

In this lecture, we will discuss...

- ✧ “R”ead in CRUD
- ✧ `find` (by example) operations
- ✧ Cursor iterations
- ✧ Pretty printing
- ✧ Projections

“R”ead in CRUD

- ✧ `find` command
- ✧ `find` – returns a **cursor** object – allows us to **iterate** over the selected document(s)
- ✧ Can be used with **query** criteria



find by example

✧ basic find

- `db[:zip].find(:city => "BALTIMORE")`

✧ find first

- `db[:zip].find.first`
- `db[:zip].find(:state => "MD").first`

✧ find distinct

- `db[:zip].find.distinct(:state)`

find by example

✧ basic find (hash)

- `db[:zip].find(:city => "GERMANTOWN").count`
- `db[:zip].find(:city => "GERMANTOWN").first`
- `pp db[:zip].find(:city => "GERMANTOWN",
:state => "NY").first`
- `pp db[:zip].find(:city => "GERMANTOWN",
:state => "MD").first`



Cursor Iterations

✧ print all

- `db[:zip].find().each { |r| puts r }`

✧ pretty printing

- `require 'pp'`
- `db[:zip].find().each { |r| pp r }`



Projections

- ✧ **Limits** the fields to return from all matching documents
 - Can **specify** inclusion or exclusion.
- ✧ `_id` is automatically included by **default**
- ✧ `true` or `1`: **inclusive**
- ✧ `false` or `0`: **exclusive**



Projections

✧ Example:

✧ `db[:zip].find({:state => "MD"}).projection(state:true, _id:false).first`

✧ `db[:zip].find({:state => "MD"}).projection(state:1, _id:0).first`



Summary

- ✧ find - find documents by an array of criteria or hashes
- ✧ Projections - selecting only necessary data rather than selecting the whole data of a document

What's Next?

- ✧ Paging
- ✧ Sorting
- ✧ Limit

