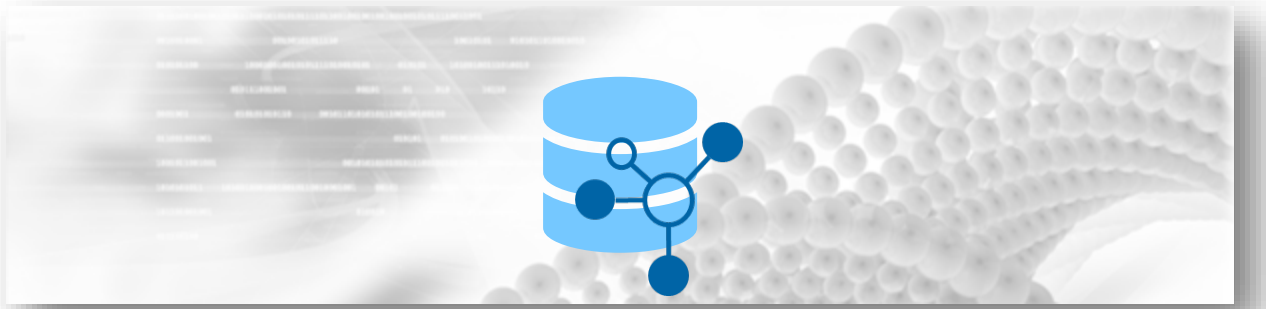
ACLS

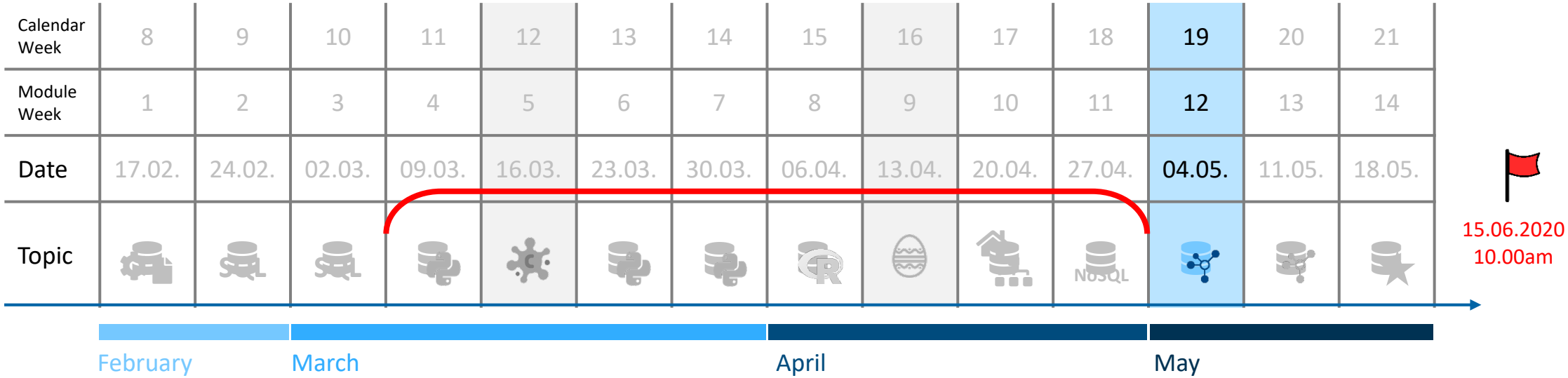
Graph-based



SS 2020 – Week 12

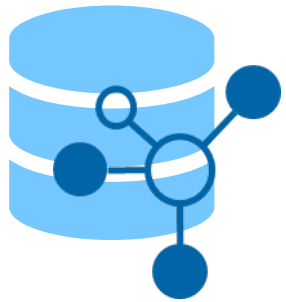
May 4

Schedule


Calendar Week
8
9
10
11
12
13
14
15
16
17
18
19
20
21
Module Week
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Date
17.02.
24.02.
02.03.
09.03.
16.03.
23.03.
30.03.
06.04.
13.04.
20.04.
27.04.
04.05.
11.05.
18.05.
Topic
NoSQL
15.06.2020
10.00am
February
March
April
May
Introduction & RDB
Structured Query Language
Database & Python
Database & R
Data Warehouse
Not only SQL
Graph Database
Special

Content

• Review		5’
• Graph-based	🎓	20’
• Relational ➞ LPG	🎓	20’
• Neo4j and Cypher	🎓	45’
• Exercise	🔧	135’



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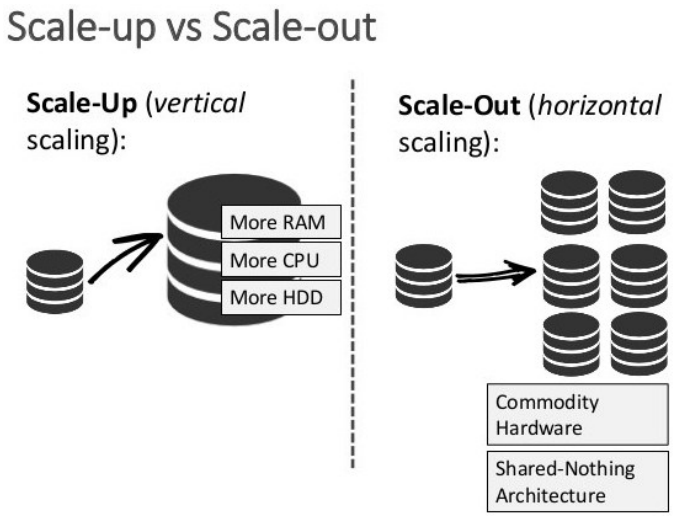
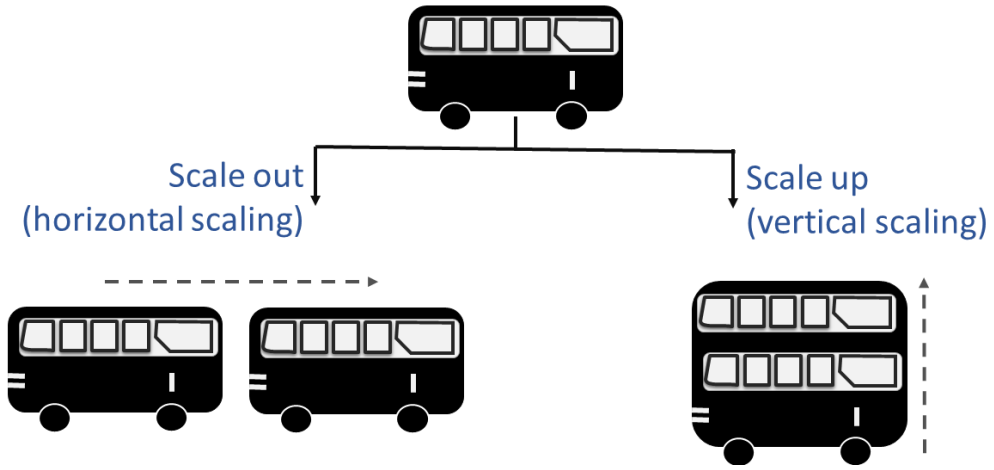
• Exercise	🔧	135’

Review (1/3)

NoSQL – Horizontal Scalability



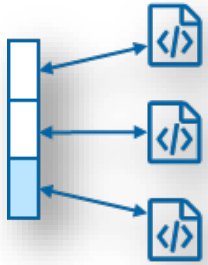


Review (2/3)

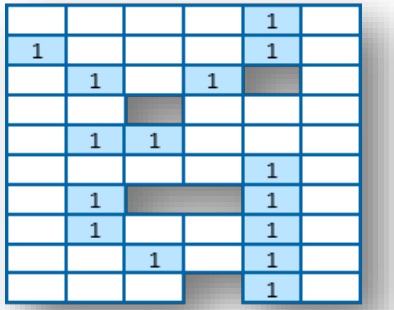
NoSQL - Types

Key-Value

Document



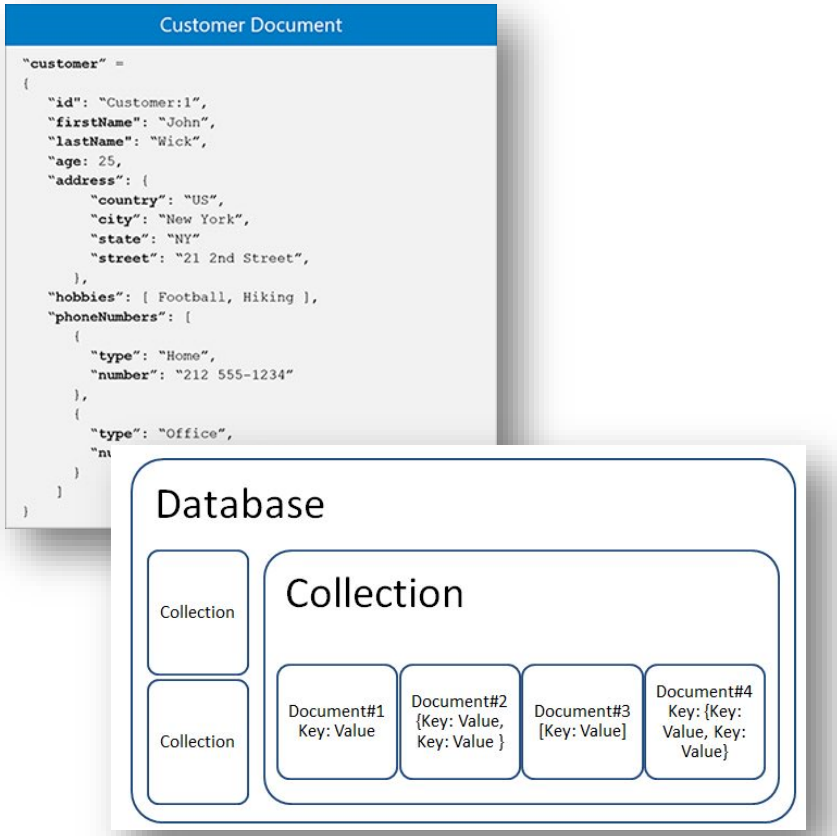
Column



Graph

Review (3/3)

Document-oriented




```python
# import mongoDB module
import pymongo

# create a new connection to the server
myConn = pyymongo.MongoClient('server url')

# select a specific database on the server
database = myConn['databasename']

# select a collection in the database
collection = database['collectionname']

# create new document
new_doc = {'key1':value1, 'key2':value2, … , 'keyN':valueN}

# insert new document
collection.insert_one(new_doc)

# retrieve documents with a given content
documents = collection.find({'some_key':'some_value'})
```

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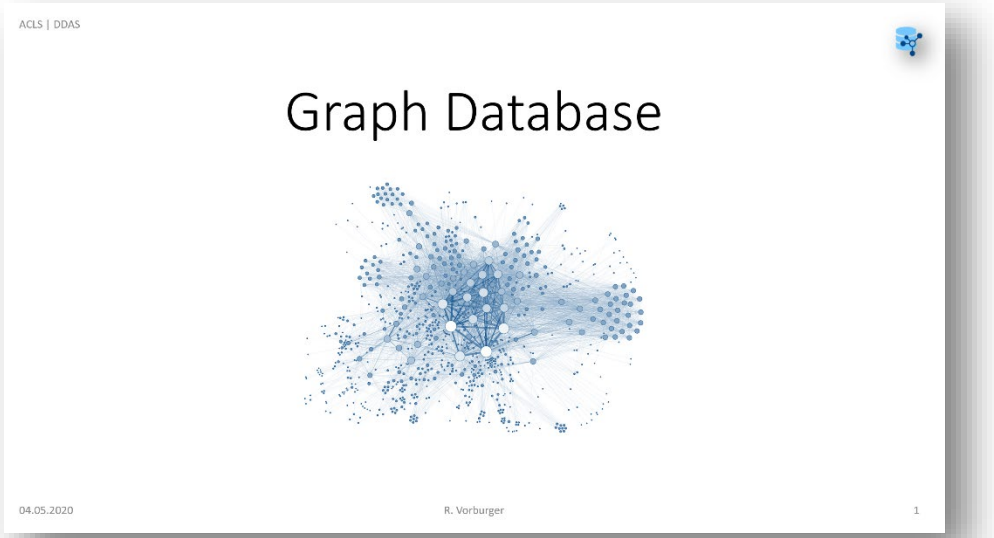

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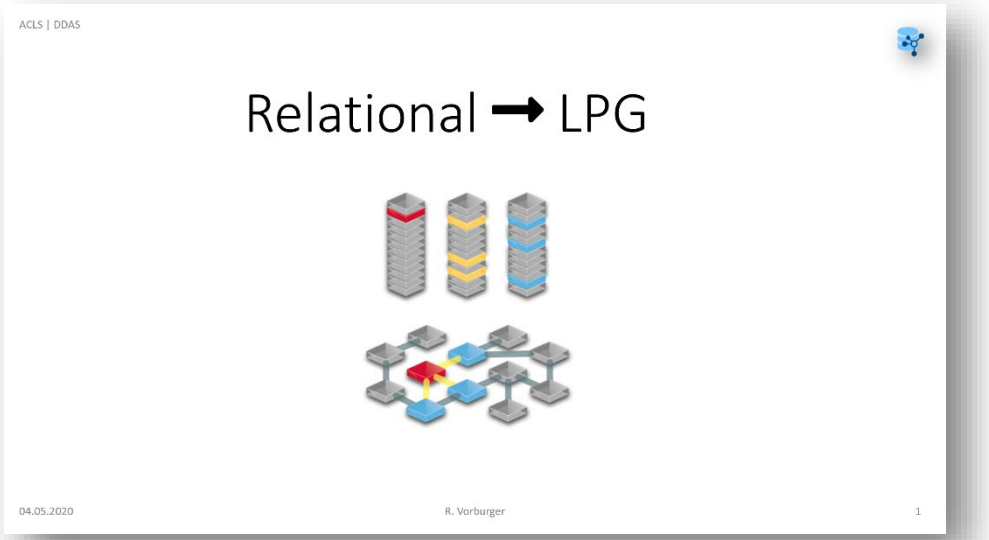

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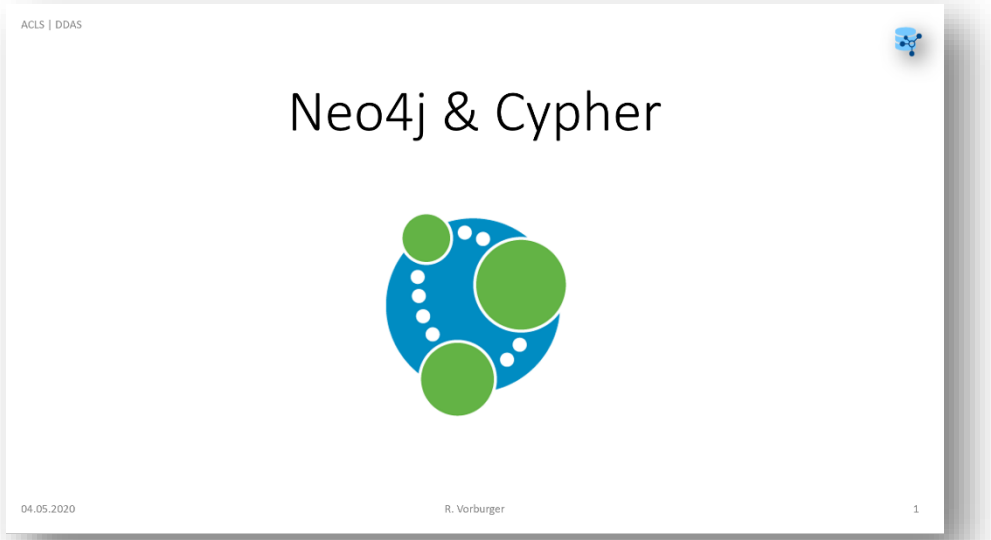

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