Mongo DB

Session 3

RDBMS VS MongoDB

RDBMS	MongoDB
Database	Database
Table	Collection
Column	Field
Tuple/Row	Document
Primary Key	Primary Key(_id)

Documents

```
>db.COLLECTION_NAME.insert(document)
```

Documents

```
>db.COLLECTION_NAME.insert(document)
```

```
{
        _id: ,
        Emp_ID: "10025AE336"
        Personal_details:{
                First_Name: "Radhika",
                Last_Name: "Sharma",
                Date_Of_Birth: "1995-09-26"
        },
        Contact: {
                e-mail: "radhika_sharma.123@gmail.com",
                phone: "9848022338"
        },
        Address: {
                city: "Hyderabad",
                Area: "Madapur",
                State: "Telangana"
        }
}
```

JSON VS BSON

	JSON	BSON
Encoding	UTF-8 String	Binary
Data Support	String, Boolean, Number, Array	String, Boolean, Number (Integer, Float, Long, Decimal128...), Array, Date, Raw Binary
Readability	Human and Machine	Machine Only

Datatypes

Field	Description
String	This type is used to store a numerical value. Integer can be 32 bit or 64 bit depending upon your server.
Integer	This type is used to store a numerical value. Integer can be 32 bit or 64 bit depending upon your server.
Boolean	This type is used to store a boolean (true/ false) value.
Double	This type is used to store floating point values
Arrays	This type is used to store arrays or list or multiple values into one key.

Datatypes

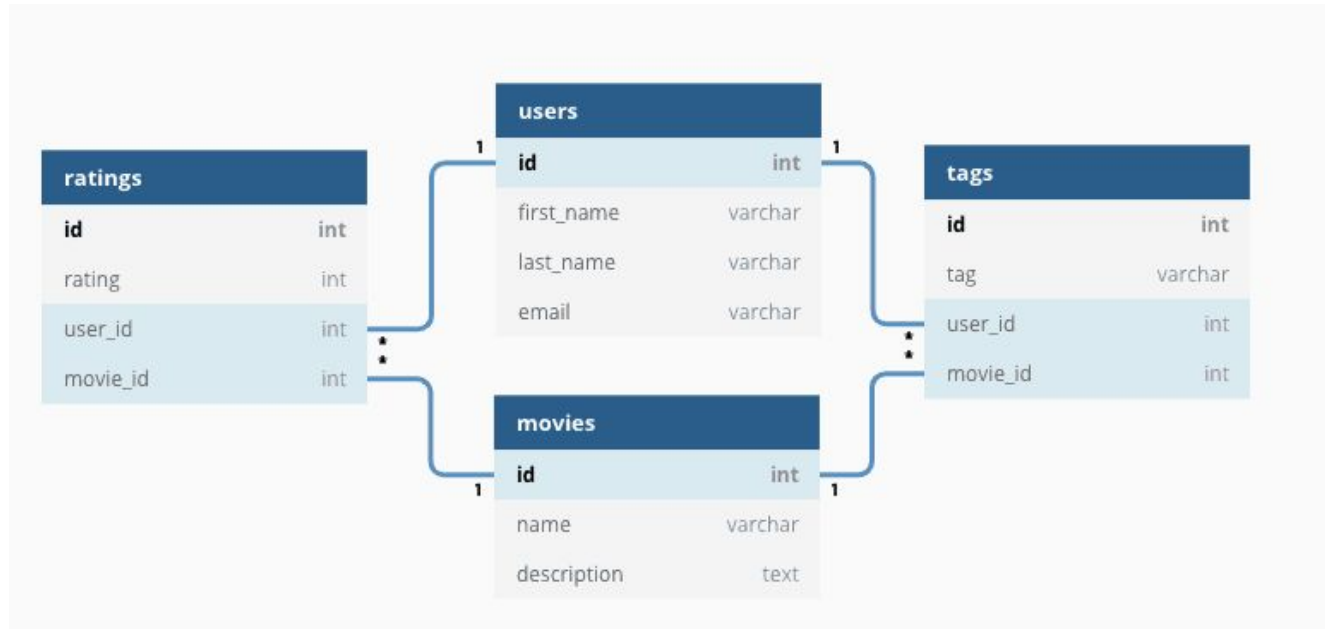| Field	Description
Timestamp	This can be handy for recording when a document has been modified or added.
Object	This datatype is used for embedded documents.
Null	This type is used to store a Null value.
Symbol	This datatype is used to store the current date or time in UNIX time format. You can specify your own date time by creating object of Date and passing day, month, year into it
Date	This datatype is used to store the current date or time in UNIX time format. You can specify your own date time by creating object of Date and passing day, month, year into it

Datatypes

Field	Description
Object ID	This datatype is used to store the document's ID.
Binary Data	This datatype is used to store binary data
Code	This datatype is used to store JavaScript code into the document.
Regular Expression	This datatype is used to store regular expression.

Relational Databases

MongoDB Document

Embedded Data Model

```
{
        _id: ,
        Emp_ID: "10025AE336"
        Personal_details:{
                First_Name: "Radhika",
                Last_Name: "Sharma",
                Date_Of_Birth: "1995-09-26"
        },
        Contact: {
                e-mail: "radhika_sharma.123@gmail.com",
                phone: "9848022338"
        },
        Address: {
                city: "Hyderabad",
                Area: "Madapur",
                State: "Telangana"
        }
}
```

MongoDB Document

Normalized Data Model

Employee:

```
{
        _id: <ObjectId101>,
        Emp_ID: "10025AE336"
}
```

Personal_details:

```
{
        _id: <ObjectId102>,
        empDocID: " ObjectId101",
        First_Name: "Radhika",
        Last_Name: "Sharma",
        Date_Of_Birth: "1995-09-26"
}
```

Contact:

```
{
        _id: <ObjectId103>,
        empDocID: " ObjectId101",
        e-mail: "radhika_sharma.123@gmail.com",
        phone: "9848022338"
}
```

Address:

```
{
        _id: <ObjectId104>,
        empDocID: " ObjectId101",
        city: "Hyderabad",
        Area: "Madapur",
        State: "Telangana"
}
```

Mongo DB

Practice 3

Objectives

+ **Create a command line interface to create and list and remove contact from folders**

+ **At first you need to select the folder(container) you want to use.**

+ **Create a command to create, list and remove contact**

References

- **https://www.npmjs.com/package/inquirer**
- **https://www.npmjs.com/package/mongodb**