# GCD Week 7 - MongoDB

## Preparation 1: Introduction to MongoDB

**First steps:**

MongoDB is a *document store* that persists JSON documents.

> mongo

MongoDB shell version: 2.0.2

connecting to: test

> show dbs

local (empty)

Switch to a *demo* database. It will be automatically created.

> use demo

switched to db demo

Insert a document into the *things* collection.

> db.things.save({name : "first thing", description : "second thing"});

Display all collections.

> show collections

system.indexes

things

Display the first record from *things*.

> db.things.findOne()

{

"\_id" : ObjectId("4f3bb9a7b47d69a700f9d4a0"),

"name" : "first thing",

"description" : "second thing"

}

Save another document and find both.

> db.things.save({name : "second thing", description : "second thing"});

> db.things.find()

{ "\_id" : ObjectId("4f3bb9a7b47d69a700f9d4a0"), "name" : "first thing", "description" : "second thing" }

{ "\_id" : ObjectId("4f3bba03b47d69a700f9d4a1"), "name" : "second thing", "description" : "second thing" }

Find a document by ID.

> db.things.find({ "\_id" : ObjectId("4f3bba03b47d69a700f9d4a1") })

> Remark: use your own “\_id”

{ "\_id" : ObjectId("4f3bba03b47d69a700f9d4a1"), "name" : "second thing", "description" : "second thing" }

Removing a document.

> db.things.remove({ "\_id" : ObjectId("4f3bba03b47d69a700f9d4a1")})

Updating a document will replace all document data.

> db.things.update({ "\_id" : ObjectId("4f3bb9a7b47d69a700f9d4a0")}, { "name" : "updated thing" })

> db.things.find()

{ "\_id" : ObjectId("4f3bb9a7b47d69a700f9d4a0"), "name" : "updated thing" }

To set a value, use *$set*.

> db.things.update({ "\_id" : ObjectId("54c6997b97e6e7e65ff2df7a")}, { "$set" : { "description" : "updated description" }})

> db.things.find()

{ "\_id" : ObjectId("4f3bb9a7b47d69a700f9d4a0"), "description" : "updated description", "name" : "updated thing" }

Interesting links:

* <http://docs.mongodb.org/manual/reference/mongo-shell/>
* <http://docs.mongodb.org/manual/core/read-operations-introduction/>
* <http://docs.mongodb.org/manual/reference/sql-comparison/>

## In Class activity

Make Assignments 1 and 2 from GCD Assignments week 7.docx.