



**University of  
Zurich** <sup>UZH</sup>

## Department of Informatics

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### **Informatik Vertiefung Datenbanktechnologie**

#### **Research Study: Implementing TPC-H using a NoSQL Database (Mongo)**

- Literature research on the NoSQL database systems: Mongo [2]
- Create the TPC-H schema [1] in Mongo, and import the data into the database
- Formulate and execute the 22 TPC-H queries on Mongo
- Write a report, 5-7 pages, in which you describe:
  - the data model
  - the query model
  - advantages and disadvantages
- Oral exam

#### **Literature:**

- TPC Benchmark H, <http://www.tpc.org/tpch/spec/tpch2.14.2.pdf>
- Mongo Documentation, <http://downloads.mongodb.org/docs/mongodb-docs-2012-01-23.pdf>
- K. Orend, Analysis and Classification of NoSQL Databases and Evaluation of their Ability to Replace an Object-relational Persistence Layer, Master's Thesis - TUM, 2010



Supervisor: Amr Noureldin (noureldin@ifi.uzh.ch)  
Start date: 15 December 2011  
Duration: 2.5 months  
Exam: 28 February 2012

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