

## **B4M36DS2: Database Systems 2**

<http://www.ksi.mff.cuni.cz/~svoboda/courses/2016-1-B4M36DS2/>

Practical Class 5

# **MongoDB Document Database**

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# First Steps

## Remotely connect to our NoSQL server

- SSH and SFTP access
- PuTTY and WinSCP on Windows
- **147.32.83.196:22**

## Start mongo shell

- `mongo`

## Switch to your database

- use `login`

## Insert sample data into your database

- Empty your collections first
- See `/home/NOSQL/mongodb/data.js`

# Exercise 1

Express the following MongoDB query

- Find actors born in **1966** with first name ***Jiri***

## Exercise 2

Express the following MongoDB query

- **Find movies directed by *Jan Hřebejk***
- Note that the order of fields for first and last names can be arbitrary

# Exercise 3

Express the following MongoDB query

- **Find actors with first name *Jiri* who played in *Medvidek* movie**
- Return names of these actors only

# Exercise 4

Express the following MongoDB query

- **Find movies shot between years 2000 and 2005 such that they have a director specified**
- Return movie identifier only
- Order the result by ratings in descending order and then by years in ascending order

# Exercise 5

Express the following MongoDB query

- **Find actors who stared in *Samotari* or *Medvidek* movies**
- Return actor identifier only
- Find two different approaches

# Exercise 6

Express the following MongoDB query

- **Find actors who played in both *Samotari* and *Medvidek***
- Return actor identifier only
- Find two different approaches



# Exercise 7

Express the following MongoDB query

- **Find movies with Czech title equal to *Vratne lahve***
- Return movie title only
- Note that there are two means how movie titles are defined

# Exercise 8

Express the following MongoDB query

- Find actors having their movies defined as an array
- **Return actor identifier and the second and third movie only (if any)**

# Exercise 9

Express the following MongoDB query

- **Find movies in which at least one actor with an identifier ending with *ova* played**
- Return movie identifier and the first actor who satisfies such a condition

# Exercise 10

Express the following MongoDB query

- **Find movies that have a *Czech Lion* award from 2005**
- Return movie identifier and all awards

# Exercise 11

Express the following MongoDB query

- Find movies that are *comedies* and *dramas* at the same time  
or  
have a rating *80* or more
- Return movie identifier only