MYSQL / MONGO

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|  | MYSQL | MONGO |
| Db Type | Open-source relational database management sysmte | Non-realtional db |
| orientation | Stores data in tables and uses SQL for db access | Stores data as documents in JSON format. Realted info stored together for fast query acess via Mongo Query langauge. |
| Schemas | Pre-define db schema and rules to govern relation between fields. Changes require a migration procedure that takes db offline | Uses schema validation to enforce data governeance controls over each collection. Fields vary among documentsyou can add a field wihtout affectin other fields |
|  |  | Collections do not enforce schema |
| ORM | Sequelize | Mongoose |
| Terms | Table – a series of columns that contain many rows | Collection – a group of documents |
|  | Row – a data entry – “john”, “durham”, 28 | Document – a record in a collection. Essentially an ojbect. { name: ‘john, city: ‘durham’} |
|  | Column – the ‘fields” – name, address, age, etc | Field – a name – value pair in a document. |
|  | JOINs | Embedded documents, $lookup & $graphLookup |
|  | GROUP\_BY | Aggregation pipeline |
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| The shell | Mysql -u root -p | Terminal 1: mongod |
|  | Use the cli right there | Terminal 2: mongo |
|  |  | Specific port: mongo --port 28015   * Remote port: mongo mongodb://mongodb0.example.com:28015 |
| Initialize Db |  |  |
| Create a table |  |  |
| Create a new row | INSERT INTO users (user\_id, age, status) VALUES (‘011’, 34, ‘a’) | Db.users.insert({user\_id: ‘011’, age: 45, status: ‘a’}) |
| Read row | SELECT \* FROM users | db.users.find() |
| Update | UPDATE users SET status=’c’ WHERE age > 25 | Db.users.update( { age: { $gt: 25}} , { $set: {status: ‘c’}}, { multi: true } ) |
| Delete | d | Db.users.remove({‘title’: ‘xyz’}) |

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| Create dB | CREATE DATABASE database name | Use DATABASE\_NAME (or returns an existing one) |
| See list of dbsq | SHOW DATABASES | Show dbs |
| See current check current db |  | Db |
| If new db, to see it in list, u must add at least one document into it \*but how if it doesn’t have a collection? |  | Db.movie.insert({‘name’: ‘tot’}) |
| Create table / collection | CREATE TABLE potluck (id INT NOT NULL PRIMARY KEY, name VARCHAR(20), food VARCHAR(30)); | Db.createCollection(“name”, {options}) |
| Drop table / collection | DROP DATABASE name | Db.name.drop() |
| Show tables / collections | SHOWS tables; | Show collections |

DESCRIBE tablename 🡪 see table shema

Add / Delete Columns in MySql (do you need to add / delete ‘field’ in mongo? Do nothing

ALTER TABLE table-name ADD email VARCHAR(40);

DELETE from [table name ] where [col name]=[field text];

Ubuntu install

Sudo apt-get install mysql-server

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|  |  | String |
|  |  | Integer |
|  |  | Boolean |
|  |  | Doulbe (floating point values) |
|  |  | Array (mulitple values into one key) |
|  |  | Object (embedded document) |
|  |  | null |