# MongoDB task-Day 2

## Design Database for Zenclass programme:

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

**Query: db.topics.aggregate([{**

**$lookup:**

**{from:'tasks',**

**localField:'\_id',**

**foreignField:'topic\_id',**

**as:'taskDetails'**

**}},{$match:{ $and: [ { date: { $gte: new Date("2020-10-15")}},{ date:{$lte: new Date("2020-10-30") }} ]}**

**},{ $project : { \_id : 0 } }])**

**Output**: {

topic\_name: 'React\_Day1',

date: 2020-10-15T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe167'),

topic\_id: 'react\_001',

task: [

'callback Hell',

'coundown task'

]

}

]

},

{

topic\_name: 'React\_Day2',

date: 2020-10-18T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe168'),

topic\_id: 'react\_002',

task: [

'reusable react components'

]

}

]

},

{

topic\_name: 'React\_Day3',

date: 2020-10-22T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe169'),

topic\_id: 'react\_003',

task: [

'conditional rendering',

'shopify app'

]

}

]

},

{

topic\_name: 'React\_Day4',

date: 2020-10-25T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe16a'),

topic\_id: 'react\_004',

task: [

'Design React UI with many reusable components'

]

}

]

},

{

topic\_name: 'React\_Day5',

date: 2020-10-28T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe16b'),

topic\_id: 'react\_005',

task: [

'Hooks',

'myTODO app'

]

}

]

},

{

topic\_name: 'React\_Day6',

date: 2020-10-30T00:00:00.000Z,

taskDetails: [

{

\_id: ObjectId('6691e341643f7ef8725fe16c'),

topic\_id: 'react\_006',

task: [

'React-router-dom',

'router-blog'

]

}

]

}

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

**Query: db.company\_drives.find({ $and: [ { date: { $gte: new Date("2020-10-15")}},{ date:{$lte: new Date("2020-10-30") }} ]},{\_id:0,selected:0})**

**Output**:

{

company\_name: 'Infoys',

date: 2020-10-15T00:00:00.000Z

},

{

company\_name: 'Zoho',

date: 2020-10-18T00:00:00.000Z

},

{

company\_name: 'Capgemini',

date: 2020-10-25T00:00:00.000Z

}

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

**Query: db.company\_drives.find({},{\_id:0,date:0})**

**Output**: {

company\_name: 'Infoys',

selected: [

'usr\_001',

'usr\_005'

]

},

{

company\_name: 'Zoho',

selected: [

'usr\_003',

'usr\_005'

]

},

{

company\_name: 'Capgemini',

selected: [

'usr\_002',

'usr\_008'

]

},

{

company\_name: 'TCS',

selected: [

'usr\_004'

]

}

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

**Query: db.codekata.find({},{\_id:0})**

**Output:** {

usr\_id: 'usr\_001',

codekata\_points: 250

},

{

usr\_id: 'usr\_002',

codekata\_points: 180

},

{

usr\_id: 'usr\_003',

codekata\_points: 300

},

{

usr\_id: 'usr\_004',

codekata\_points: 50

},

{

usr\_id: 'usr\_005',

codekata\_points: 100

},

{

usr\_id: 'usr\_006',

codekata\_points: 75

},

{

usr\_id: 'usr\_007',

codekata\_points: 130

},

{

usr\_id: 'usr\_008',

codekata\_points: 120

}

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

**Query: db.mentors.find({mentee\_count:{$gt:15}})**

**Output**: {

\_id: 'mentor\_001',

mentor\_name: 'Nagaraj',

mentee\_count: 20

},

{

\_id: 'mentor\_004',

mentor\_name: 'Karthik',

mentee\_count: 18

}

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

**Query: db.attendance.aggregate(**

**[**

**{**

**$lookup: {**

**from: 'tasks',**

**localField: 'topic\_id',**

**foreignField: 'topic\_id',**

**as: 'task\_details'**

**}**

**},**

**{ $unwind: '$task\_details' },**

**{ $match: {**

**'task\_details.due\_date': {**

**$gte: '2020-10-15',**

**$lte: '2020-10-31'**

**}**

**}},**

**{**

**$project:**

**{\_id:0,topic\_id:1,absent:1,'task\_details.due\_date':1,'task\_details.submitted\_users':1}**

**}**

**])**

**Output:** {

topic\_id: 'react\_001',

absent: [

'usr\_002',

'usr\_004',

'usr\_006',

'usr\_007'

],

task\_details: {

submitted\_users: [

'usr\_003',

'usr\_002',

'usr\_005',

'usr\_007',

'usr\_008'

],

due\_date: '2020-10-18'

}

},

{

topic\_id: 'react\_002',

absent: [

'usr\_002',

'usr\_003',

'usr\_007',

'usr\_008'

],

task\_details: {

submitted\_users: [

'usr\_003',

'usr\_002',

'usr\_005',

'usr\_007',

'usr\_008'

],

due\_date: '2020-10-20'

}

},  
{

topic\_id: 'react\_003',

absent: [

'usr\_002',

'usr\_004',

'usr\_006',

'usr\_008'

],

task\_details: {

submitted\_users: [

'usr\_003',

'usr\_002',

'usr\_001',

'usr\_008'

],

due\_date: '2020-10-23'

}

},  
{

topic\_id: 'react\_004',

absent: [

'usr\_001',

'usr\_004',

'usr\_006',

'usr\_008'

],

task\_details: {

submitted\_users: [

'usr\_003',

'usr\_002',

'usr\_005',

'usr\_007',

'usr\_008'

],

due\_date: '2020-10-28'

}

},

{

topic\_id: 'react\_005',

absent: [

'usr\_001',

'usr\_003',

'usr\_006',

'usr\_007'

],

task\_details: {

submitted\_users: [

'usr\_003',

'usr\_002',

'usr\_007',

'usr\_008'

],

due\_date: '2020-10-30'

}

}