoj@gmail.com", mentee_count: 20 }
])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6619618787e77159592b1f96'),
    '1': ObjectId('6619618787e77159592b1f97'),
    '2': ObjectId('6619618787e77159592b1f98'),
    '3': ObjectId('6619618787e77159592b1f99'),
    '4': ObjectId('6619618787e77159592b1f9a')
  }
}
```

The bottom status bar shows the connection to 'Atlas atlas-9qhc1m-shard-0 [primary] zen\_class' and the system clock at 10:00 PM on 12-04-2024.



# CREATED DATABASE

MongoDB Compass - cluster0.mj6rrle.mongodb.net/zen\_class

Connect Edit View Help

cluster0.mj6rrle....

My Queries

zen\_class

+ Create collection

Refresh

View

Sort by

Collection Name

My Queries

Performance

Databases

Search

admin

config

settings

fsdguvi

local

sample\_mfix

zen\_class

attendance

codekata

companydrives

mentors

tasks

topics

users

attendance

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	5	58.00 B	1	20.48 kB

codekata

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	5	48.00 B	1	20.48 kB

companydrives

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	5	73.00 B	1	20.48 kB

mentors

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	5	112.00 B	1	20.48 kB

tasks

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	5	110.00 B	1	20.48 kB

>\_MONGOSH

28°C Mostly clear

Search

zoom

chrome

edge

mail

whatsapp

teams

word

0

10:01 PM 12-04-2024