DailyHW

03/14/2022

Notes and Q&A:

<https://docs.google.com/document/d/1O7ogrWUuttxBATKADPk98zPqyQcgCWbdF18YKx0xcSQ/edit?usp=sharing>

Checklist:

<https://docs.google.com/document/d/1fmYhFHUIy44UIId1fpUUV-vWt9RdjD0ghkv9n5PqzBw/edit?usp=sharing>

1. What have you reviewed today?

28-34, index-sql

* 1. Transaction (a series of database operations that follows ACID principles)
  2. Optimist Lock vs Pessimistic Lock, when to use each?
  3. Deadlock? Livelock?
  4. Saga
  5. 2PC
  6. Dirty data? Non-repeatable read? Phantom read? Isolation level?
  7. Cluster index vs non-cluster index
  8. B-tree vs b+tree
  9. View/stored-procedure/materialized view

1. What new things you have learned today?
2. I downloaded Mysql on my computer and learned the basic syntax.
3. I learned how to add dependencies on POM.XML with Maven
4. I learned how JDBC works in general and tested simple CRUD operations with Statement on my local machine.
   1. Allocate a connection object to connect to database
   2. Allocate a statement object based on the connection ( stmt = con.createStatement() )
   3. Write sql query, execute query (stmt.excuteQuery)
   4. Process the result
   5. Close stmt and con under finally clause.

1. What is your learning plan tomorrow?
2. Review 20-28, db to redis. 0-6 preparation to equals()/ hashcode()
3. Learn new class materials
4. A coding question on stack if I have time.

**Statement vs PreparedStatement vs CallableStatement?** All are interface.

* Statement is for general-purpose access to our database. It is useful when we are using static SQL statements at runtime.

- It does not accept parameters.

* PreparedStatement is used when we play to use some SQL statement many times.

- It accepts input parameters at runtime.

* CallableStatement is used when we’d like to access the database stored procedures.
* It accepts input parameters at runtime.

**Setup jdbc in your local laptop and run the CRUD operation**

Text

Description automatically generated implementations were added on Github.