

# Database Design for Zen class programme

The screenshot shows the MongoDB Compass interface for the 'zen\_class' database. The left sidebar lists the collections: admin, config, local, task, and zen\_class. The main area displays a grid of collection statistics for 'attendance', 'codekata', 'company\_drives', 'mentors', 'tasks', 'topics', and 'users'. Each collection card shows storage size, document count, average document size, index count, and total index size.

Collection	Storage size	Documents	Avg. document size	Indexes	Total index size
attendance	20.48 kB	32	100.00 B	1	20.48 kB
codekata	20.48 kB	28	77.00 B	1	20.48 kB
company_drives	20.48 kB	5	346.00 B	1	20.48 kB
mentors	20.48 kB	5	153.00 B	1	20.48 kB
tasks	20.48 kB	8	346.00 B	1	20.48 kB
topics	20.48 kB	8	167.00 B	1	20.48 kB
users	20.48 kB	20	128.00 B	1	20.48 kB

## 1. Users:

The screenshot shows the MongoDB Compass interface for the 'zen\_class.users' collection. The left sidebar lists the collections: admin, config, local, task, zen\_class, and users. The main area displays the 'zen\_class.users' collection with 20 documents and 1 index. The 'Documents' tab is selected, showing a list of user documents. Each document contains fields: \_id, id, name, email, phone, and mentor\_id.

Document	_id	id	name	email	phone	mentor_id
1	ObjectId('663644da55471d719af8d31e')	1	Arjun Kumar	arjun.kumar@example.com	+919876543216	1
2	ObjectId('663644da55471d719af8d31f')	2	Divya Patel	divya.patel@example.com	+919876543211	1
3	ObjectId('663644da55471d719af8d320')	3	Rajesh Nair	rajesh.nair@example.com	+919876543212	2
4	ObjectId('663644da55471d719af8d321')	4				

## 2. Codekata:

MongoDB Compass - MONGODB-DAY-2/zen\_class.codekata

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries Performance Databases

Search

admin config local task zen\_class

attendance codekata company\_drives mentors tasks topics users

zen\_class.codekata

28 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND OPTIONS

ADD DATA EXPORT DATA UPDATE DELETE

1 - 20 of 28

```
{ "_id": ObjectId("663695eca5b3a8c4d6010cac"), "user_id": 1, "problems_solved": 16, "date": "2020-10-01" }
```

```
{ "_id": ObjectId("663695eca5b3a8c4d6010cad"), "user_id": 3, "problems_solved": 11, "date": "2020-10-02" }
```

```
{ "_id": ObjectId("663695eca5b3a8c4d6010cae"), "user_id": 6, "problems_solved": 15, "date": "2020-10-03" }
```

```
{ "_id": ObjectId("663695eca5b3a8c4d6010caf"), "user_id": 1, "problems_solved": 8, "date": "2020-10-04" }
```

```
{ "_id": ObjectId("663695eca5b3a8c4d6010cb0"), "user_id": 1, "problems_solved": 1, "date": "2020-10-05" }
```

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## 3. Attendance:

MongoDB Compass - MONGODB-DAY-2/zen\_class.attendance

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries Performance Databases

Search

admin config local task zen\_class

attendance codekata company\_drives mentors tasks topics users

zen\_class.attendance

32 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN RESET FIND OPTIONS

ADD DATA EXPORT DATA UPDATE DELETE

1 - 20 of 32

```
{ "_id": ObjectId("663670b055471d719af8d371"), "attendance_id": 1, "user_id": 1, "topic_id": 1, "attended": true, "date": "2020-09-01" }
```

```
{ "_id": ObjectId("663670b055471d719af8d372"), "attendance_id": 2, "user_id": 2, "topic_id": 1, "attended": true, "date": "2020-09-01" }
```

```
{ "_id": ObjectId("663670b055471d719af8d373"), "attendance_id": 3, "user_id": 3, "topic_id": 1, "attended": false, "date": "2020-09-01" }
```

```
{ "_id": ObjectId("663670b055471d719af8d374"), "attendance_id": 4, "user_id": 4, "topic_id": 1, "attended": true, "date": "2020-09-01" }
```

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## 4. Topics:

MongoDB Compass - MONGODB-DAY-2/zen\_class.topics

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries topics zen\_class attendance tasks codekata

My Queries Performance Databases Search

admin config local task zen\_class attendance codekata company\_drives mentors tasks topics users

zen\_class.topics

8 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or Generate query

ADD DATA EXPORT DATA UPDATE DELETE

1 - 8 of 8

```
{ "_id": ObjectId("66364f4f55471d719af8d369"),
  "topic_id": 1,
  "topic_name": "HTML",
  "topic_description": "Hypertext Markup Language for creating web pages.",
  "introduction_date": "2020-09-01" }
{ "_id": ObjectId("66364f4f55471d719af8d36a"),
  "topic_id": 2,
  "topic_name": "CSS",
  "topic_description": "Cascading Style Sheets for styling web pages.",
  "introduction_date": "2020-09-11" }
{ "_id": ObjectId("66364f4f55471d719af8d36b"),
  "topic_id": 3,
  "topic_name": "JavaScript",
  "topic_description": "Programming language for making web pages interactive.",
  "introduction_date": "2020-09-21" }
{ "_id": ObjectId("66364f4f55471d719af8d36c"),
  "topic_id": 4,
  "topic_name": "React",
  "topic_description": "JavaScript library for building user interfaces.",
  "introduction_date": "2020-10-01" }
```

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## 5. Tasks:

MongoDB Compass - MONGODB-DAY-2/zen\_class.tasks

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries tasks zen\_class attendance tasks codekata

My Queries Performance Databases Search

admin config local task zen\_class attendance codekata company\_drives mentors tasks topics users

zen\_class.tasks

8 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or Generate query

ADD DATA EXPORT DATA UPDATE DELETE

1 - 8 of 8

```
{ "_id": ObjectId("66368437a5b3a8c4d6010c9a"),
  "task_id": 1,
  "topic_id": 1,
  "task_name": "HTML Basics Assignment",
  "description": "Complete a set of exercises covering basic HTML concepts.",
  "task_assigned_date": "2020-09-01",
  "assigned_to": Array (4)
  0: Object
    user_id: 1
    submitted: false
  1: Object
    user_id: 2
    submitted: true
  2: Object
    user_id: 3
    submitted: false
  3: Object
    user_id: 4
    submitted: true
}
{ "_id": ObjectId("66368437a5b3a8c4d6010c9b"),
  "task_id": 2,
  "topic_id": 2,
  "task_name": "CSS Styling Project",
  "description": "Create a webpage and style it using CSS according to provided guideline..." }
```

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## 6. Company Drives:

MongoDB Compass - MONGODB-DAY-2/zen\_class.company\_drives

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries Performance Databases Search

admin config local task zen\_class

attendance codekata company\_drives mentors tasks topics users

zen\_class.company\_drives

5 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or Generate query

EXPLAIN RESET FIND OPTIONS

ADD DATA EXPORT DATA UPDATE DELETE

1 - 5 of 5

```
{
  "_id": ObjectId("66368efca5b3a8c4d6010ca7"),
  "drive_id": 1,
  "company_name": "Tech Solutions Inc.",
  "drive_date": "2020-10-20",
  "students_appeared": Array(5)
}
```

```
{
  "user_id": 6,
  "status": "attended"
}, {
  "user_id": 2,
  "status": "not attended"
}, {
  "user_id": 8,
  "status": "attended"
}, {
  "user_id": 13,
  "status": "attended"
}, {
  "user_id": 19,
  "status": "not attended"
}
```

```
{
  "_id": ObjectId("66368efca5b3a8c4d6010ca8"),
  "drive_id": 2,
  "company_name": "Data Analytics Corp.",
  "drive_date": "2020-10-25"
}
```

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## 7. Mentors:

MongoDB Compass - MONGODB-DAY-2/zen\_class.mentors

Connect Edit View Collection Help

MONGODB-DAY-2

My Queries Performance Databases Search

admin config local task zen\_class

attendance codekata company\_drives mentors tasks topics users

zen\_class.mentors

5 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or Generate query

EXPLAIN RESET FIND OPTIONS

ADD DATA EXPORT DATA UPDATE DELETE

1 - 5 of 5

```
{
  "_id": ObjectId("663699fca5b3a8c4d6010cc8"),
  "mentor_id": 1,
  "mentor_name": "Karthik Subramanian",
  "email": "karthik.subramanian@example.com",
  "phone": "+919876543220",
  "mentees_count": 18
}
```

```
{
  "_id": ObjectId("663699fca5b3a8c4d6010cc9"),
  "mentor_id": 2,
  "mentor_name": "Meera Gupta",
  "email": "meera.gupta@example.com",
  "phone": "+919876543221",
  "mentees_count": 14
}
```

```
{
  "_id": ObjectId("663699fca5b3a8c4d6010cca"),
  "mentor_id": 3,
  "mentor_name": "Rajeshwari Iyengar",
  "email": "rajeshwari.iyengar@example.com",
  "phone": "+919876543222",
  "mentees_count": 20
}
```

```
{
  "_id": ObjectId("663699fca5b3a8c4d6010ccb"),
  "mentor_id": 4
}
```

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