



# Java JDBC

## A Report

It was required to create a java database connectivity api that interacts with the project database management system), it was required to implement 5 interface [ Connection, Statement, ResultSet, and ResultSetMetaData.

The user will be able to interact with the database without actually using the DBMS pi the working dynamic is as follows:

the user creates an object of the driver class and inputs a working directory to it, and ca method of the driver class that creates the connection object which in its turn cre: statement object this object can execute queries and when a select query is entered the return a resultset object that has the output table this object contains a resultsetmet object that has all the stats of the subsequent resultset.

# Snapshots

Java Database Connectivity

Create Driver

Connection: Create Close

Statement: Create Close

☒ Drop if exists

Execute Add to Batch

Execute Batch Clear Batch

Number of updated rows: 0

Timeout (zero for default)

ResultSet Rows

Set Absolute Next

BeforeFr Previous

AfterLast

Columns Control

Get Result

Result:

ResultSet MetaData

Get ColName

Get ColCount

Get TableName

Get colType

Result:

Create Driver

Connection: 

Create

Close

Statement: 

Create

Close

☐ Drop if exists

```
create database csed22
create table stud(id int)
insert into stud values(0)
insert into stud values(1)
insert into stud values(2)
insert into stud values(3)
select * from stud
```

Execute

Add to Batch

Execute Batch

Clear Batch

Number of updated rows: 0

Timeout (zero for default)

Set

Get

ResultSet Rows

Set Absolute

Next

BeforeFr

Previous

AfterLast

id

0

1

2

3

Columns Control

Get Result

Result: 0

ResultSet MetaData

Get ColName

Get ColCount

Get TableName

Get colType

Result: id

## Recalling old tables

Create Driver

Connection: 

Create

Close

Statement: 

Create

Close

☐ Drop if exists

```
create database csed22
select * from stud
```

Execute

Add to Batch

Execute Batch

Clear Batch

Number of updated rows: 0

Timeout (zero for default)  

Set

Get

ResultSet Rows  

Set Absolute

Next

BeforeFr

Previous

AfterLast

id

0

1

2

3

Columns Control  

Get Result

Result:

ResultSet MetaData  

Get ColName

Get ColCount

Get TableName

Get colType

Result:

# Log files

```
1 Friday 06 December 2019 11:23:37.997 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\83034\students
2 Friday 06 December 2019 11:28:13.370 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\13069\csed21
3 Friday 06 December 2019 11:29:14.884 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\348\temp
4 Friday 06 December 2019 11:29:37.443 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create table tempo(id int, name varchar)
5 Friday 06 December 2019 11:30:29.685 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into table values(1,'ahmed')
6 Friday 06 December 2019 11:30:57.578 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into tempo values(1,'ahmed')
7 Friday 06 December 2019 11:31:25.246 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from tempo
8 Friday 06 December 2019 11:36:33.430 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\51825\db
9 Friday 06 December 2019 11:37:11.334 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create table org(id int, name varchar)
10 Friday 06 December 2019 11:37:29.845 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(1,'ahmed')
11 Friday 06 December 2019 11:37:50.070 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(2,'pierre')
12 Friday 06 December 2019 11:38:08.409 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(3,'hossam')
13 Friday 06 December 2019 11:38:35.533 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(3,'hossam')
14 Friday 06 December 2019 11:38:57.241 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(4,'mtna')
15 Friday 06 December 2019 11:39:34.959 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
16 Friday 06 December 2019 11:43:18.113 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\39360\db
17 Friday 06 December 2019 11:43:55.324 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create table org(id int, name varchar)
18 Friday 06 December 2019 11:44:12.271 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
19 Friday 06 December 2019 11:45:00.658 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(1,'ahmed')
20 Friday 06 December 2019 11:45:13.275 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
21 Friday 06 December 2019 11:51:05.482 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\17228\temp
22 Friday 06 December 2019 11:51:26.065 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create table org(id int, name varchar)
23 Friday 06 December 2019 11:51:44.082 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeupdate Executing update query insert into org values(1,'ahmed')
24 Friday 06 December 2019 11:52:02.123 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
25 Friday 06 December 2019 12:00:03.021 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
26 Friday 06 December 2019 12:00:28.666 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
27 Friday 06 December 2019 12:00:46.641 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
28 Friday 06 December 2019 12:01:12.609 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
29 Friday 06 December 2019 12:01:45.909 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
30 Friday 06 December 2019 12:02:08.642 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
31 Friday 06 December 2019 12:02:26.637 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
32 Friday 06 December 2019 12:02:44.650 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
33 Friday 06 December 2019 12:02:48.737 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement clearBatch Batch cleared successfully !
34 Friday 06 December 2019 12:03:10.697 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
35 Friday 06 December 2019 12:03:12.430 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeBatch Batch executed successfully !
36 Friday 06 December 2019 12:03:25.770 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
37 Friday 06 December 2019 12:05:27.505 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
38 Friday 06 December 2019 12:05:59.214 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement addBatch Batch added successfully !
39 Friday 06 December 2019 12:06:01.794 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeBatch Batch executed successfully !
40 Friday 06 December 2019 12:06:01.795 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeBatch Batch executed successfully !
41 Friday 06 December 2019 12:06:01.796 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executeBatch Batch executed successfully !
42 Friday 06 December 2019 12:06:26.794 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement executequery Executing query select * from org
43 Friday 06 December 2019 12:06:45.277 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement clearBatch Batch cleared successfully !
44 Friday 06 December 2019 13:22:16.781 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create database sample\40274\aaa
45 Friday 06 December 2019 13:22:30.996 EBT INFO eg.edu.alexu.csd.oop.jdbc.cs24.MyStatement execute Executing query create table aa(id int)
```

Create Driver

Connection:

Create

Close

Statement:

Create

Close

☐ Drop if exists

```
create database csed22
select * from stud
create table stud2 (id, int,
name varchar)
create table stud2 (id, int,
name varchar)
```

id

0

1

2

3

Message



Syntax Error!

OK

Number of updated rows: 0

Timeout (zero for default)

Set

Get

ResultSet Rows

Set Absolute

Next

BeforeFr

Previous

AfterLast

Columns Control

Get Result

Result:

ResultSet MetaData

Get ColName

Get ColCount

Get TableName

Get colType

Result:

Java Database Connectivity

Create Driver

Connection: 

Create

Close

Statement: 

Create

Close

☐ Drop if exists

values(10, 'ahmedyasser')  
insert into stud2  
values(22, 'pierre')  
insert into stud2  
values(24, 'hossam')  
insert into  
stud2(66, 'minaashraf')  
insert into stud2 values  
(66, 'minaashraf')  
select \* from stud2

Execute

Add to Batch

Execute Batch

Clear Batch

Number of updated rows: 0

Timeout (zero for default)  

Set

Get

ResultSet Rows  

1

Set Absolute

Next

BeforeFr

Previous

AfterLast

id	name
10	'ahmedyasser'
22	'pierre'
24	'hossam'
66	'minaashraf'

Columns Control  

name

Get Result

Result: 'ahmedyasser'

ResultSet MetaData  

2

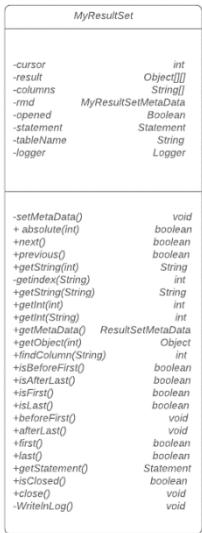
Get ColName

Get ColCount

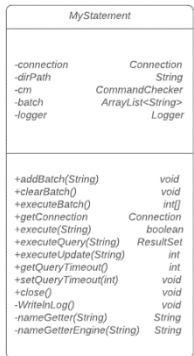
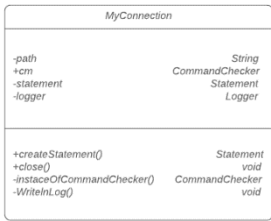
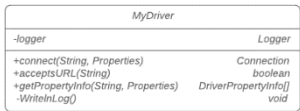
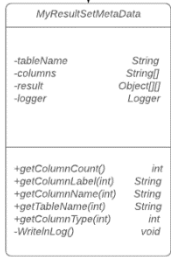
Get TableName

Get colType

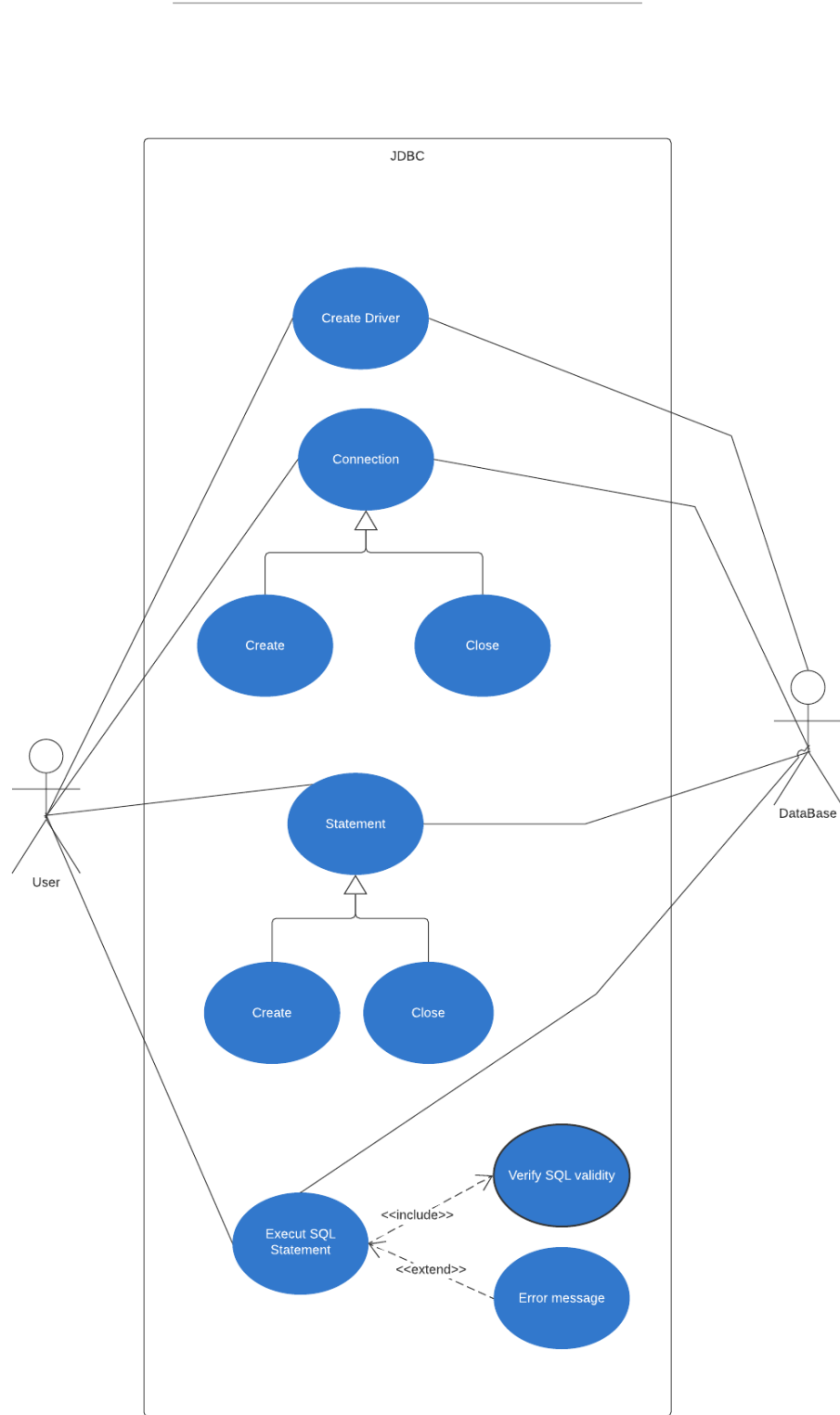
Result: name

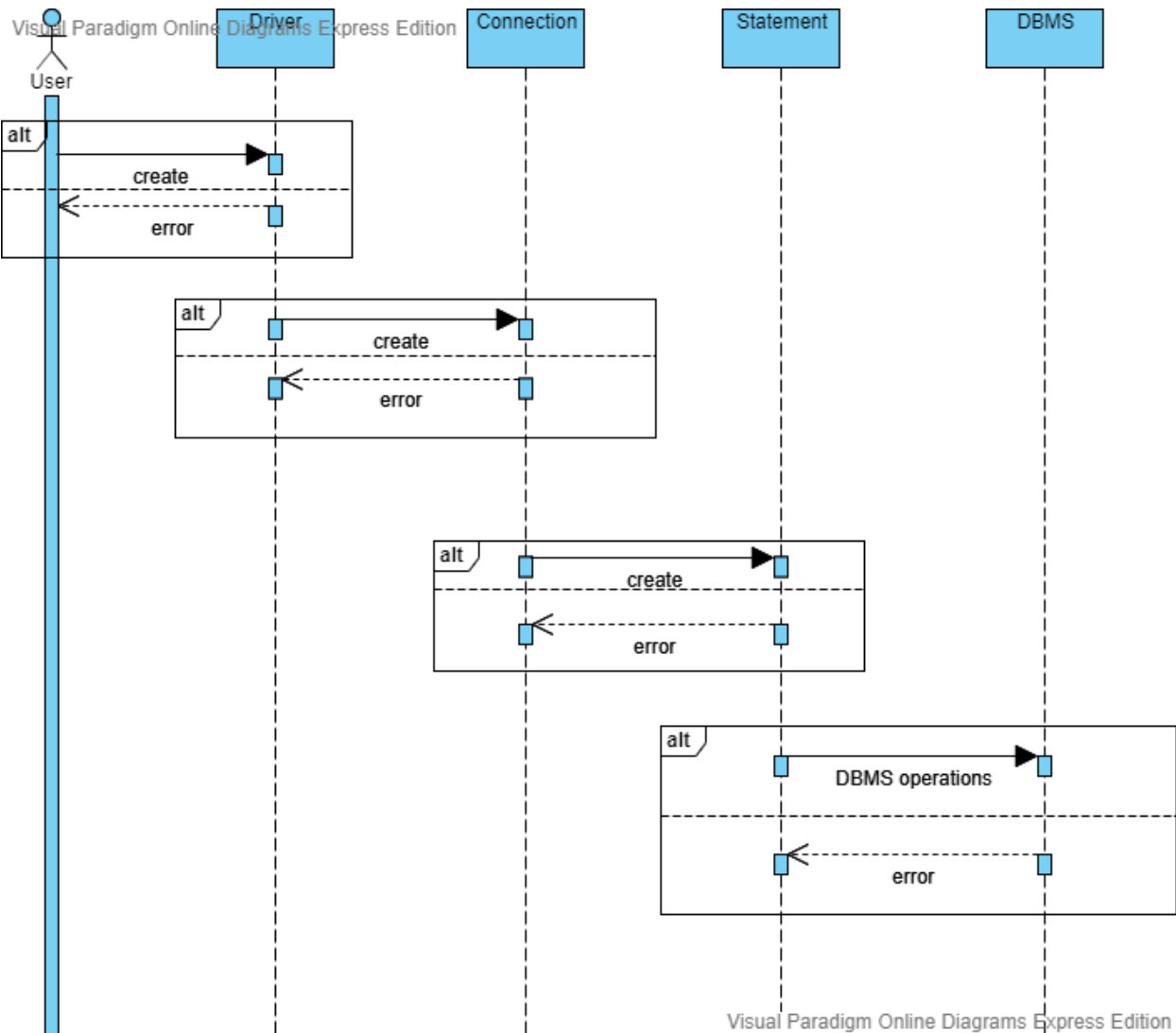


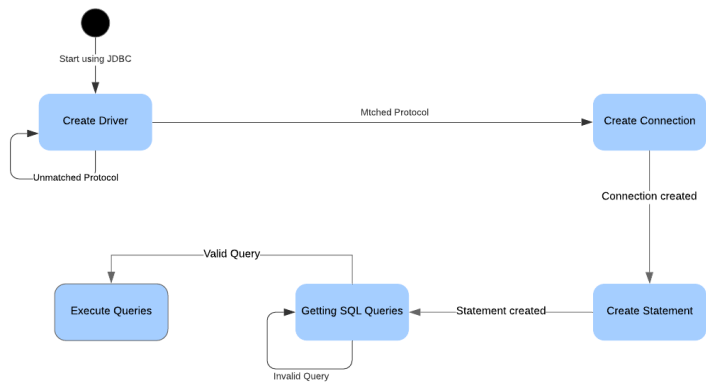
-rmd 0..1











## User Manual

- 1)create a driver from the create driver button
- 2)create connection from the create connection button
- 3)create statement from the create statement button
- 4)write the your selected sql query in the text field; you have the option to execute the query now or to add it to the batch of queries for later execution
- 5) click execute batch to execute all the queries in the batch or click clear batch to clear it
- 6)if you executed a select query you can see the result in the table in the lateral part of the program
- 7)you can select a specific cell by selecting an absolute row by typing its number starting from 1 for the first one and clicking select absolute you can also click next and previous to navigate between the rows, before first puts you before the first position an after last does a similar job
- 8) to see the individual cell enter a column name or number starting from 1 and click get column the content of the pre-determined row and selected column
- 9)to get information on the result the lower right section is used; you can get the table's name and a column name using its number and the number of columns