In this lecture, we will discuss…

- ✧ Importing sample data
- ✧ Basics of MongoDB shell
- ✧ MongoDB collections
- ✧ IRB shell and MongoDB
- ✧ Basic MongoDB commands in IRB

MongoDB Basics

- Import dataset
  - Download sample zips.json file from MongoDB
  - Save the above file
  - Run the import command as in

```
> mongoimport --db test --collection zips
--drop --file zips.json
```

Database, Documents and Collections

- Mongo can create database on the fly
  - No need to create database beforehand
- Documents
  - Unit of storing data in a MongoDB database
  - JSON document
- Collection (similar to tables in DB)
  - Unit of storing data in a MongoDB database
  - Collection of documents

Collection Types

✧ Capped Collection

- Fixed-size collections that support high-throughput operations
- Insert and retrieve documents based on insertion order
- Once a collection fills its allocated space, it makes room for new documents by overwriting the oldest documents in the collection
- `db.createCollection("log", { capped : true, size : 5242880, max : 5000 } )`

Mongo Basics

- Start mongo shell
  -
    ```
    $ mongo
    ```
- Switch to test database

  ```
  > use test
  ```
- Test the data with a simple find command (note: we will cover this in more depth later)

  ```
  > db.zips.findOne()
  ```
  - The above command will return a single document from the zips collection.

MongoDB Ruby Driver Setup

✧ mongo-ruby driver

- `gem update --system`
- `gem install mongo`
- `gem install bson_ext`

✧ Using gem

```
> require mongo
```

MongoDB Basics (irb shell)

- Start irb shell
- Type the following commands:

```
> require 'mongo'
> Mongo::Logger.logger.level =
  ::Logger::INFO
> db =
Mongo::Client.new('mongodb://localhost:27017')
> db=db.use('test')
> db.database.name
> db.database.collection_names
> db[:zips].find.first
```

Summary

- ✧ Basics of MongoDB
- ✧ Database, Document and Collection
- ✧ MongoDB Ruby Driver
  - `<irb>` shell

What's Next?

- ✧ CRUD Operations

Next Topic…..

Lesson 2 – CRUD operations