* **s01 topics**

**e01**

1. MongoDB

* MongoDB
* Installation
  + Installation through Homebrew

brew update

brew install mongodb

* Setup
  + Create a data/db folder where you want your databases to be sourced

mkdir –p users/evanturner/src/data/db

* Run Mongo
  + You connect to the database server, which runs as mongod
  + **mongod** is the primary daemon process for the MongoDB system.
    - It handles data requests, manages data access, and performs background management operations
  + Specify the dbpath when loading mongod

mongod --dbpath ~/src/data/db

**Macintosh HD:Users:evanturner:Desktop:Screen Shot 2014-12-22 at 1.01.36 PM.png**

* In another terminal
  + Run the mongo command

mongo

* + After starting the mongo shell your session will use the test database by default.
  + At any time, issue the following operation at the mongo to report the name of the current database:



* + At this point, if you issue the show dbs operation again, it will not include the book\_library\_db database
  + MongoDB will not permanently create a database until you insert data into that database.

Mongod and Mongos

* You can start MongoDB from a command line by issuing the mongod command and specifying option
  + The mongod process is the primary database process that runs on an individual server.
* mongos provides a coherent MongoDB interface equivalent to a mongod from the perspective of a client
  + The mongo binary provides the administrative shell.

Starting

* By default, MongoDB stores data in the /data/db directory. *On Windows, MongoDB stores data in C:\data\db*. On all platforms, MongoDB listens for connections from clients on port 27017

Specify a Data Directory

* If you want mongod to store data files at a path *other than* /data/db you can specify a dbPath.
  + The dbPath must exist before you start mongod. If it does not exist, create the directory and the permissions so that mongod can read and write data to this path

Stopping

* + In a clean shutdown a mongod completes all pending operations, flushes all data to data files, and closes all data files.
    - Other shutdowns are *unclean* and can compromise the validity the data files
  + Clean shutdowns are executed with the following command:

db.shutdownServer() or Control-C or Command-period