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BY AMPHISOFT

MongoDB - Create and Drop Database and Collection

Overview

In this session, you will learn

- Data Modeling in MongoDB
- How to create a database in MongoDB
- How to drop a database.
- How to create a collection in MongoDB
- How to rename a collection.
- How to drop a collection.

Data Modeling in MongoDB

- Data in MongoDB has a flexible schema. Since, MongoDB is a document based database, any document within the same collection is not mandatory to have same set of fields or structure.

- Some considerations while designing Schema in MongoDB

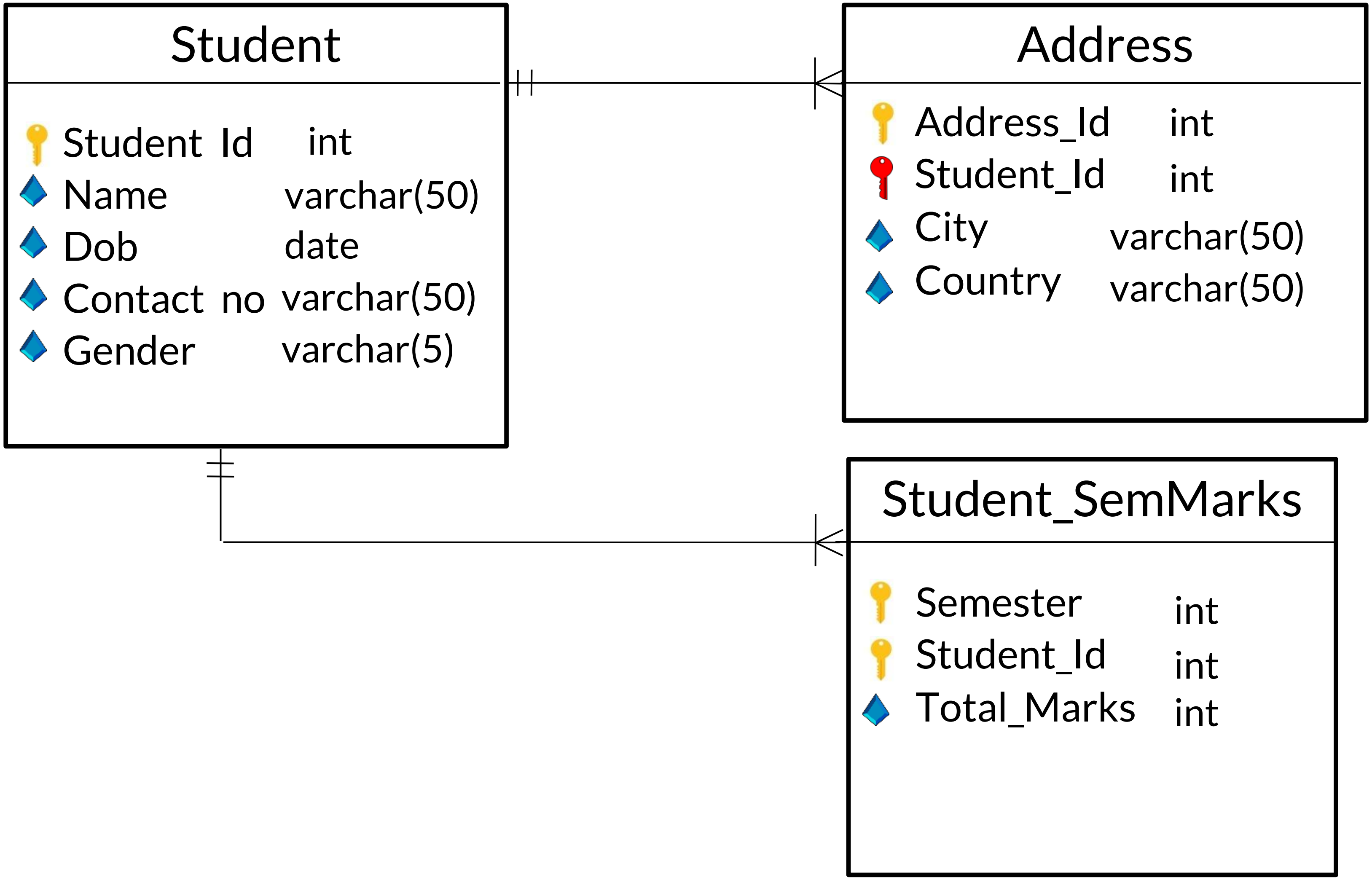
➢ Design your schema according to user requirements.

➢ Combine objects into one document i-f you will use them together. Otherwise separate them.

➢ Optimize your schema for most frequent use cases.

➢ Do complex aggregation in the schema.

Example of Data Modeling in MongoDB



Student

🔑	Student Id	int
◆	Name	varchar(50)
◆	Dob	date
◆	Contact no	varchar(50)
◆	Gender	varchar(5)

Address

🔑	Address_Id	int
🔑	Student_Id	int
◆	City	varchar(50)
◆	Country	varchar(50)

Student_SemMarks

🔑	Semester	int
🔑	Student_Id	int
◆	Total_Marks	int

Example of Data Modeling in MongoDB

Student

```
{
   Student_Id: 123,
   Name: 'ABC',
   Dob: ISODate("1995-10-03"),
   Address :[{
       City: 'Bangalore',
       Country: 'India'
     },
          {
       City: 'Chennai',
       Country: 'India'
     }
   ],
   Contact_no: '7874234681'
   Gender: 'F'
}
```

Student_SemMarks

```
{
   Semester:1,
   Student_Id: 123,
   TotalMarks: 490
}
```

How MongoDB Create Database

If there is no database, use the following command to define the name for your database and the database is created if it doesn’t exist already.

Syntax:

```
use database_name
```

Example:

```
C:\> use College

// switched to db College
```

Cont'd.....

- To check currently selected database,

```
C:\> db
```

- If you want to check your databases list,

```
C:\> show dbs
```

- If your database is not in the list, your database has not been created yet. To create a database you must save at least one document in it.

```
C:\> db.Student.insert({"Student_Id":100})
C:\> show dbs
 // College
```

How MongoDB Drop Database

- To remove a database , we use DROP command.

Syntax:

```
db.dropDatabase()
```

Example:

```
C:\> show dbs
// College
// Employee
C:\> db
//College
C:\> use Employee
// switched to db Employee
C:\> db.dropDatabase()
//{ "dropped" : “Employee", "ok" : 1 }
```

MongoDB Create Collection

In MongoDB **createCollection** is used to create a Collection. This is used primarily for creating new collections.

Syntax:

```
        db.createCollection<name, options>
```

Example:

```
        C:\> db.createCollection("Student")        // {"ok" : 1}
```

To check the created collection,

```
        C:\> show collections                     // Student
```

MongoDB also creates collection automatically, when you insert some document.

```
        C:\> db.Student_SemMarks.insert({"Semester" : 1, "Student_Id" : 123,
"Marks" : 490})              // Student_SemMarks created and one
                                   document inserted
```

Rename a collection

In MongoDB **renameCollection** is used to rename the collection. The command will rename a old collection to new collection.

Syntax:

```
db.<collection_name>.renameCollection(target, dropTarget)
```

Example:

```
C:\> db.Student.renameCollection("Student_details", true)
                                        // {"ok" : 1}}
```

Dropping a collection

The drop command removes an entire collection from a database

Syntax:

```
db.<collection_name>.drop()
```

Example:

```
C:\> db.Student_details.drop()
```

To check the list of collections into database.

```
C:\> show collections
```

drop() method will return true, if the selected collection is dropped successfully, otherwise it will return false.

THANKS

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