

Sakshi Chauhan

BillGenerateSystem

MongoDB

Day-1

12-April-2023

1) Think the Structure of 'Bill' Collection :-

- I Would like to create structure of Torrent Power Bill Generate
- Create a Database with the name of :- torrentPower
- and also Create a collection with the name of :- billGenerate

Here my Fields of billGenerate collection:-

- billingMode
- name
- address
- registeredMobile
- customerId
- readingDate
- billDate
- yourBill
- dueDate
- yourUnits
- paymentMode

Then the database use in prompt:-

```
use torrentPower
```

I would insert one record for testing :-

```
db.billGenerate.insertOne({  
    'billingMode': '60 Days',
```

```

    'name': 'sakshi chauhan',
    'address': 'chandlodiya,ahmedabad',
    'registeredMobile': '9898628062',
    'customerId': '123456',
    'readingDate': new Date('2022-05-07'),
    'billDate': new Date('2022-05-12'),
    'yourBill': 2200,
    'dueDate': new Date('2022-05-26'),
    'yourUnits': 323,
    'paymentMode': 'online'
  })
}

```

```

> db.billGenerate.insertOne({
  'billingMode': '60 Days',
  'name': 'sakshi chauhan',
  'address': 'chandlodiya,ahmedabad',
  'registeredMobile': '9898628062',
  'customerId': '123456',
  'billingMonth': 'may 2022',
  'readingDate': new Date('2022-05-07'),
  'billDate': new Date('2022-05-12'),
  'yourBill': 2200,
  'dueDate': new Date('2022-05-26'),
  'yourUnits': 323,
  'paymentMode': 'online'
})
< {
  acknowledged: true,
  insertedId: ObjectId("64364fc4b4b68eab08192186")
}

```

Then InsertMany records using <https://www.mockaroo.com/>

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```
'79': ObjectId("64365cc2b4b68eab081921d6"),
'80': ObjectId("64365cc2b4b68eab081921d7"),
'81': ObjectId("64365cc2b4b68eab081921d8"),
'82': ObjectId("64365cc2b4b68eab081921d9"),
'83': ObjectId("64365cc2b4b68eab081921da"),
'84': ObjectId("64365cc2b4b68eab081921db"),
'85': ObjectId("64365cc2b4b68eab081921dc"),
'86': ObjectId("64365cc2b4b68eab081921dd"),
'87': ObjectId("64365cc2b4b68eab081921de"),
'88': ObjectId("64365cc2b4b68eab081921df"),
'89': ObjectId("64365cc2b4b68eab081921e0"),
'90': ObjectId("64365cc2b4b68eab081921e1"),
'91': ObjectId("64365cc2b4b68eab081921e2"),
'92': ObjectId("64365cc2b4b68eab081921e3"),
'93': ObjectId("64365cc2b4b68eab081921e4"),
'94': ObjectId("64365cc2b4b68eab081921e5"),
'95': ObjectId("64365cc2b4b68eab081921e6"),
'96': ObjectId("64365cc2b4b68eab081921e7"),
'97': ObjectId("64365cc2b4b68eab081921e8"),
'98': ObjectId("64365cc2b4b68eab081921e9")
}
}
```

DeleteOne record with key and value:-

```
db.billGenerate.deleteOne({'name':'sakshi chauhan'})
```

```
> db.billGenerate.deleteOne({'name':'sakshi chauhan'})
< {
  acknowledged: true,
  deletedCount: 1
}
```

Use the find , i find json object of paymentMode : online:-

```
db.billGenerate.find({'paymentMode':'online'})
```

```

    }
    > db.billGenerate.find({'paymentMode':'online'})
    < {
      _id: ObjectId("64364fc4b4b68eab08192186"),
      billingMode: '60 Days',
      name: 'sakshi chauhan',
      address: 'chandlodiya,ahmedabad',
      registeredMobile: '9898628062',
      customerId: '123456',
      billingMonth: 'may 2022',
      readingDate: 2022-05-07T00:00:00.000Z,
      billDate: 2022-05-12T00:00:00.000Z,
      yourBill: 2200,
      dueDate: 2022-05-26T00:00:00.000Z,
      yourUnits: 323,
      paymentMode: 'online'
    }
    {
      _id: ObjectId("64365cc2b4b68eab08192187"),
      billingMode: '60 Days',
      name: 'Ricca Gores',
      address: '82 Jackson Circle',
      registeredMobile: '180-164-6339',
      customerId: '123456',
      billingMonth: 'may 2022',
      readingDate: 2022-05-07T00:00:00.000Z,
      billDate: 2022-05-12T00:00:00.000Z,
      yourBill: 2200,
      dueDate: 2022-05-26T00:00:00.000Z,
      yourUnits: 323,
      paymentMode: 'online'
    }
  ]
}

```

then i try to find yourUnit is greater than 5 and less than 500:-

```
db.billGenerate.find({ "yourUnits": { $gt: 50, $lt: 500 } })
```

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```
> db.billGenerate.find({
  "yourUnits": {
    $gt: 50,
    $lt: 500
  }
})
< {
  _id: ObjectId("64364fc4b4b68eab08192186"),
  billingMode: '60 Days',
  name: 'sakshi chauhan',
  address: 'chandlodiya,ahmedabad',
  registeredMobile: '9898628062',
  customerId: '123456',
  billingMonth: 'may 2022',
  readingDate: 2022-05-07T00:00:00.000Z,
  billDate: 2022-05-12T00:00:00.000Z,
  yourBill: 2200,
  dueDate: 2022-05-26T00:00:00.000Z,
  yourUnits: 323,
  paymentMode: 'online'
}
```

```

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    address: '77 Schurz Crossing',
    registeredMobile: '229-920-6345',
    customerId: '2ac17df3-3c88-4270-b263-f45b11d713f0',
    readingDate: '28/03/2012',
    billDate: '03/04/2023',
    yourBill: 5877,
    dueDate: '07/10/2017',
    yourUnits: 487,
    paymentMode: 'online'
  }
  {
    _id: ObjectId("64365cc2b4b68eab0819218b"),
    billingMode: '60 Days',
    name: 'Amory Filewood',
    address: '3 Porter Alley',
    registeredMobile: '788-553-8732',
    customerId: 'd73d3411-ca06-4e1a-b86a-c82caf8c6fcc',
    readingDate: '10/09/2021',
    billDate: '20/08/2012',
    yourBill: 7939,
    dueDate: '16/06/2016',
    yourUnits: 155,
    paymentMode: 'online'
  }

```

find all record count:-

1) `db.billGenerate.find().count();`

answer:- 100

2) Only `count()` method not use `find()`:-

```

> db.billGenerate.find().count();
< 100
> db.billGenerate.count();
< 'DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.'
< 100

```

update One record :-


```
> db.billGenerate.find({$and:[{'billDate': {$lt: ('31/12/2016')}}],{'paymentMode': 'online'}}).limit(7);
< {
  _id: ObjectId("64365cc2b4b68eab08192187"),
  billingMode: '60 Days',
  name: 'Ricca Gores',
  address: '82 Jackson Circle',
  registeredMobile: '180-164-6339',
  customerId: '3554b4af-5255-4776-8771-ecd3b3557144',
  readingDate: '01/10/2011',
  billDate: '10/10/2011',
  yourBill: 8505,
  dueDate: '31/10/2011',
  yourUnits: 969,
  paymentMode: 'online'
}
```

use updateMany yourunit = 666 (name changed to "pravinbhai chauhan")

- Before Update

```
{
  _id: ObjectId("64365cc2b4b68eab0819218d"),
  billingMode: '60 Days',
  name: 'Eveline Salmoni',
  address: '3 Tony Court',
  registeredMobile: '143-238-8012',
  customerId: '3689cbf1-e418-46d9-a996-c03d15ddd5ef',
  readingDate: '24/06/2016',
  billDate: '31/03/2020',
  yourBill: 9443,
  dueDate: '02/10/2022',
  yourUnits: 666,
  paymentMode: 'online'
}
```

- After updatee

```
db.billGenerate.updateMany(
  { 'yourUnits': 666 },
  { $set: { 'name': 'Pravinbhai chauhan' } }
)
```



```

< {
  _id: ObjectId("64365cc2b4b68eab0819218d"),
  billingMode: '60 Days',
  name: 'Pravinbhai chauhan',
  address: '3 Tony Court',
  registeredMobile: '143-238-8012',
  customerId: '3689cbf1-e418-46d9-a996-c03d15ddd5ef',
  readingDate: '24/06/2016',
  billDate: '31/03/2020',
  yourBill: 9443,
  dueDate: '02/10/2022',
  yourUnits: 666,
  paymentMode: 'online'
}

```

And-or Operator:-

This query searches for documents where yourBill is greater than 1000 and less than 5000, and either paymentMode is "cash" or yourUnits is greater than 300 and less than 600.

```

db.billGenerate.find({
  $and: [
    { "yourBill": { $gt: 1000, $lt: 5000 } },
    { $or: [
      { "paymentMode": 'cash' },
      { "yourUnits": { $gt: 300, $lt: 600 } }
    ] }
  ]
})

```

```
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```

```
  customerId: 'bcbbf368-1248-41a5-a598-67ab58f9abaf',
  readingDate: '17/08/2017',
  billDate: '15/02/2014',
  yourBill: 3347,
  dueDate: '09/01/2013',
  yourUnits: 526,
  paymentMode: 'cash'
}
{
  _id: ObjectId("64365cc2b4b68eab081921a1"),
  billingMode: '60 Days',
  name: 'Cahra Logan',
  address: '8565 Florence Junction',
  registeredMobile: '520-469-7445',
  customerId: '23fc088d-7cbf-4e2d-9ddf-d8d33018ac21',
  readingDate: '03/09/2022',
  billDate: '18/01/2022',
  yourBill: 3137,
  dueDate: '29/03/2023',
  yourUnits: 901,
  paymentMode: 'cash'
```

get totalIndexSize in bytes:-

```
db.billGenerate.totalIndexSize()
```

```
> db.billGenerate.totalIndexSize()
< 36864
torrentPower > |
```