Managing Data

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Assignment: MongoDB

**---Create Database in Mongo by ‘use’ command**

**---Will automatically create/assign to: db**

use digital\_library

**--Create Collection for Users**

db.createCollection(‘users’);

db.users.insert ([

{“user\_id”: “6745”,

“name”: "Jason Byrd",

“phone”: “2105788899”,

“address”: {

“street”: "35 Houston Street",

“city”: "Dallas",

“state”: "TX",

“zip”: "75001"

},

“university”: "Columbia University"},

{“user\_id”: “4897”,

“name”: "Jesse Calbert",

“phone”: “5123456789”,

“address”: {

“street”: "313 Broadway Ave",

“city”: "Austin",

“state”: "TX",

“zip”: "73301"

},

“university”: "University of Texas"},

{“user\_id”: “4134”,

“name”: "Earl Sosa",

“phone”: “2128796533”,

“address”: {

“street”: "212 L Avenue",

“city”: "Fairfax",

“state”: "VA",

“zip”: "22030"

},

“university”: "Harvard University"},

{“user\_id”: “9867”,

“name”: "Emily Green",

“phone”: “2015467823”,

“address”: {

“street”: "234 Lincoln Ave",

“city”: "Boston",

“state”: "MA",

“zip”: "02101"

},

“university”: "Columbia University"},

{“user\_id”: “2376”,

“name”: "Martin Wilson",

“phone”: “3103766886”,

“address”: {

“street”: "333 Presa Street",

“city”: "El Paso",

“state”: "TX",

“zip”: "79835"

},

“university”: "Columbia University"}

])

**---Create Collection for List of Books**

db.createCollection(‘books’);

db.books.insert ([

{"book\_id”: “123456789”,

“title”: "SuperBat",

“author”: "Calvin Davis",

“date\_of\_pulication”: “2010-01-01”,

“pages”: “1000”,

“publisher”: “OxfordPress”,

“translator”: “None”,

“topic”: "fiction"},

{“book\_id”: “234567891”,

“title”: "Practical Python",

“author”: "Catherine Johnson",

“date\_of\_pulication”: “2011-05-12”,

“pages”: “2304”,

“publisher”: “ColumbiaPress”,

“translator”: “None”,

“topic”: "Software Engineering"},

{“book\_id”: ''345678912”,

“title”: “Practical Java",

“author”: "Michael Xu",

“date\_of\_pulication”: “2012-08-01”,

“pages”: “334”,

“publisher”: “OxfordPress”,

“translator”: “None”,

“topic”: "Machine Learning"}

])

**---Create Collection for Books Checked Out**

db.createCollection(‘checked\_out\_books’);

db.checked\_out\_books.insert ([

{“book\_id”: “123456789”,

“title”: "SuperBat",

“topic”: "fiction",

“user\_id”: “2376”,

“name”: “Martin Wilson”,

“checkout\_date”: “2020-01-10”,

“university”: "Columbia University"},

{“book\_id”: “345678912”,

“title”: "Practical Java",

“topic”: "Machine Learning",

“user\_id”: “6745”,

“name”: “Jason Byrd”,

“checkout\_date”: “2018-02-12”,

“university”: "Columbia University"},

{“book\_id”: “345678912”,

“title”: "Practical Java",

“topic”: "Machine Learning",

“user\_id”: “9876”,

‘name’: “Emily Green”,

“checkout\_date”: “2020-02-12”,

“university”: "Columbia University"},

{“book\_id”: '234567891',

“title'” "Practical Python",

“topic”: "Software Engineering",

“user\_id”: “4134”,

“name”: “Earl Sosa”,

“checkout\_date”: “2020-03-20”,

“university”: "Harvard University"},

{“book\_id”: '123456789',

“title”: " SuperBat ",

“topic”: "fiction",

“user\_id”: “4897”,

“name”: “Jesse Calbert”,

“checkout\_date”: “2020-02-02”,

“university”: "University of Texas"}

])

--------------Query 1----------------

**db.checked\_out\_books.find({ “checkout\_date” : { “$gt" : "2020-02-02"}},**

**{‘title’: “SuperBat”})**

{ "\_id" : ObjectId("5e8cf0bb93283d8a94ffdfab"), "title" : "Practical Java" }

{ "\_id" : ObjectId("5e8cf18793283d8a94ffdfac"), "title" : "Practical Python" }

--------------Query 2-----------------

**db.checked\_out.books.find({“title”: "Practical Java"})**

{ "\_id" : ObjectId("5e8cf0bb93283d8a94ffdfab"), "book\_id" : "345678912", "title" : "Practical Java", "user\_id" : "9876", "name" : "Emily Green", "checkout\_date" : "2020-02-12", "university" : "Columbia University" }

--------------Query 3-----------------

**db.books.find({“topic”: "Software Engineering"}).count()**

db.books.find({"topic": "Software Engineering"}).count()

1

--------------Query 4-----------------

**db.checked\_out.books.find({“topic”: "Machine Learning"}, {“$gt”: “2018-01-01”},**

**{“$lt”: “2020-03-15”})**

{ "\_id" : ObjectId("5e8cefe293283d8a94ffdfaa") }