Day5 JDBC – Java Data Base Connectivity & Exception Handling

JDBC – It’s a specification (Meaning – It’ll have set of interfaces & abstract classes) – Incomplete or Non-concrete

JDBC Drivers – Implementation

Steps in Interacting to a DB via JDBC

1. Load & Register the Driver
2. Establish a connection
3. Create & Run (execute) Query
4. Process the Result
5. Close all the resources.

Two types of Operation in DB ( Read /Modify [insert/update/delete])

CRUD – Create/Insert Read(All/One) Update, Delete

Soft Delete – Using a Flag (isActive, Dormant, Available – Boolean)

Costly Operation – If an operation takes more time/memory or both.

Simple select – Statement Interface.

PreparedStatement – It eliminates SQL injection challenges. –

CallableStatement – This is used to execute Functions & Stored Procedures.

boolean, byte, char, short, int, float, double, long - Numbers, varchars.

Exception Handling.

Exception is an Object that can be thrown by the compiler.

Throwable 🡪 Exception & Error.

Exception – Is a condition in the program which prevents smooth flow of program. (It causes pre-mature termination) – Proper handling will allow to run the program.

Error – Is a condition which wont allow the normal execution of program. (OutofMemory, JVM Error, StackOverflow) – If not removed, can’t run the program.

1. Using throws keyword (Not-recommended – passing the responsibility)
2. Using try/catch block (recommended)

Try block should be followed by either catch or finally block or both.

Try block with finally block also correct (syntactically)

Finally block – The code inside finally block will always get executed irrespective of the exception status.

Finally block -- is a clean up block. (release objects, close resources)

<https://dev.mysql.com/doc/connector-j/en/connector-j-usagenotes-statements-callable.html>