

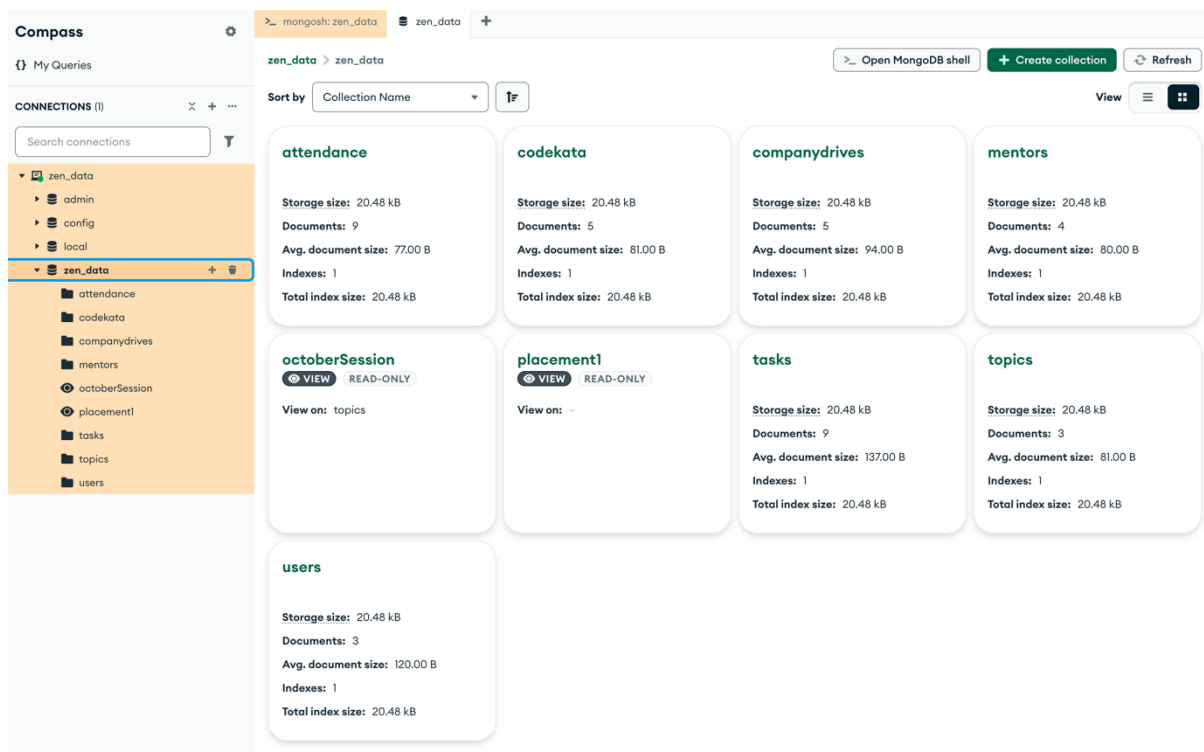
## MongoDB – Task

1. Users
2. Code Kata
3. Attendance
4. Topics
5. Tasks
6. Company drives
7. Mentors

### Technologies Used

- MongoDB
- JavaScript

### # Design a MongoDB database for Zen Class Program:



### Queries Answers:

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

```

db.createView( "octoberSession", "topics", [
  {
    $lookup:
      {
        from: "tasks",
        localField: "topic_id",
        foreignField: "topic_id",
        as: "tasksDocs"
      }
  },
  {
    $project:
      {
        _id: 0,
        topic_id:1,
        task_id:"$tasksDocs.task_id",
        Date:1,
        topic_name:1,
        task_name:"$tasksDocs.task_name"
      }
  },
  { $unwind: "$task_id" },
  { $unwind: "$task_name" }
] )

```

```

db.octoberSession.aggregate([{$match:{$expr:{$eq:[{$month:{$dateFromString:{$dateString:"$Date", format:"%Y-%m-%d"}}},10]}}}]])

```

2. 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"}})

```

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

```

db.createView( "placement1", "company_drives", [
  {
    $lookup:
      {
        from: "users",

```

```

        localField: "User_id",
        foreignField: "User_id",
        as: "userDocs"
    }
},
{
    $project:
    {
        _id: 0,
        User_id: 1,
        User_name: "$userDocs.Name",
        drive_id: 1,
        Date: 1,
        drive_name: 1,

    }
},
{ $unwind: "$User_name" }
])

```

```
db.placement1.find()
```

- Find the number of problems solved by the user in codekata

```

db.codekata.aggregate([
{
    $group:
    {
        _id: "$User_id",
        totalProblemsSolved: { $sum: { $toInt: "$Problems_solved" } }
    }
}
])

```

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

```
db.mentors.find({ mentee_count: { $gt: 15 } }).pretty()
```

- 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: "tasksDocs"
    },
    {
      $match: {
        "tasksDocs.submitted": "false"
      },
      {
        $group: {
          _id: null,
          count: { $sum: 1 }
        }
      }
    }
  }
}

```