# **MongoDB Task**

**Design database for Zen class programme:**

users

codekata

attendance

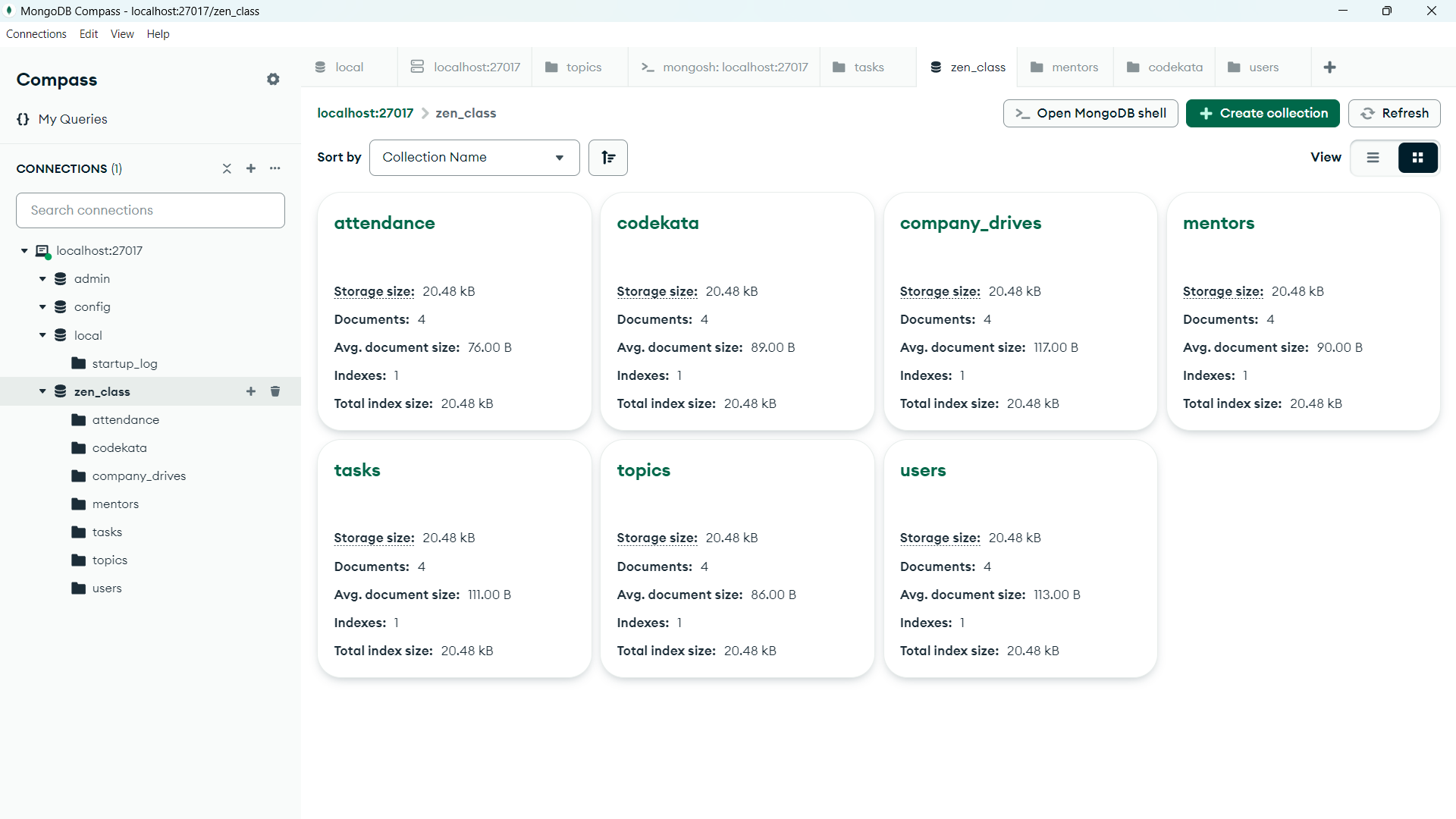
topics

tasks

company\_drives

mentors

Zen\_class Database:



Queries:

1. Find all the topics and tasks which are thought in the month of October

db.topics.aggregate([

{

$match: {

date: {

$gte"2020-10-01",

$lte: "2020-10-31"

}

}

},

{

$lookup: {

from: "tasks",

localField: "task\_id",

foreignField: "\_id",

as: "related\_tasks"

}

},

{

$project: {

\_id:0,

topic\_name: 1,

date: 1,

related\_tasks: "$related\_tasks.task\_name"

}

}

]);

1. Find all the company drives which appeared between 15 oct-2020 and 31-oct-2020

db.company\_drives.find({

date: {

$gte: "2020-10-15"

$lte: "2020-10-31"

}

});

1. Find all the company drives and students who are appeared for the placement.

db.company\_drives.aggregate([

{

$lookup: {

from: "users",

localField: "user\_ids",

foreignField: "\_id",

as: "appeared\_students"

}

},

{

$project: {

drive\_name: 1,

appeared\_students: "$appeared\_students.name"

}

}

]);

1. Find the number of problems solved by the user in codekata

db.codekata.aggregate([

{

$group: {

\_id: "$user\_id",

total\_problems\_solved: { $sum: "$problems\_solved" }

}

},

{

$lookup: {

from: "users",

localField: "\_id",

foreignField: "\_id",

as: "user\_info"

}

},

{

$unwind: "$user\_info"

},

{

$project: {

\_id:0,

"user\_name": "$user\_info.name",

total\_problems\_solved: 1,

}

}

]);

1. Find all the mentors with who has the mentee's count more than 15

db.mentors.find({

mentee\_count:{$gt:15}});

1. Find the number of users who are absent and task is not submitted  between 15 oct-2020 and 31-oct-2020

db.attendance.aggregate([

{

$match: {

date: { $gte: "2020-10-15", $lte: "2020-10-31" },

status: "absent"

}

},

{

$lookup: {

from: "tasks",

localField: "user\_id",

foreignField: "user\_id",

as: "user\_tasks"

}

},

{

$unwind: "$user\_tasks"

},

{

$match: {

"user\_tasks.submission\_status": "not submitted"

}

},

{

$group: {

\_id: null,

count: { $sum: 1 }

}

}

]);