

Session 2

Installation of Mongo Shell OR Studio3t

- Mongo Shell download [link](#)
- All the work is expected to do it in mongo shell not in mongo compass

OR

- You can also install [Studio3T](#)
- Connect to mongoddb://localhost:27017

Few Commands to test after connections

Command	Expected Output	Notes
show dbs	<pre>admin 40.00 KiB config 72.00 KiB db 128.00 KiB local 40.00 KiB</pre>	All Databases are shown
use db	<pre>switched to db db</pre>	Connect and use db
show collections	<pre>Students</pre>	Show all tables
db.foo.insert({"bar" : "baz"})		Insert a record to collection. Create Collection if not exists

Few Commands to test after connections

Command	Notes
<code>db.foo.batchInsert([{"_id" : 0}, {"_id" : 1}, {"_id" : 2}])</code>	Insert more than one document
<code>db.foo.find()</code>	Print all rows
<code>db.foo.remove()</code>	Remove foo table

Documents, Collections, Database

Documents:

At the heart of MongoDB is the document:

an ordered set of keys with associated values.

The representation of a document varies by programming language, but most languages have a data structure that is a natural fit, such as a map, hash, or dictionary.

```
{"greeting" : "Hello, world!"}
```

Collections:

Collections A collection is a group of documents.

If a document is the MongoDB analog of a row in a relational database, then a collection can be thought of as the analog to a table.

Database:

MongoDB groups collections into databases.

A single instance of MongoDB can host several databases, each grouping together zero or more collections.

A database has its own permissions, and each database is stored in separate files on disk.

A good rule of thumb is to store all data for a single application in the same database.

Datatype:

Basically each document will be in JSON format which will be as follows. Where each attributes inside can be of multiple data types.

- Date
- Int32
- Decimal
- Timestamp

```
{
  "name" : "John Doe",
  "address" : {
    "street" : "123 Park Street",
    "city" : "Anytown",
    "state" : "NY"
  }
}
```