#### 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



### 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

- - 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

